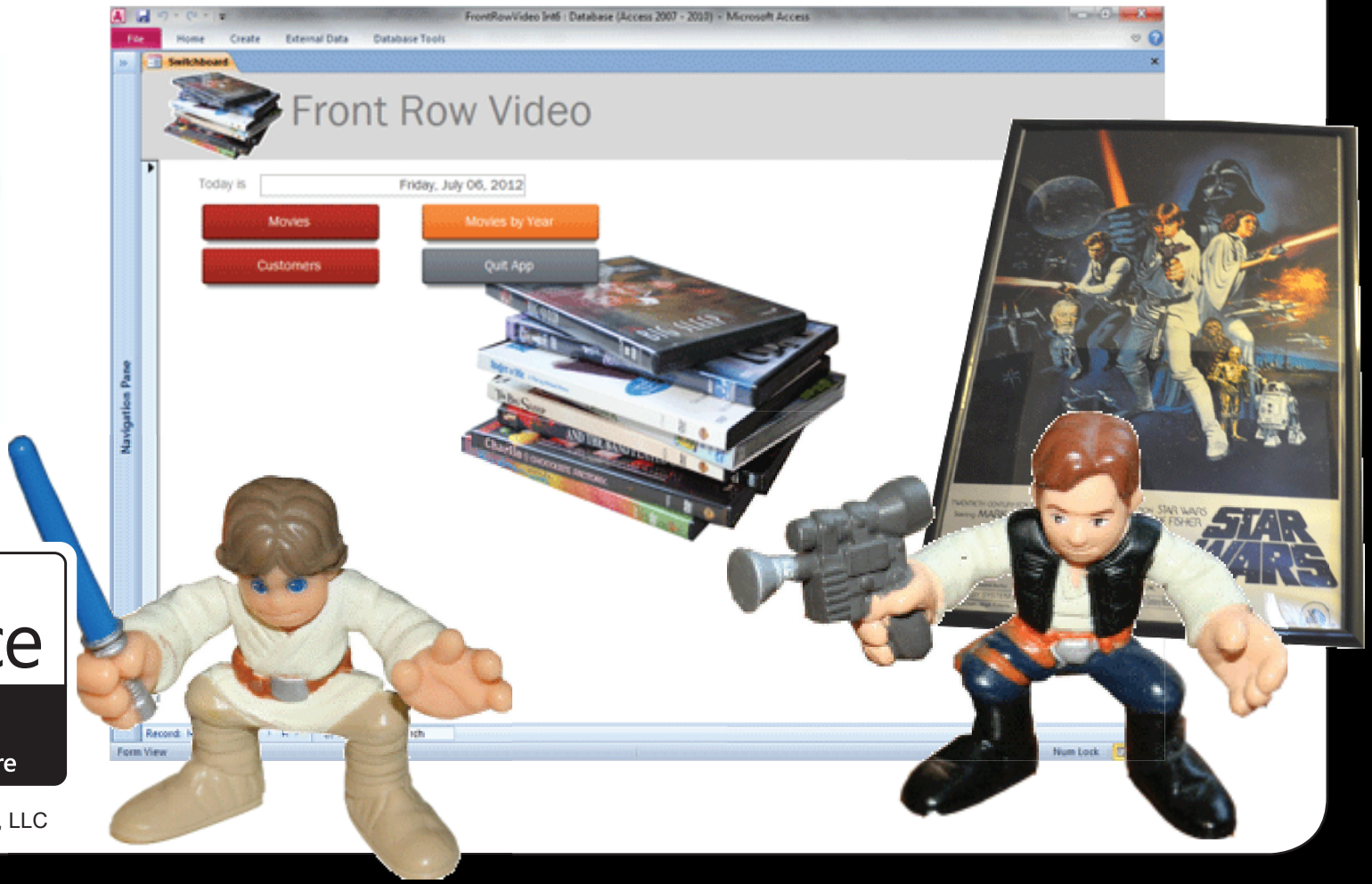
The **Intermediate** Guide to
Microsoft Access 2010

Microsoft Office Specialist Exam 77-885 Study Guide



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The Intermediate Guide to
Microsoft Access 2010

Microsoft Office Specialist Exam 77-885 Study Guide

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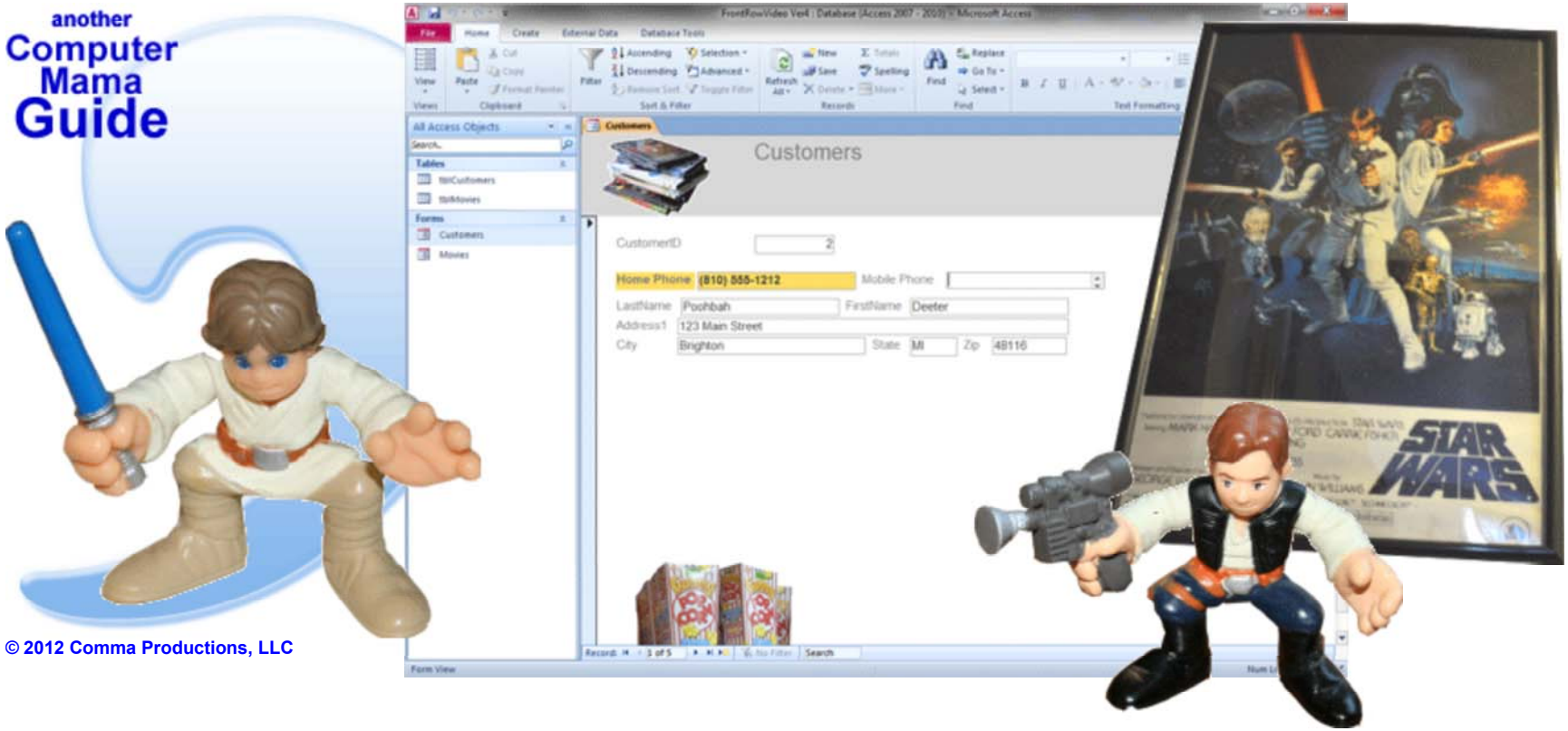

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The Intermediate Guide to Microsoft Access 2010

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Microsoft Office Specialist Certification

What is the Microsoft Office Specialist Certification?

The Microsoft Office Specialist certification validates through the use of exams that you have obtained specific skill sets within the applicable Microsoft Office programs and other Microsoft programs included in the Microsoft Office Specialist Program. The candidate can choose which exam(s) they want to take according to which skills they want to validate.

CertiPort is the premier provider for validating technology skills.

The **Microsoft Office Specialist** tests are offered at authorized testing centers.

For more information on the MOS exam topics or to find a testing center near you please contact: **www.certiport.com**

What is the Microsoft Office Specialist Certification Program?

The **Microsoft Office Specialist (MOS) Certification Program** enables candidates to show that they have something exceptional to offer – proven expertise in Microsoft Office programs. Recognized by businesses and schools around the world, millions of certifications have been obtained in over 100 different countries. The **Microsoft Office Specialist (MOS) Certification Program** is the only Microsoft-approved certification program of its kind.

The Microsoft Office Specialist Certification Series

Core Certification: Pass any 1 test:
Word 2010 Core: Exam 77-881
Excel® 2010 Core: Exam 77-882
PowerPoint® 2010: Exam 77-883
Access® 2010: Exam 77-885
Outlook® 2010: Exam 77-884

Expert Certification: Pass either test:
Word 2010 Expert: Exam 77-887
Excel® 2010 Expert: Exam 77-888

Master: Pass 3 required and 1 elective test:
Required
Word 2010 Expert: Exam 77-887
Excel® 2010 Expert: Exam 77-888
PowerPoint® 2010: Exam 77-883

Elective
Access® 2010: Exam 77-885 or
Outlook® 2010: Exam 77-884

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The Benefits of Certification

For More Information:
www.certiport.com
www.microsoft.com

Why Get Certified?

For employers, the certification provides skill-verification tools that not only help assess a person's skills in using Microsoft Office programs but also the ability to quickly complete on-the-job tasks across multiple programs in the Microsoft Office system. (http://www.microsoft.com/learning/en/us/certification/mos.aspx). Certification proves a certain level of advanced competency with the programs in question. Employers don't have to wonder if the skills stated on the resume are honest and without exaggeration. This can lead to further employment opportunities and increased pay.

A person holding Microsoft Office Certification shows not just a level of skill, but an ability to quickly complete tasks, due to familiarity with the program and it's many time-saving features. The hard work that goes into learning Microsoft Office programs to the level of proficiency necessary for successful completion of the Certification Exams also indicates a desire on behalf of the student to learn and succeed.

The Benefits: Earn More, Find Jobs Quicker

Research indicates that employees with Microsoft Certification earn more and find jobs quicker than those employees without certification. Furthermore, employees with certification report a greater feeling of confidence. These things translate into greater job satisfaction. (http://www.microsoft.com/learning/en/us/certification/mos.aspx)

Research also shows that individuals with certification make up to 12% more than those without certification. In addition, 82% of Microsoft Office Specialists report a salary increase after receiving certification. Managers like the skills proven and the ability demonstrated by those with Microsoft Office Certifications.
http://www.certiport.com/Portal/desktopdefault.aspx?page=common/pagelibrary/mos2003.html

About Our Certification Program

Books in this Series:
Beginning Guide to Microsoft® Access 2010

Intermediate Guide to Microsoft® Access 2010

Advanced Guide to Microsoft® Access 2010

Microsoft Office Specialist (MOS) Certification for Access 2010

Overview: Our Microsoft Office Specialist certification program for Access 2010 covers all of the exam objectives for the Access certification exam. Microsoft Office Specialist exam 77-85 for Access is an elective exam that demonstrates expert knowledge of database programming and Microsoft Office automation. It is not required for MOS certification.

Our Approach: In designing these Guides, we found that it made more sense to write the lessons based on the Ribbons and Tasks. The beginning of each lesson provides an overview of the Ribbons and Tasks covered.

The Beginning Guide to Microsoft Access 2010 demonstrates the following Ribbons: **Home**, **Create**, **Table Tools, Form Layout Tools: Arrange and Format, Query Tools, and Report Layout Tools**. The lesson activities focus on basic database objects: Tables, Forms, Queries and Reports.

The Intermediate Guide to Microsoft Access 2010 demonstrates the following Ribbons: **Table Tools, Form Design Tools: Arrange and Format, Query Tools, Report Design Tools and the Macro Tools**. The programming focuses on representing one-to-many relationships: Form and Subform, Report and Subreport. The lessons show how to design for Real Users that includes creating a Switchboard that opens when the database is launched.

The Advanced Guide to Microsoft Access 2010 begins with a discussion of how to design a database in Third Normal Form to minimize repeat data and reduce errors. The programming focuses on using Key data to create relationships between Tables. The projects include a Receipt Form that calculates the total amount owed and a Receipt Printout formatted for a small Point of Sale (POS) printer.

Course Prerequisites: Students who enroll in the Microsoft Access 2010 program should have strong computer skills including how to use an Internet browser and how to select commands from a menu. Students should know how to save files and send attachments by email as well. In addition, students should have good skills with spreadsheets.

Microsoft Access 2010 Study Guide

Microsoft Office Specialist (MOS): Exam 77-885 for Access 2010

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About the Authors

Microsoft Office Specialist (MOS): Exam 77-885 for Access 2010

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Elizabeth is the Computer Mama. She developed the teaching methodology in the Complete Computer Guide series using breakthrough research in gender balanced training. Elizabeth has taught several thousand men and women from government, manufacturing, small business, and education in both online and hands-on classrooms.

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All of my books

are dedicated to

Fr. Paul Cummings

who taught me

computers.

Love, eBeth

How To Use This Guide

Microsoft Office Specialist Certification Training

The Comma Method

Observation is a perceptual strategy that asks: why am I doing this and which tools would be most effective? Each lesson begins with a discussion of the purpose and the objectives.

Orientation helps students start at the right place. The screen shots in the *Complete Compute Guides* show the entire window as well as a close up of the particular button or command.

Notation There are "breadcrumbs" above each screen image. Like Hansel and Gretel, the breadcrumbs show the pathway to a button or option. Our notation uses the following convention:
Ribbon->Group->Button->Options

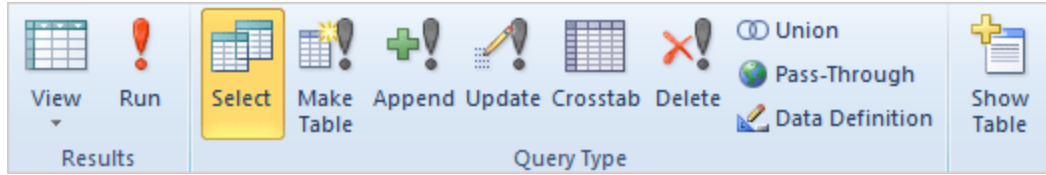
Menu Maps

The Comma Method recognizes that there is a difference in how men and women navigate the menus. Men typically have the ability to see the map first. This method of acquiring knowledge is called *Breadth-first*. [1] Women tend to work with the details first. They learn several commands, such as copy, cut, and paste, then they put those concepts under the label, “edit.” This method of learning is called *Depth-first*.

The Comma Method uses menu mapping to assist men and women to see both the Breadth and the Depth. An example of the menu map is can be seen here.

[1] Ford, Nigel, Sherry Chen, Matching/mismatching revisited: An Empirical Study of Learning and Teaching Styles. British Journal of Educational Technology v.32 no1 (Jan. 2001)

Query Tools->Design



Take One

Access 2010: Getting Started

Hello, Again, Hello

Intermediate Access Objectives

An overview of the lessons in this book:

1. Representing a one-to-many relationship with a Form and Subform.
2. Using a Query Criteria to make a Combo Box that looks up a value on a Form.
3. Creating a blank Form and adding buttons to open Forms and Reports.
4. Finding common errors in Forms and Queries and correcting the mistakes.
5. Calculating Totals in a Report.

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Lesson 1 : Hello, Again, Hello

1. Readings
Read Lesson 1 in the Intermediate Access guide, page 11-26

Project
This overview does not have a demonstration project.

Downloads
There are no downloads for this lesson.

2. Practice
There is no Practice Activity for this lesson.

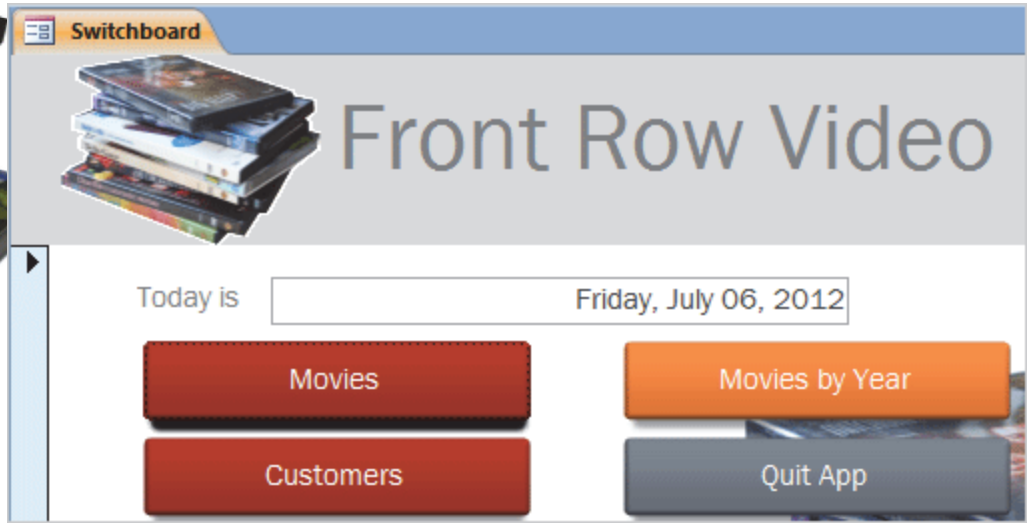
3. Assessment
There is no test for this lesson.

Working with Databases

Learning Microsoft Access is different than mastering the rest of the Microsoft Office suite. Each objective in PowerPoint can be explained and demonstrated in a couple dozen pages. In contrast, it takes a whole book of programming to make a database useful.

One goal of the Intermediate Access programming is to create Forms and Reports that search the movies. Another goal is to make the database User Friendly. This lesson offers a summary of each step in the process is, why that method was chosen, and what the outcome should be.

Sample Microsoft Office Access 2010 Form



Take One

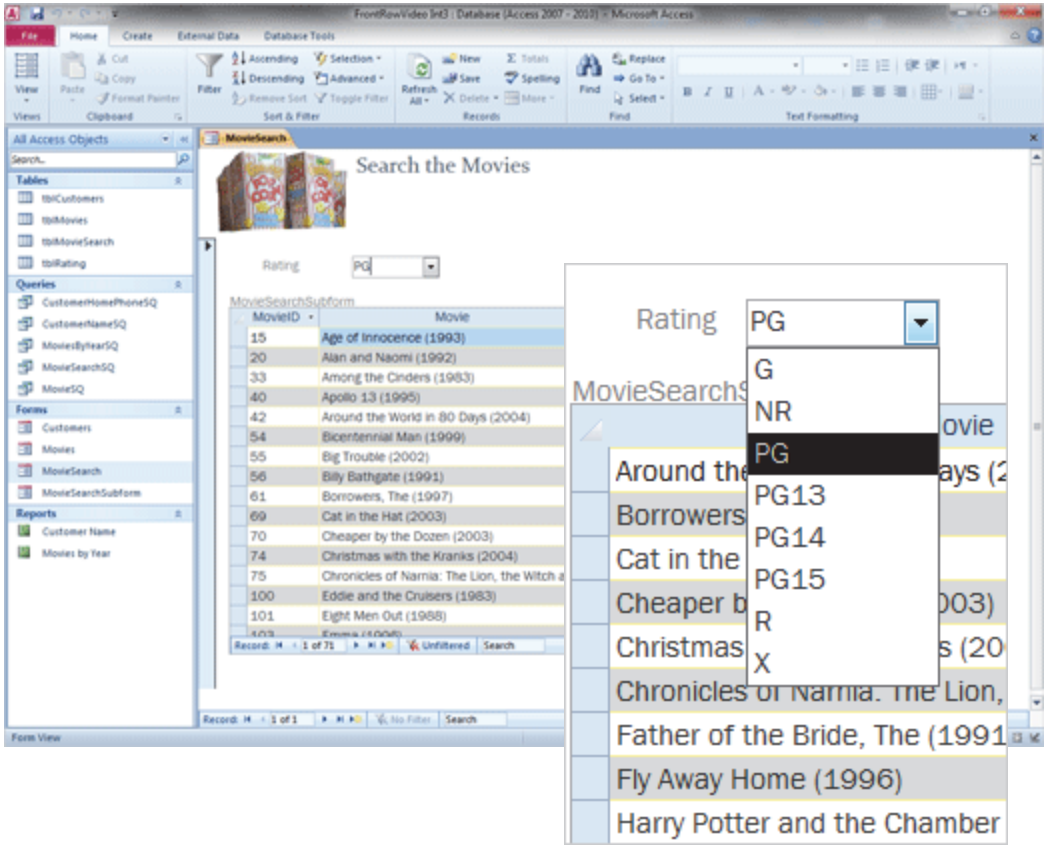
Goals and Objectives

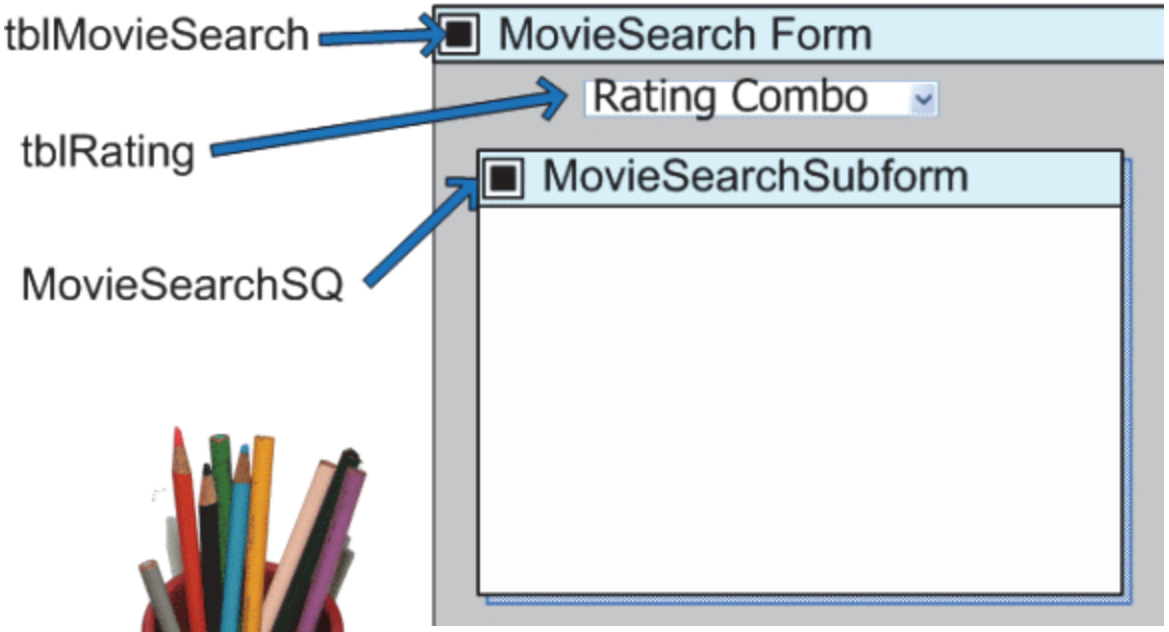
The ***Beginning Guide to Microsoft Access 2010*** introduced the database objects: Tables, Queries, Forms and Reports. These lessons showed a one-to-one relationship. The Movies Form has one Record Source: the Movie Table, tblMovies.

The ***Intermediate Guide to Microsoft Access 2010*** demonstrates several methods of representing one-to-many relationships. For example, there are many movies with the same rating, say "PG,"

What Is The Best Approach? These lessons will create several Forms and Reports that look up important information. These lessons will also focus on the User Interface. Simple programming can make a Form much easier to use.

Example of a Form with a Combo Button





Example of a data diagram: The arrows show the Record Source for the Forms and the Control Source for the Combo Box.

Before You Begin: Draw A Data Diagram

Each object in a database either looks up the information in a Table or modifies the information in the Table.

These lessons will build Forms with Subforms. A Subform is a Form that is added to another Form. The two Forms are linked by Fields that both share. This is how a relational database represents a one-to-many relationship.

Each Form and Subform will have a different Record Source, so it is important to keep track of which Table or Query goes with which Form or Report.

A **data diagram** helps organize your plans. It is a simplified sketch of what you would see when the Forms are in Design View.

Take One

Name Objects Consistently

Name Objects Consistently: Use a naming strategy that includes the Object.

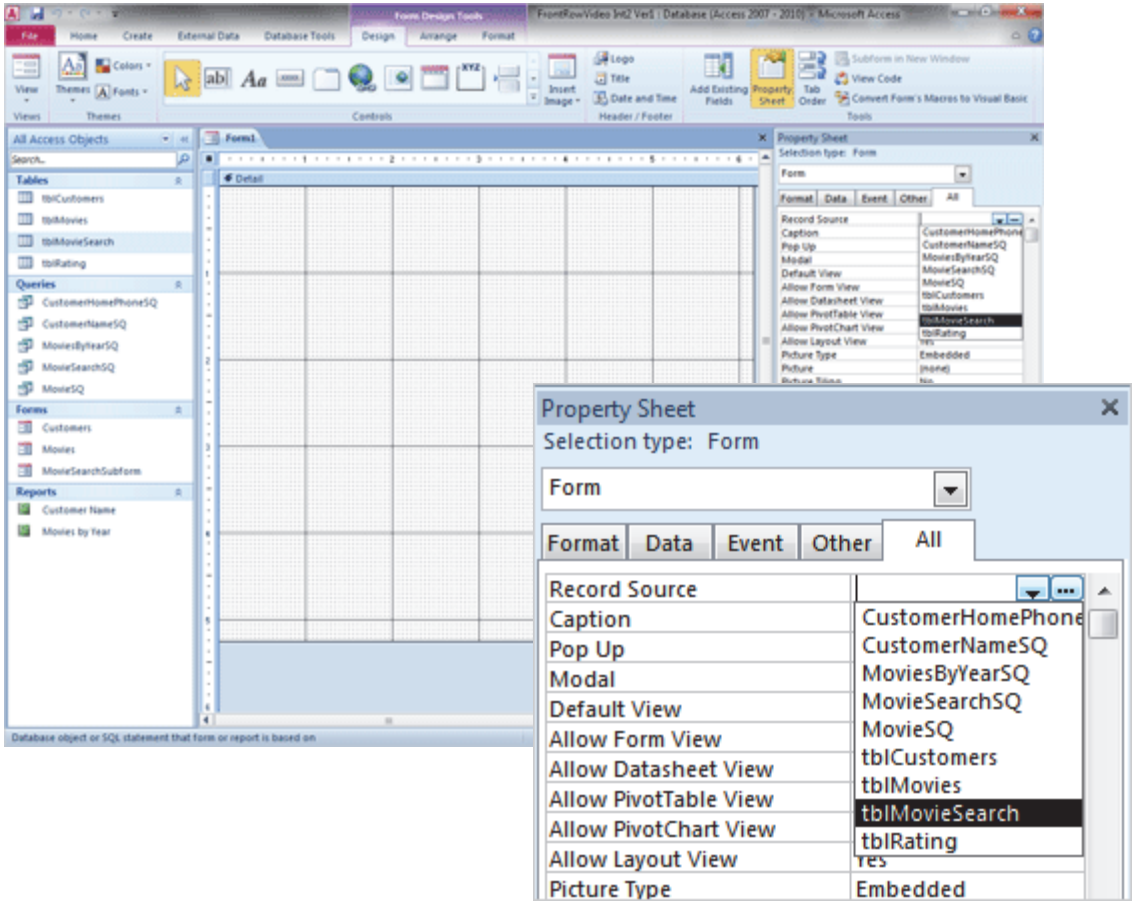
Why Does This Matter? When you review the Record Source in the Property Sheet, you will discover to your dismay that the Objects are not sorted and identified as Tables or Queries.

If you use a consistent naming strategy when you name the Tables and Queries it will be very easy to identify what type of Object (Table or Query) it is in the Property Sheet.

The same method should be used when you name the Primary Key. It should include the name of the Table it goes with. In our lessons we will rename the Primary Key in the Rating Table from ID to RatingID.

The Computer Mama Also Sez: Using the default, ID, for all of the Primary Keys is like naming all of your sons "Dave."

Sample of a Property Sheet for a Form. The Record Source is selected



Take One

One-From-Many Relationships: The Rating Combo Box

Use a Table to Add Data to Another Table
This lesson will add a Combo Box to the Movie Form. The Combo Box will select data from the Rating Table and add the Rating to the Movie Table.

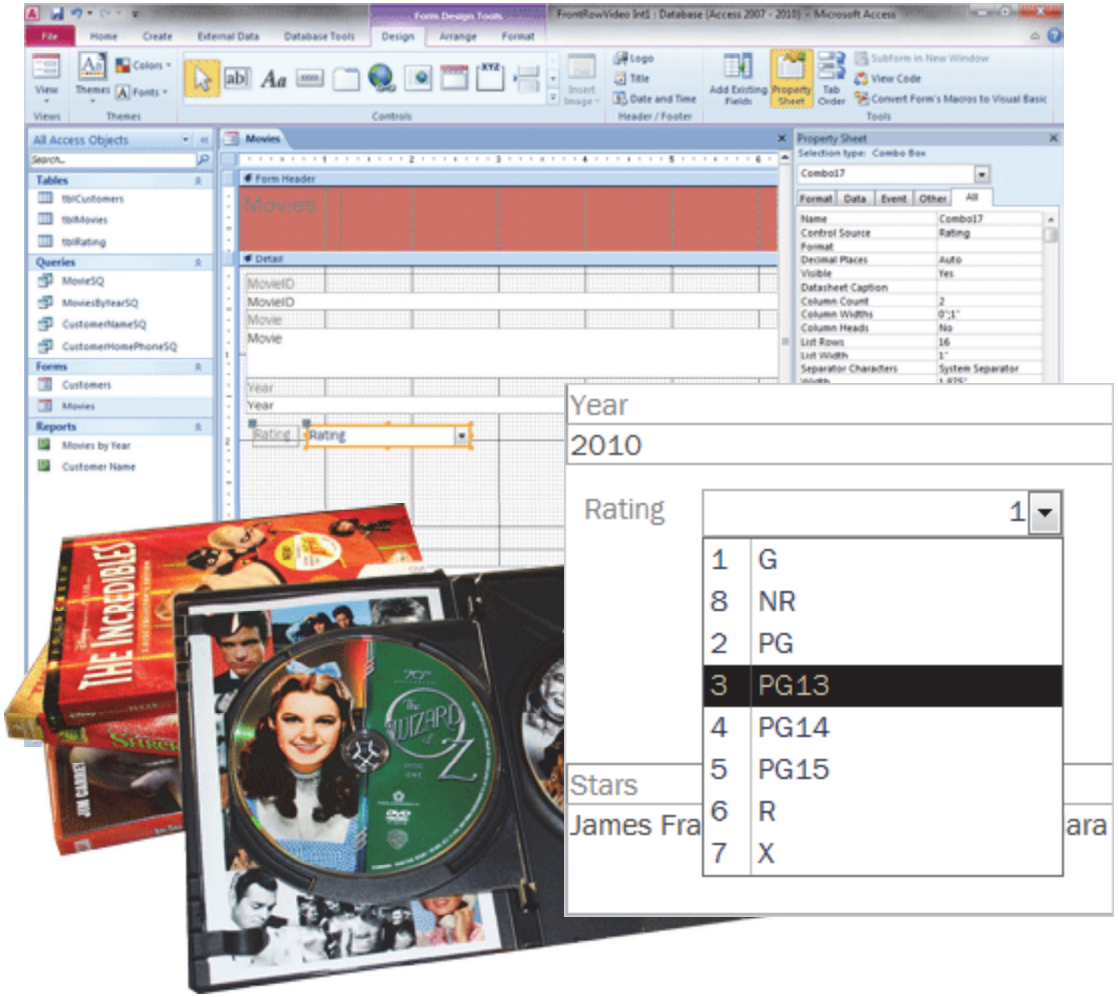
What Are the Steps?
Create a Rating Table and add the Rating data.
Add a Rating Combo Box to the Movie Form.
Troubleshoot the Combo Box Properties.

What Are the Issues? The Combo Box Wizard does NOT always choose the Field that matches. This lesson shows one method for selecting the Field that matches.

What is the key concept? The focus of this lesson is on the data. Each Field in a Table has a specific data type: Number, Text, Date, etc.

When you add data from one Table to another the data has to be the same type. Text goes with Text. Numbers go with Numbers.

Sample of a Form with a Combo Box Control



Take One

Forms and Subforms: Purpose of This Programming

The lessons will create a Search Form that lets Users look up Movies by the Genre and Rating.

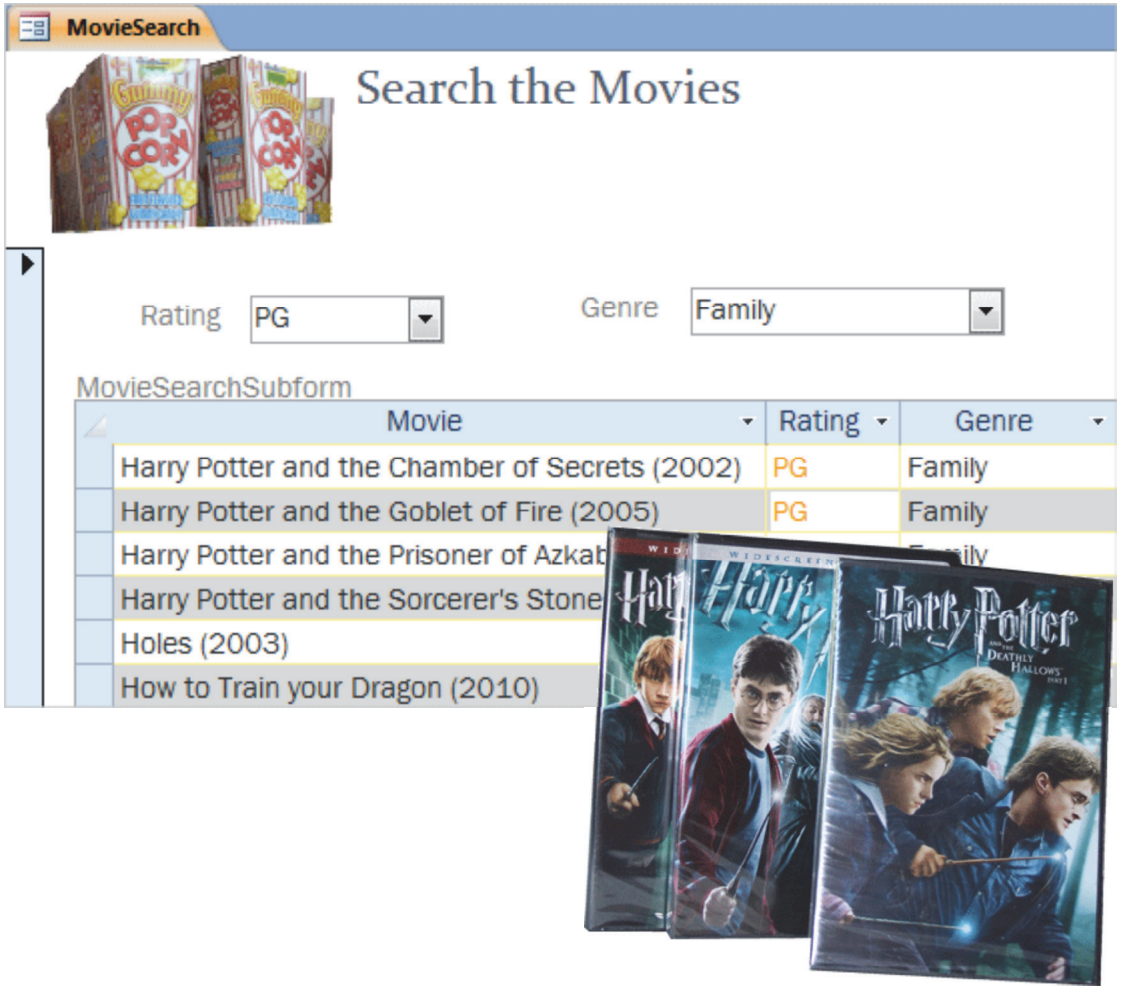
The three **Form and Subform** lessons will program several Forms and Controls to:

Create a Form and Subform
Forms and Subform Design Part 1 will design two Forms: The MovieSearch Form and a MovieSearchSubform. The MovieSearch Form has a new Table for the Record Source. The Movie Subform will use a Query for the Record Source. Both Forms will be formatted and tested.

Link the Form and Subform
Forms and Subform Design Part 2 demonstrates how to link a Form and Subform. The Movie Search Form will use a Combo Box to filter the data in the Movie Subform.

Use a Query to Select Specific Data
Forms and Subform Design Part 3 adds a Synchronized Combo Box to the MovieSearch Form.

Example of the Completed Search Form



Take One

Form and Subform Design, part 1: Create the Subform

Key Concept: Using a Query as a Record Source

Plan: The Subform will display the Movies as a list in Datasheet view. The Rating data will be formatted with Conditional Formatting

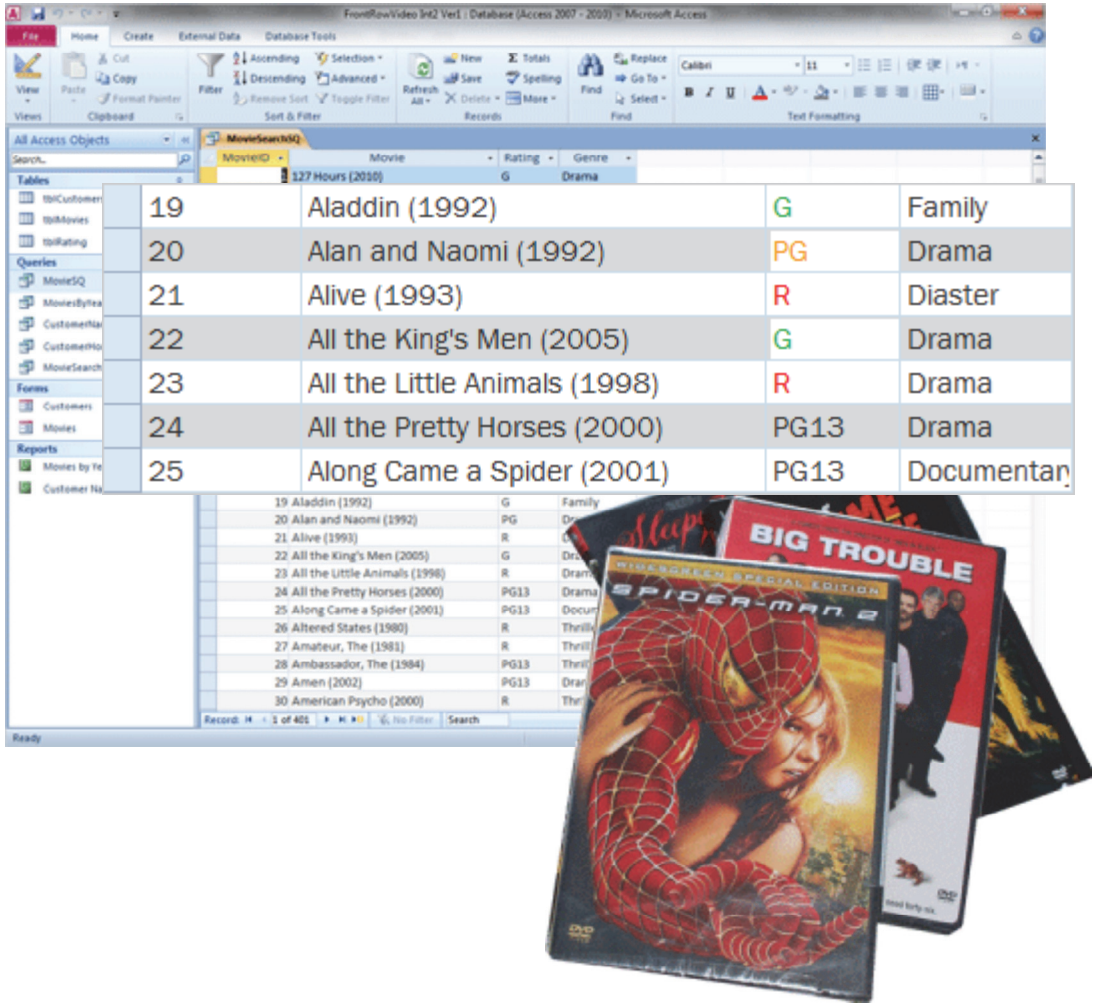
What Are the Steps? Create a Select Query for the Record Source and Test the Results. Then, create a Subform and edit the Property Sheet.

What Are the Issues? The Subform should be in Datasheet View.

Why Use This Method? A Form can use either a Table or a Query for the Record Source.

A Query lets you select, sort and filter the Records in the Subform.

Example of the Movie Subform with Conditional Formatting



Take One

Form and Subform Design, part 1: Create the Form

Key Concept: Use a Combo Box Control to look up data in one Table and add it to another Table.

Plan: The Form will enable Users to search for Movies by Rating. This Form will have a new Table, tblMovieSearch, as the Record Source.

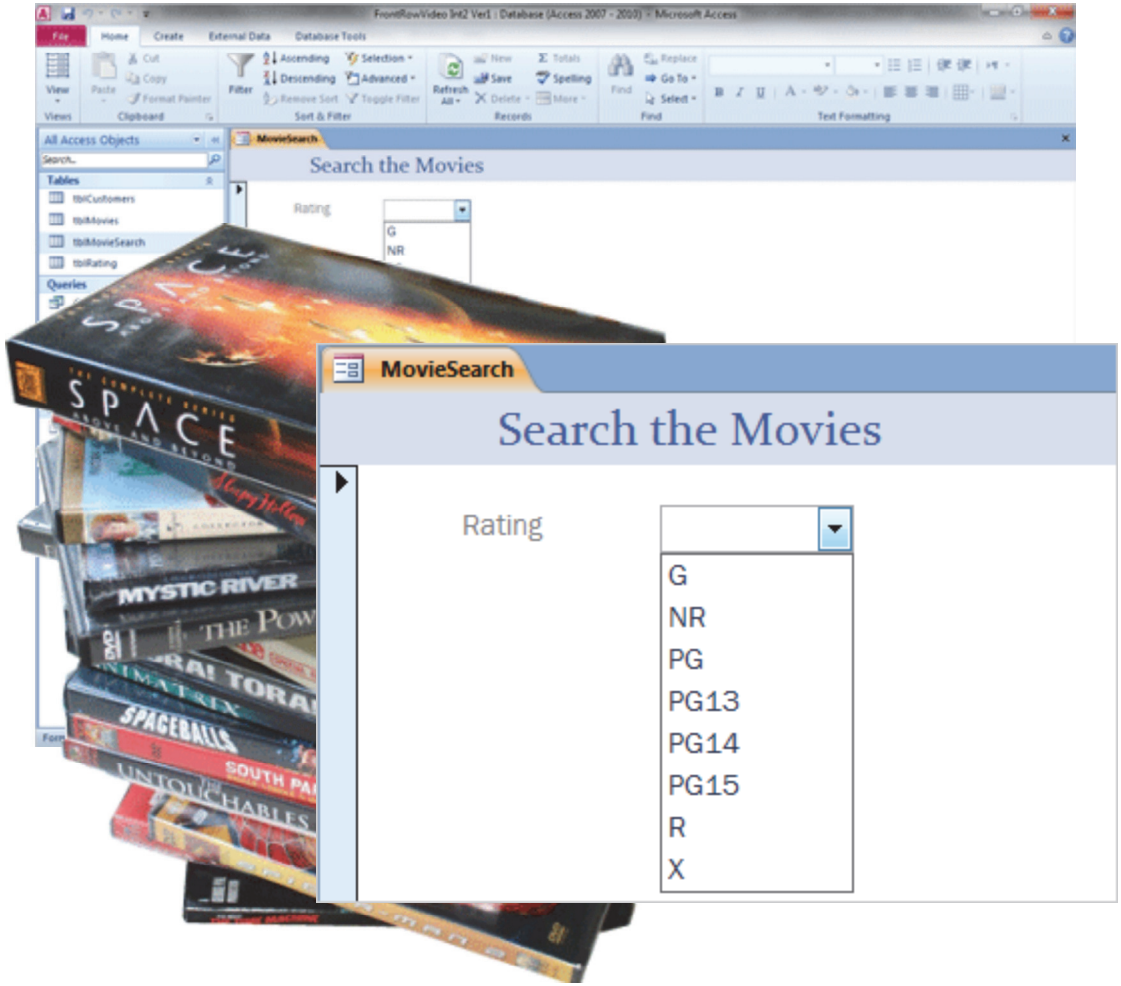
What Are the Steps?
Create a new Table for the Movie Search Form.
Create a new Form based on tblMovieSearch.

Create a new Table for the Rating data.
Use tblRating as the Control Source for a Combo Box on the MovieSearch Form.

What Are the Issues? This Form should be in Single Form View.

Why Use This Method? A Combo Box Control is an effective way to look up the data in a Table. When a User selects a value from a Table it is accurate and spelled right.

Example of the Rating Combo Box on the MovieSearch Form



Take One

Form and Subform Design, part 2: Link the Form and Subform

Key Concept: Use a Form Control to add the MovieSearchSubform to the MovieSearch Form.

Plan: Link the Form and Subform by three Fields to create a one-to-many relationship.

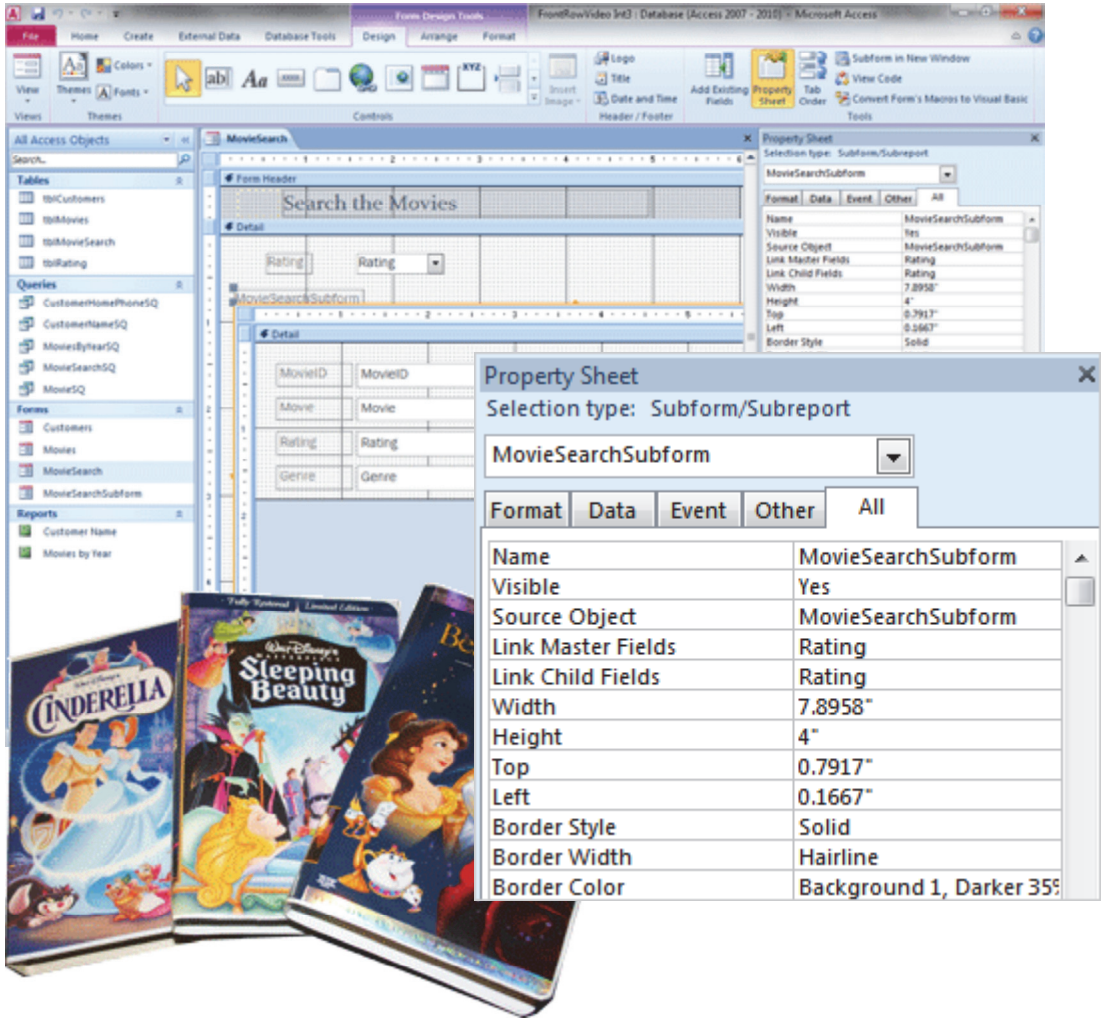
What Are the Steps?
Use the Subform Wizard to Link the Forms
Select the Subform
Define the common Field: Rating

Review the Subform Properties
Confirm the Master and Child Links
Test the Movie Search Form

Automate the Form with a Macro
Troubleshoot the Programming

What Are the Issues? The Control Automation will be programmed with Embedded Macros. The new Macro Editor uses forms to help write the Code.

Example of the Form and Subform Links in the Property Sheet



Take One

Form and Subform Design, part 3: Synchronized Combo Boxes

Key Concept: Use the Query Criteria to look up a value on a Form.

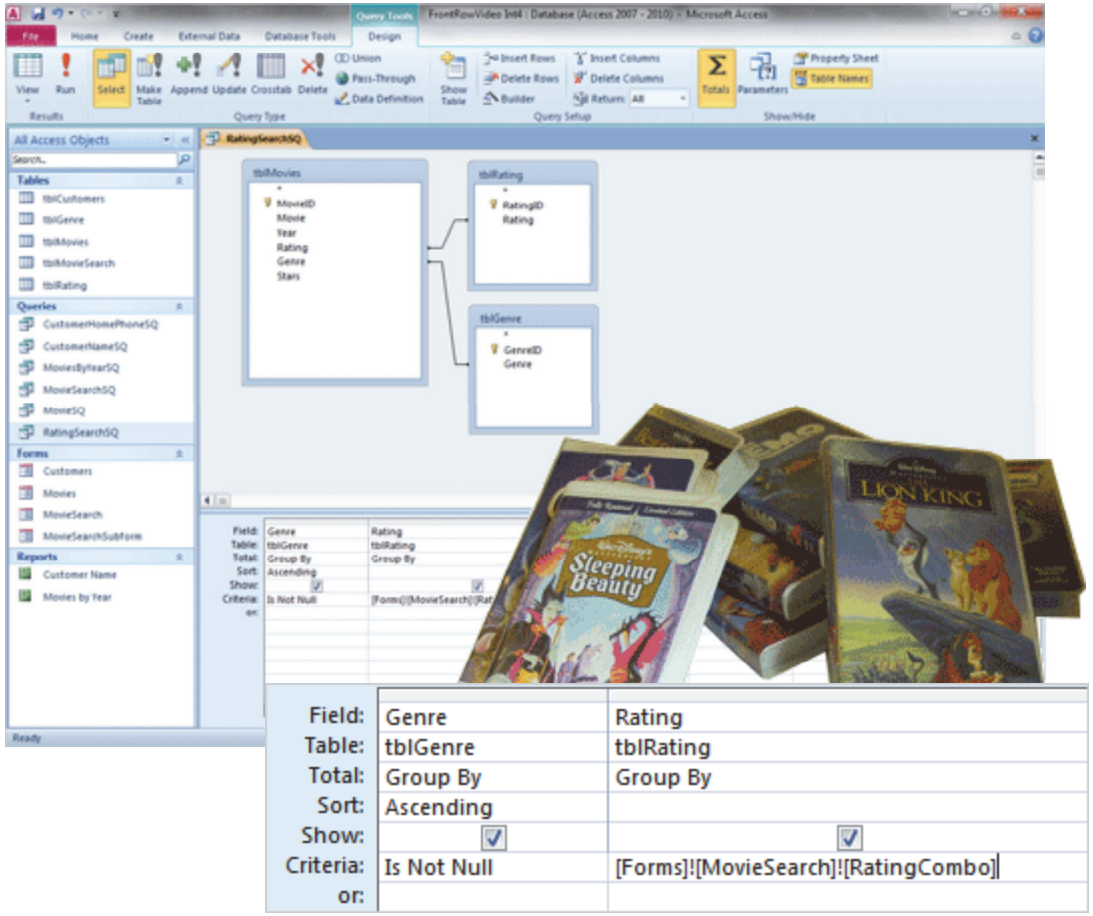
Plan: Synchronize two Combo Boxes and Filter the Records in the MovieSearchSubform.

What Are the Steps?
Create a Table for the Genre.
Create a Query for the second Combo Box.
Use the Expression Builder to write a Criteria that looks up a Field on the MovieSearchForm.

Create a Genre Combo Box
Automate the Form with a Macro
Test the Movie Search Form
Troubleshoot the Programming

What Are the Issues? Many of the Movie Records are incomplete: they have no Genre data. So, the Query needs to filter out the Movies that do not have a Genre with a Criteria.

Example of a Query that synchronizes two Combo Boxes



Take One

Designing for Users: Meet the Stars

Key Concept: Use Command Buttons to open Forms and Reports from a Form.

Plan: Create a Switchboard Form.

What Are the Steps?
Create an Unbound Form.

Add Command Buttons:
To open two Forms: Movies, Customers.
To open one Report: Movies by Year

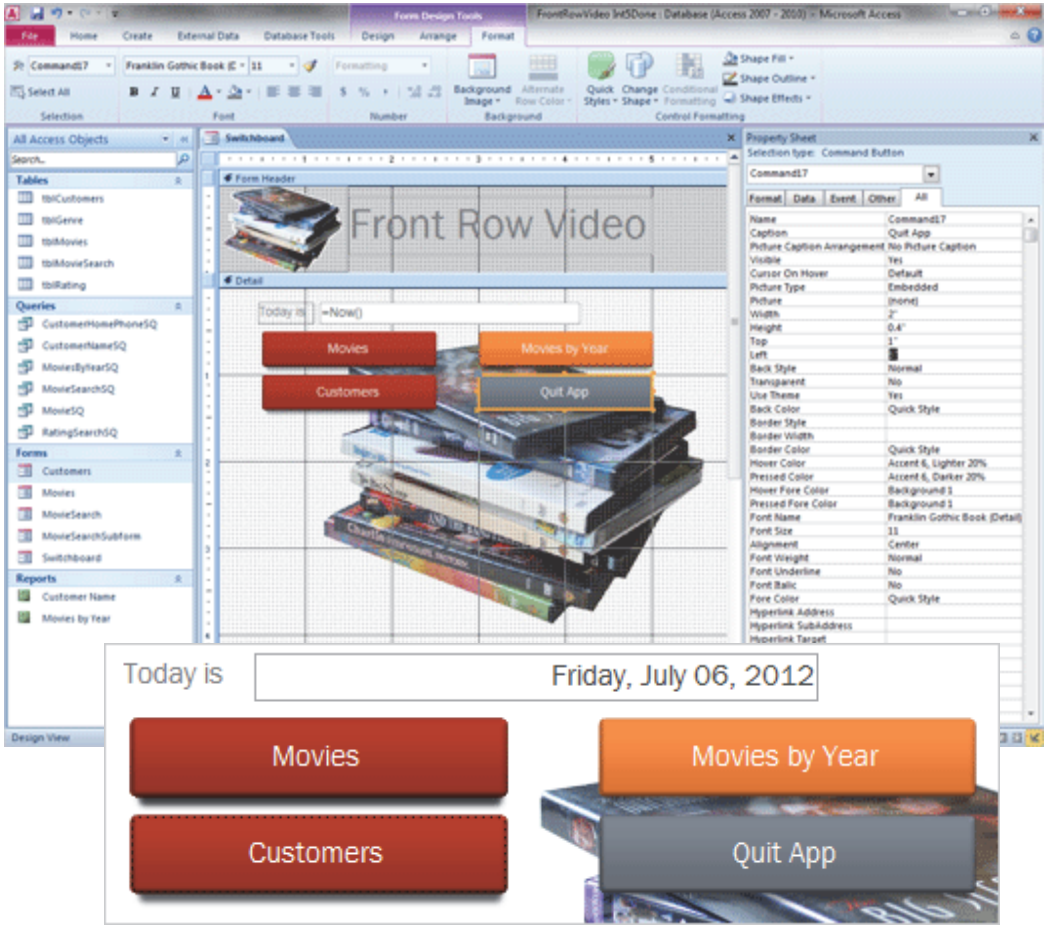
Add Buttons to Return to the Switchboard From the Movies and Customers Form.

What Are the Issues? The Command Button Wizard creates Embedded Macros.

Why Use This Method? Embedded Macros are the default in Microsoft Access 2010.

The Macros will be converted to Visual Basic (VBA) to demonstrate legacy programming.

Example of the completed Switchboard Form



Take One

Designing for Users: The Opening Scene

Key Concept: Program the User Interface for the Current Database.

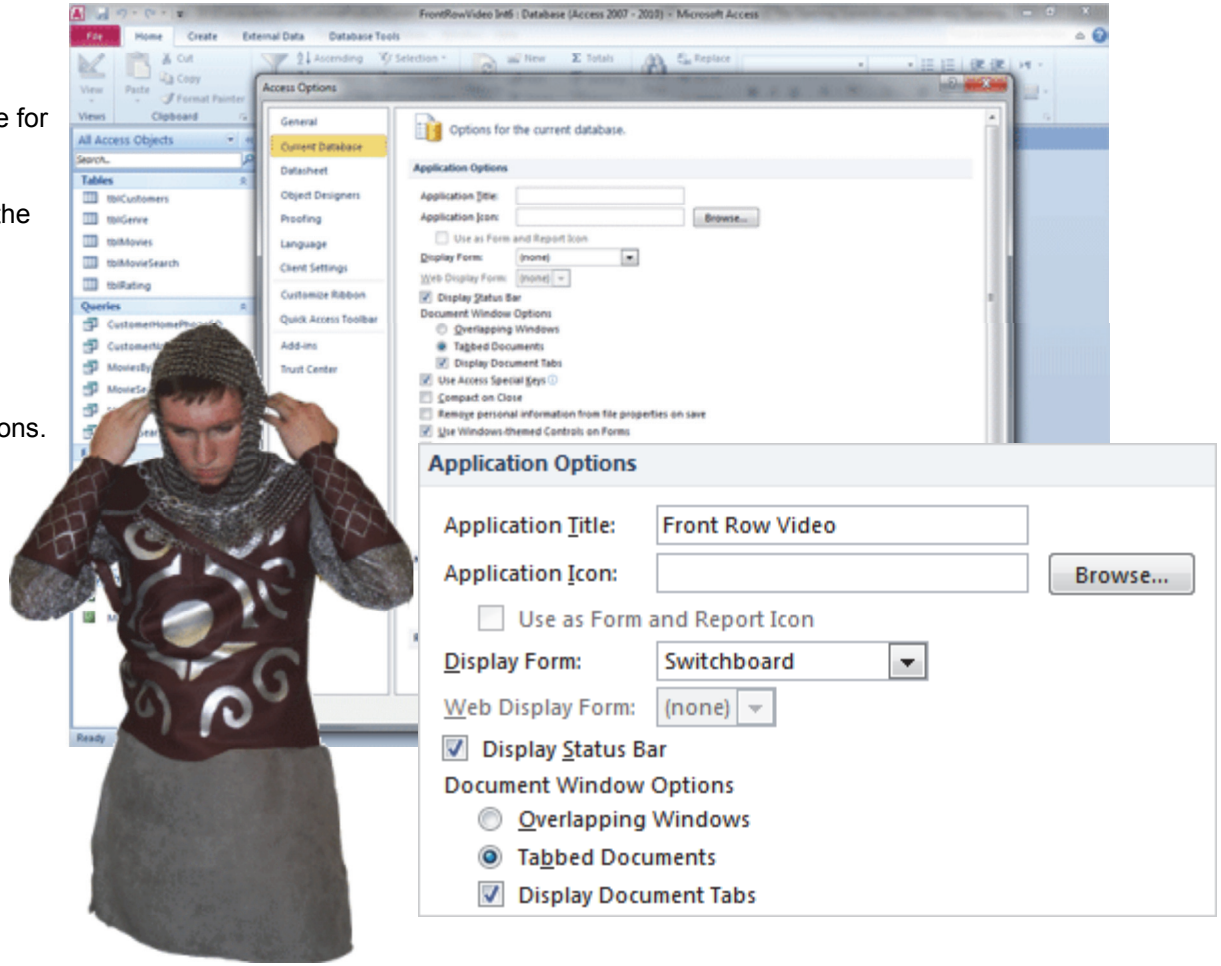
Plan: Open the Switchboard Form when the database starts and hide the Navigation Pane. Edit the Form Properties to hide Selectors, Buttons and Controls when the Form opens.

What Are the Steps?
Set the Microsoft Access Application Options.
Select a Form to Display.
Test the start up settings.

Edit the Switchboard Form Properties
Hide the Record Selectors.
Hide the Navigation Buttons.
Hide the Windows Controls.

What Are the Issues?
Forms need to be tested again and again.

Screenshot of the Access Applications Options



Take One

Designing for Users: Testing Software

Key Concept: Use the Property Sheet to investigate Form Errors.

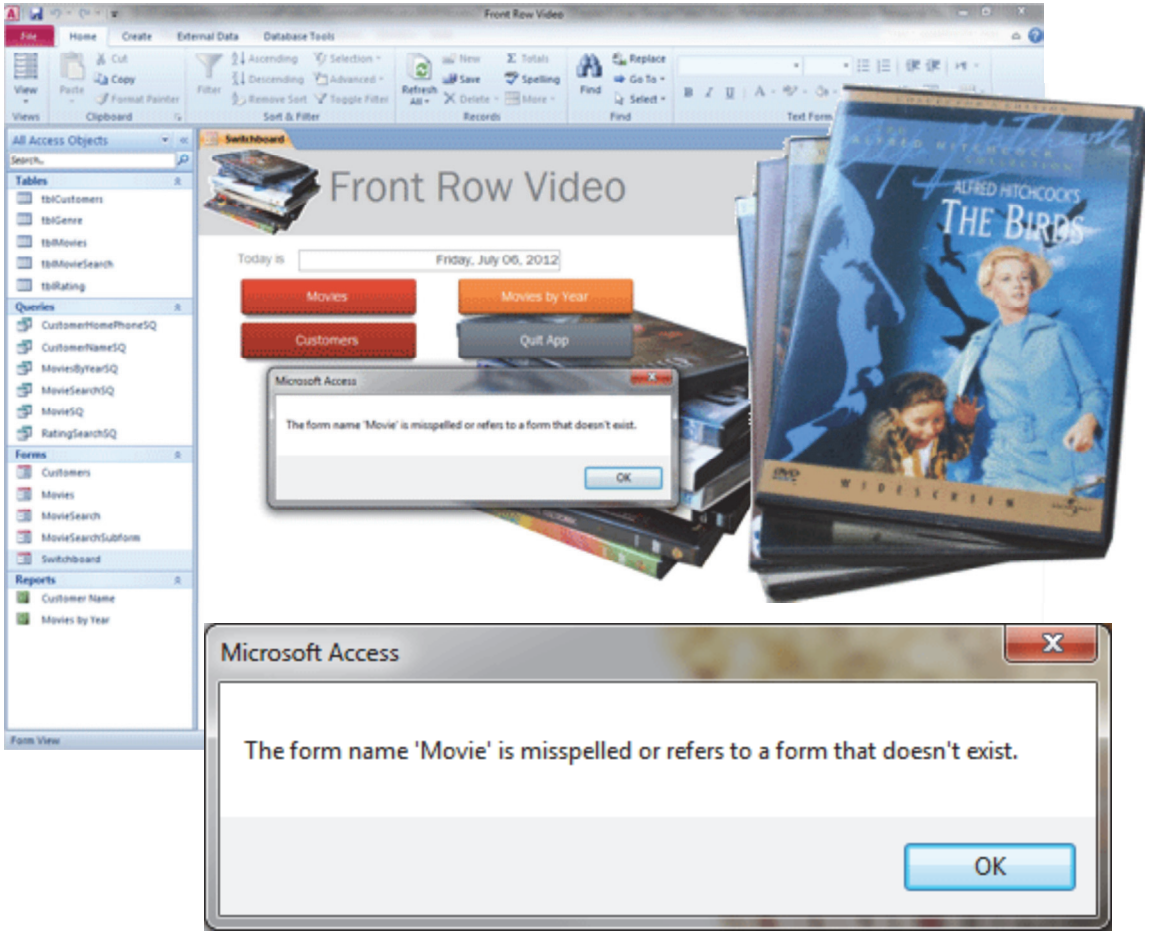
Purpose: Identify programming errors.

What Are the Steps?
Create an error: misspell the Form Name.
Test the Control and Review the error.
Correct the error and test again.

What Are the Issues? All programmers need to learn how to troubleshoot mistakes.

Why Use This Method? The Computer Mama suggests that kicking the computer to next Tuesday is not a winning strategy. This lesson offers a more scientific method.

Sample of a spelling error



Take One

One-to-Many: Report Design Report Totals and Options

Key Concept: Add a Calculated Control to the Group Footer to show Totals.

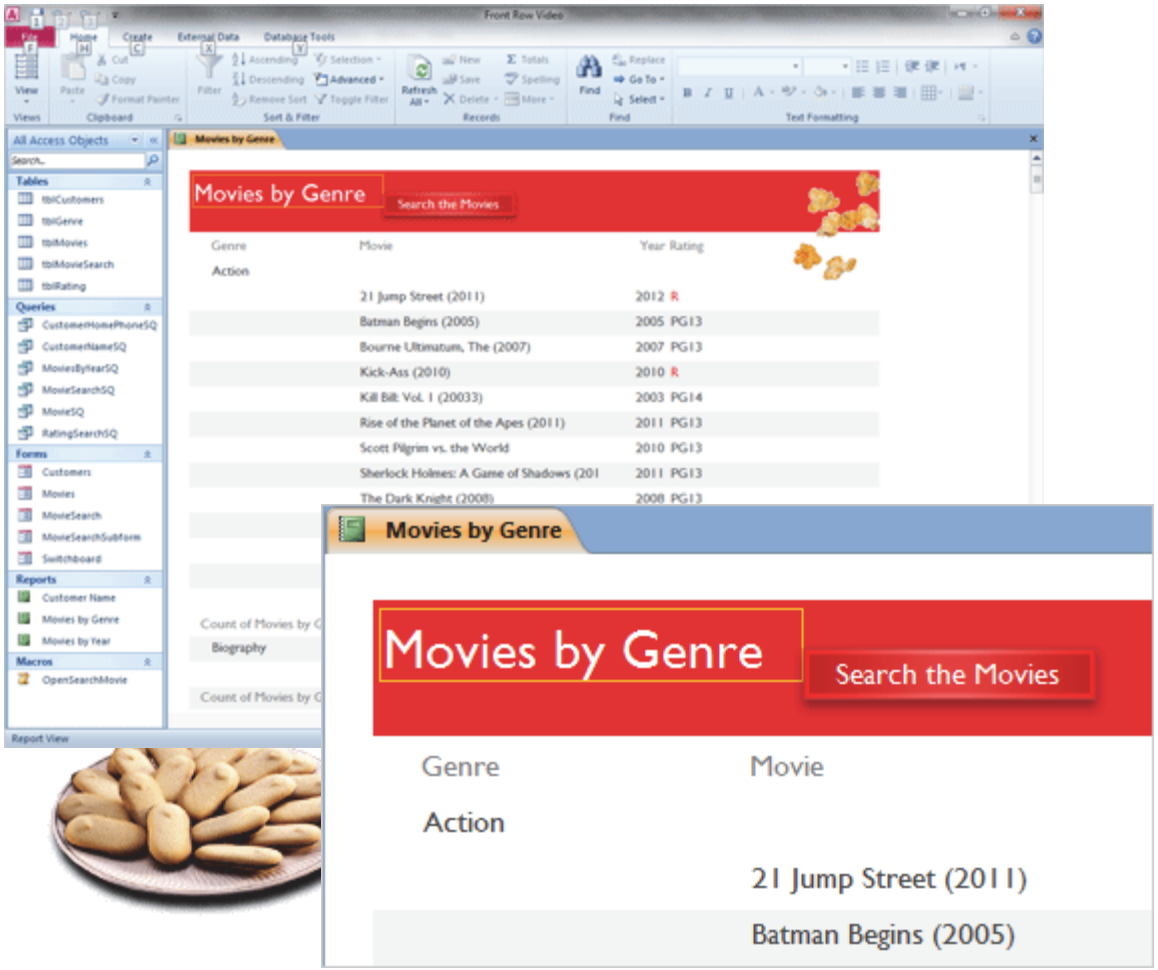
Purpose: Use Sorting and Grouping to show One-to-Many relationships in a Report.

What Are the Steps?
Create a Report based on a Query.

Add Sorting and Grouping
Group the Movies by Genre
Sort the Movies by Year

Add Totals to the Report
Total Each Group
Total for the Report

Grab the cookies.
Let's get started!



Take Two

Access 2010: Designing Forms

One-from-Many Relationships

Intermediate Access Objectives

In this lesson, you will learn how to:

1. Create a new Table to use as a Record Source for a Combo Box Control.
2. Use the Combo Box Wizard to create a Bound Drop Down Control.
3. Edit the Combo Box with the Property Sheet.

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Lesson 2 : One-from-Many Relationships

1. Readings
Read Lesson 2 in the Intermediate Access guide, page 27-52

Project
Create a Combo Box with the Wizard.

Downloads
FrontRowVideo Int2.accdb
BBL Int ver2.accdb

2. Practice
Do the Practice Activity on page 53.

3. Assessment
Review the Test questions on page 54.

Create Ribbon

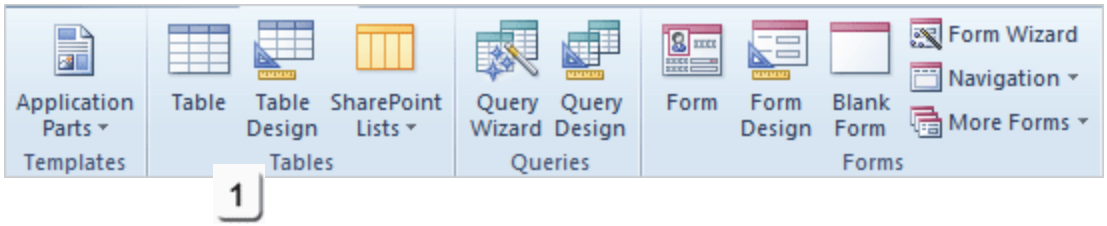
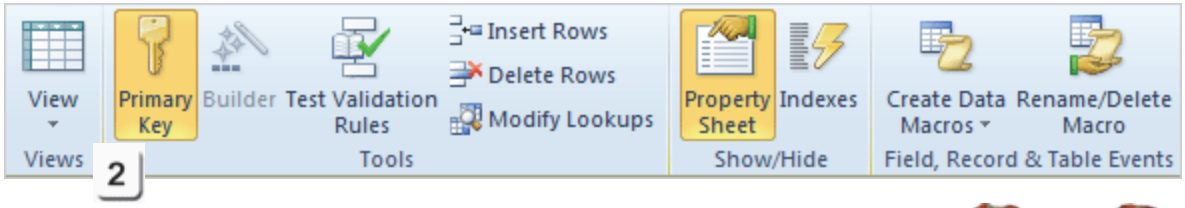


Table Design Tools



Menu Maps

From the **Create Ribbon**.
1. Create ->Tables->Table Design, page 34

From the **Table Tools Ribbon**
2. Table Tools ->Design->Views->View, page 35

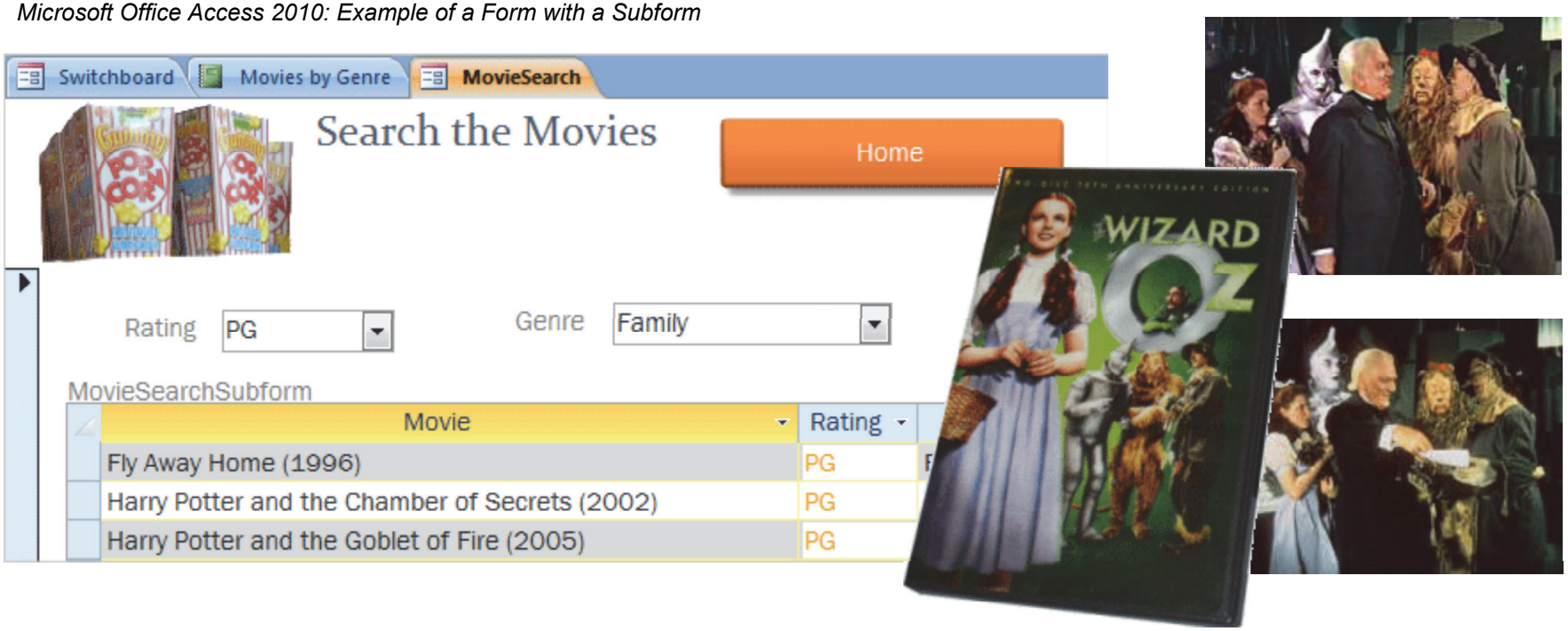
From the **Form Design Tools ->Design Ribbon**
Form Design Tools ->Design->Controls->Combo Box, page 37

One-to-Many Relationships

The Beginning Guide to Microsoft Access 2010 demonstrated **one-to-one relationships**. There was one Table, tblMovies, for the Movie Form. There was another table, tblCustomers, for the Customer Form. Each Query had only one Table as well. This is a simplified approach to programming that introduced the database objects: Table, Query, Form and Report.

In real life, most transactions are **one-to-many relationships**. For example, one customer may rent many movies. There are several ways to create a one-to-many relationship in Microsoft Access. *The Intermediate Guide to Microsoft Access 2010* will demonstrate how to create Forms as well as Reports that show one-to-many relationships.

Microsoft Office Access 2010: Example of a Form with a Subform



Data Entry: Form and Subform

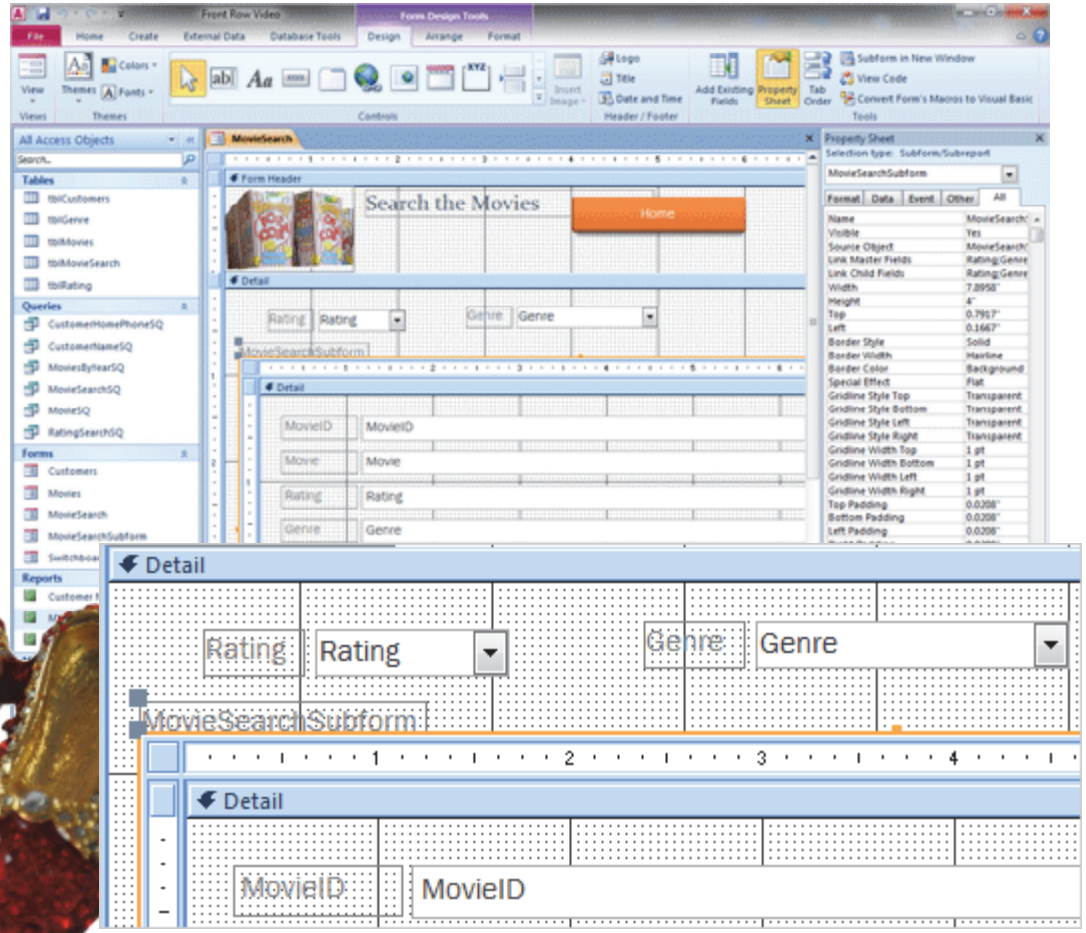
Forms and Subforms let Users record one-to-many transactions. For example, a Receipt Form has the customer's name on the top Form and the movies that were rented listed in the Subform on the bottom.

When business is good many customers return many times and rent many movies. A Receipt Form is also an example of a **many-to-many relationship.** So, we will spend some time on the Receipt Form in the *Advanced Guide to Microsoft Access 2010*.

The Intermediate lessons will create two forms that work with the Movie Table: a data entry form and a search form. We will also add a little programming to the Form Controls so that the records update automatically when the User makes a selection.

So far, so good.

Microsoft Office Access 2010: Example of a Form with a Subform in Design View



Purpose of This Programming

Forms and Form Controls are User-friendly tools to add, move or modify data from one Table to another. The **Combo Box** can use a Table or Query to look up, filter or select the data.

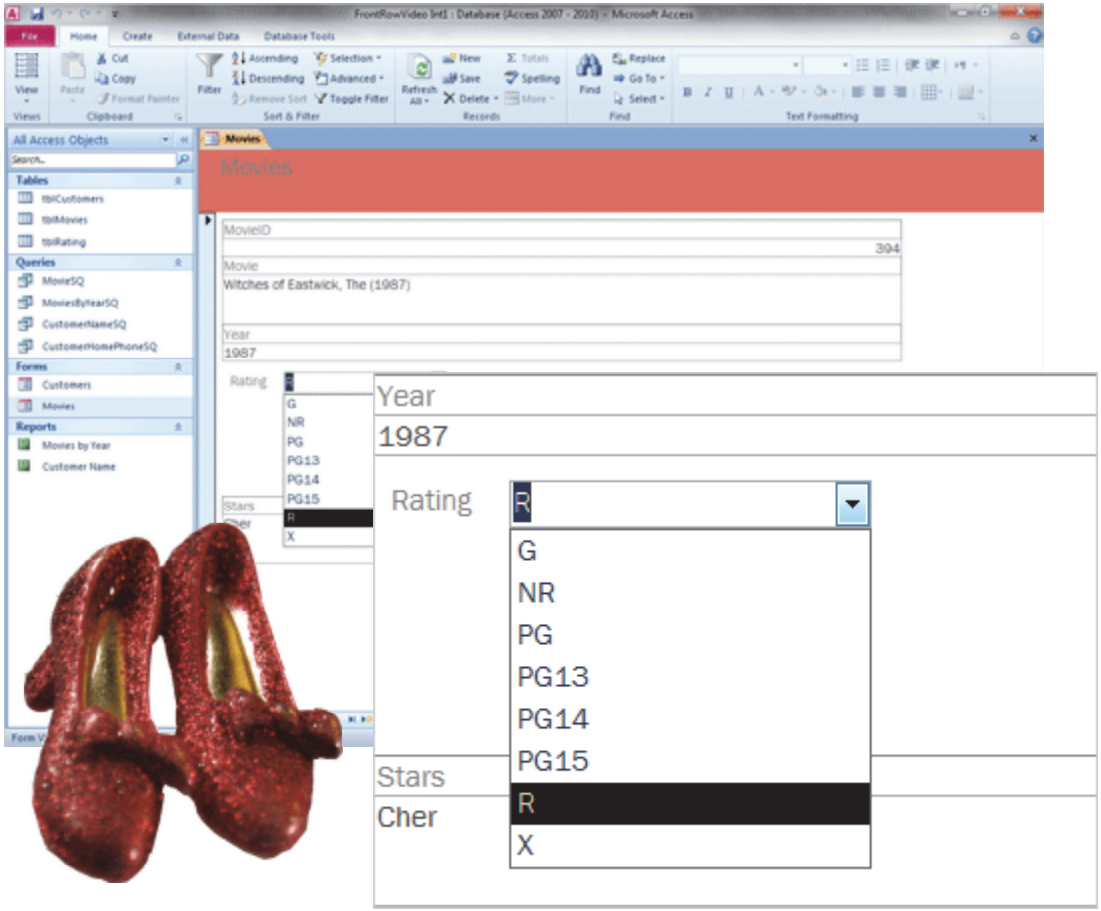
The next three lessons will program several Combo Box Controls to do the following:

Use a Table to Add Data to Another Table
This lesson will create a Combo Box to the Movie Form. The Combo Box will be used to add data from the Rating Table to the Movie Table.

Use a Table to Filter Data in Another Table
The next lesson will create a movie search form. This form will use a Combo Box to filter the data in the Movie Table.

Use a Query to Select Specific Data
A Query can be a Record Source for a Form as well. The following lesson modifies the movie search form with synchronized Combo Boxes.

Microsoft Office Access 2010: Example of a Form with a Combo Box Control



Before You Begin

Before You Begin: Open the Sample Database
Go to **Start -> All Programs ->Microsoft Office.**
Click on **Microsoft Office Access 2010**.
Access will prompt you to open a database.

This lesson uses the database that was created in the Beginning Guide to Microsoft Access 2010. If you finished those lessons you can continue with the same database that you saved or download the sample database at the beginning of this lesson.

The FrontRowVideo Int2.accdb database has:

Two Tables: tblCustomers, tblMovies

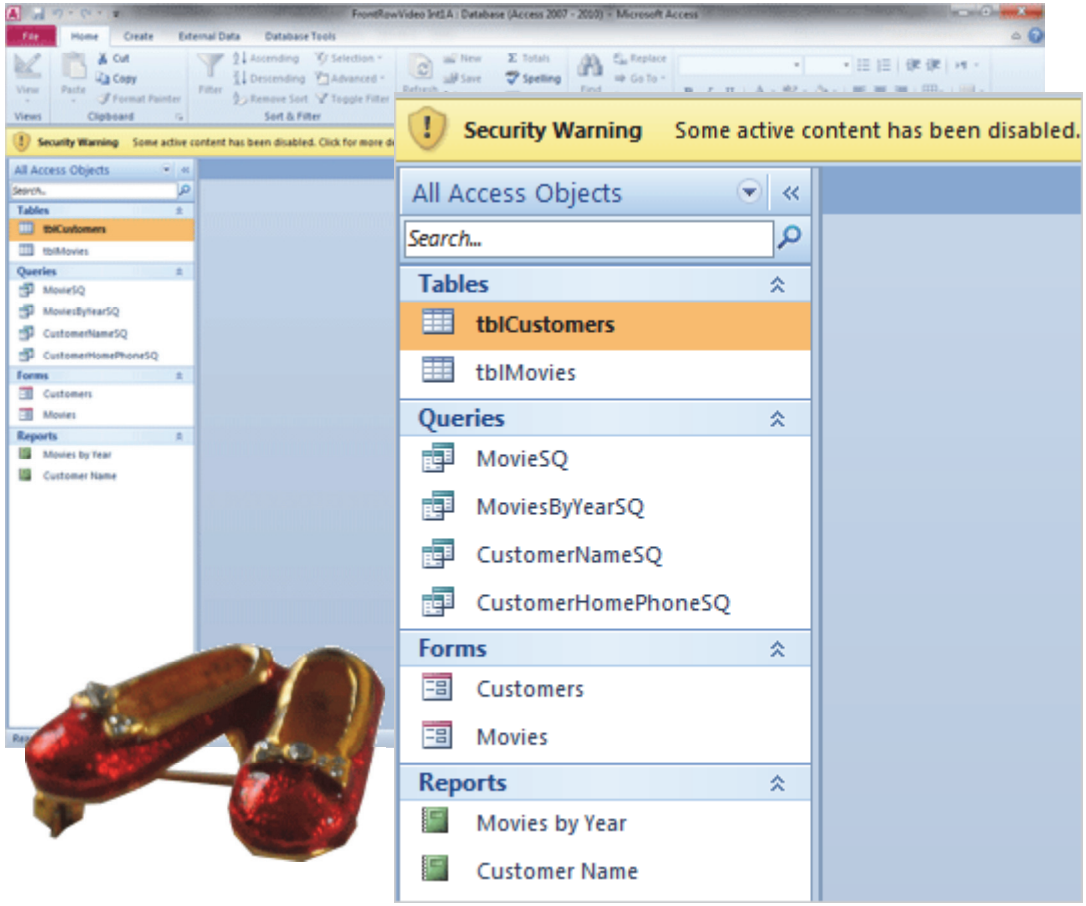
Four Queries: MovieSQ, MoviesByYearSQ, CustomerNameSQ and CustomerHomePhoneSQ

Two Forms: Customers, Movies

Two Reports: Movies by Year, Customer Name
Keep going....

Memo to Self: Click **Enable Content** if you see the Security Warning.

Start -> All Programs ->Microsoft Office->Microsoft Office Access 2010



Exam 77-885: Microsoft Access 2010
2. Building Tables
2.1.1. Create tables in Design View

Know Your Data

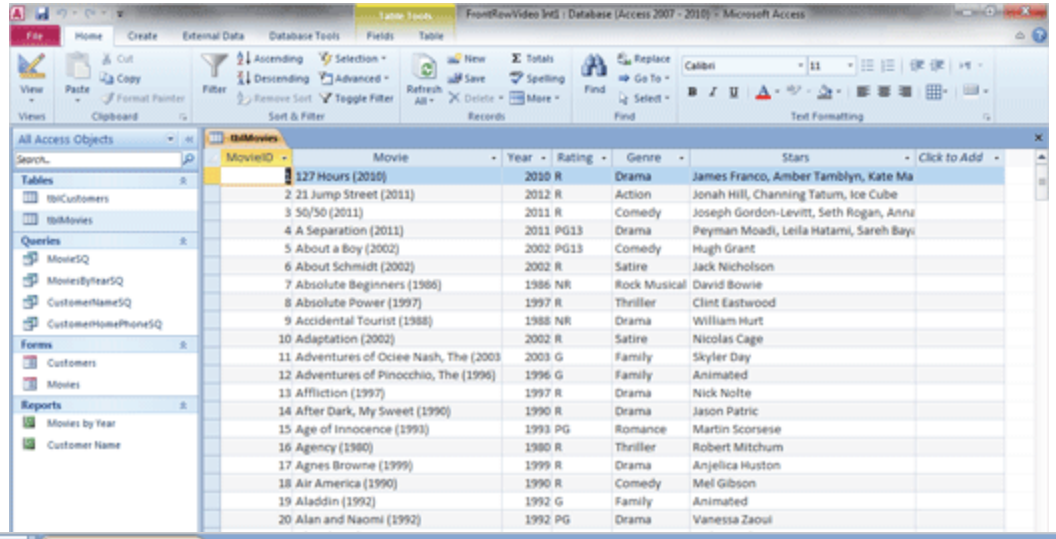
Try This: Review tblMovies

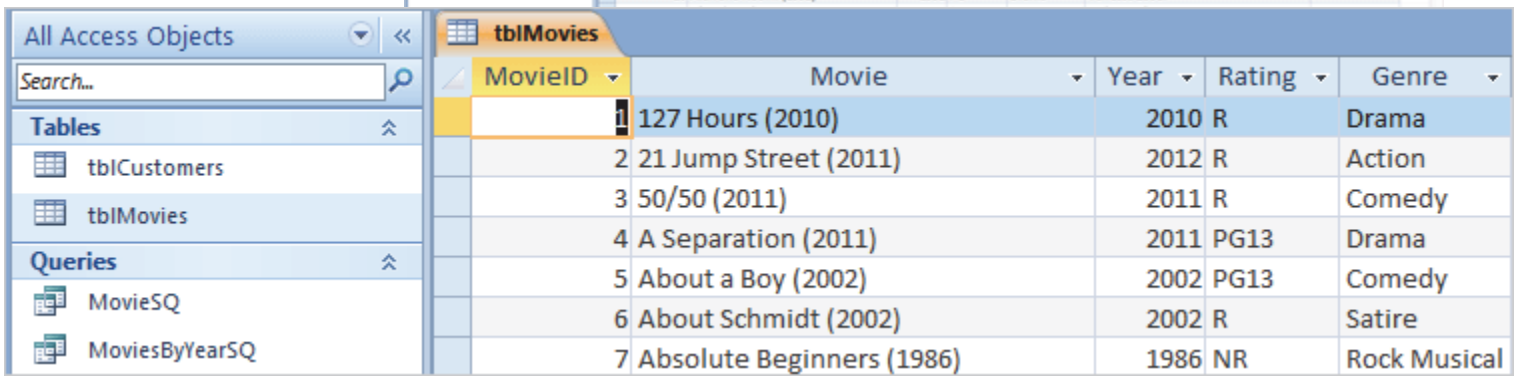
Go to **All Access Objects ->Tables**.
Select a Table: tblMovies
Double-click the Table to open it in Datasheet View.

What Do You See? There are 401 records in tblMovies. There are Fields for Rating and Genre.

Close tblMovies.
Keep going...

All Access Objects ->Tables





Take Two

Use a Table to Add Data

A Combo Box can look up up data from a Table or a Query. This example will look up movie ratings (G, PG, R) from a Rating Table. First, let's create the Rating Table.

1. Try it: Create a Rating Table
Go to **Create ->Tables->Table Design.**

A new, blank Table will open in Design View. The **Table Tools** should be available.

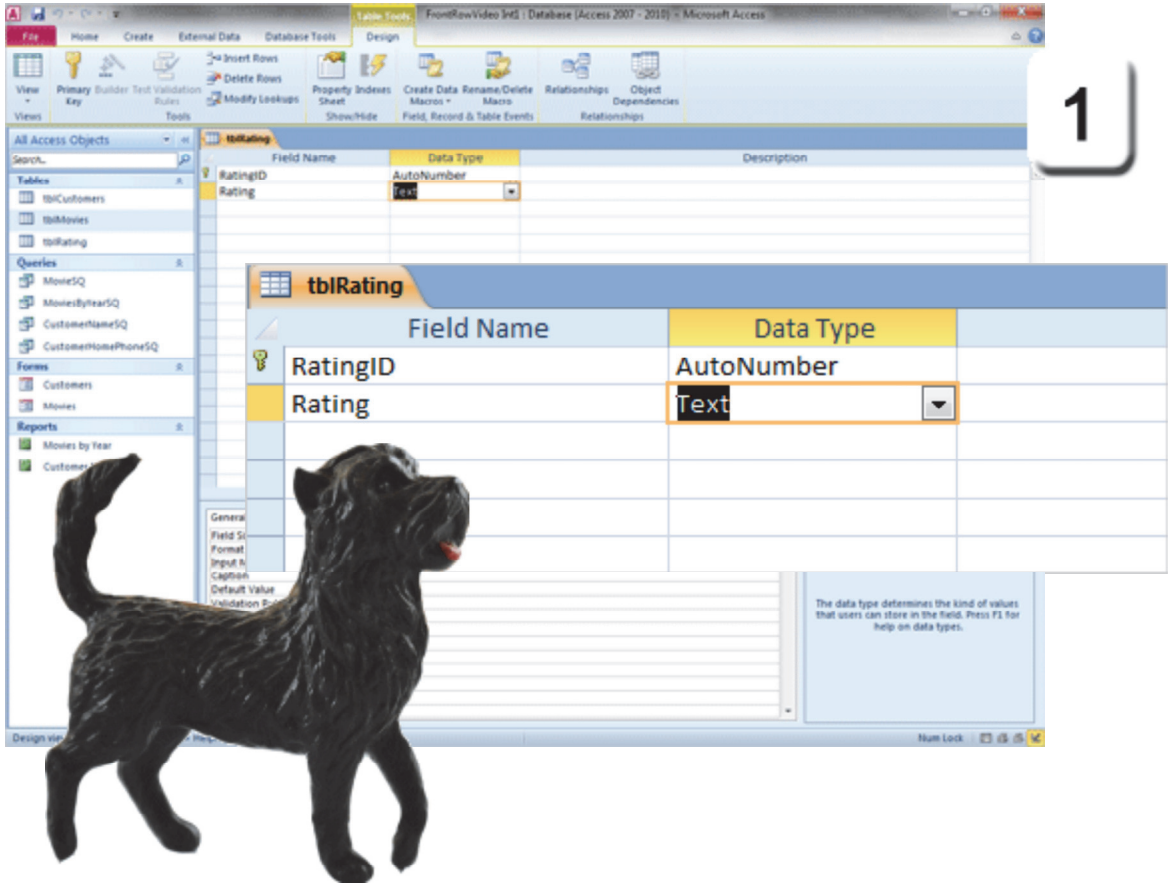
Try This, Too: Add the Fields
Field Name: RatingID
Data Type: AutoNumber
Go to **Table Tools->Table->Primary Key**.

Field Name: Rating
Data Type: Text

Do This, Now: Save the Table
Go to **File->Save**.
Enter the name: tblRating.

Keep going..

Create ->Tables->Table Design



Exam 77-885: Microsoft Access 2010
2. Building Tables
2.1.1. Create tables in Design View

Take One

Add Data to the Table

Before You Begin: Change the View
Go to **Table Tools->Design->Views->View**.
Select a **View: Datasheet**

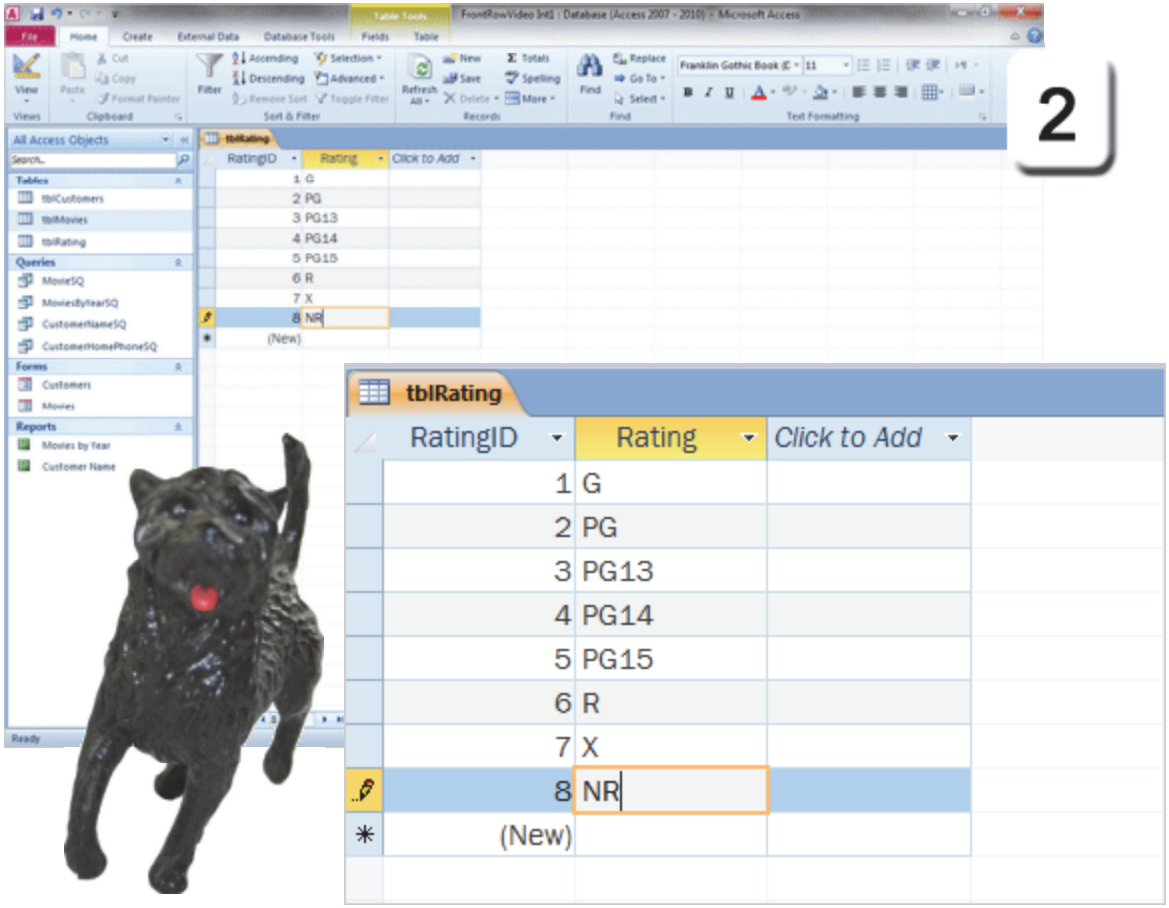
2. Try it: Add Data to the Table
Enter the following in the Ratings column:
G
PG
PG13
PG14
PG15
R
X
NR

What Do You See? Access added an AutoNumber to each new record.

Close tblRating. Keep going...

Memo to Self: The information in the Rating Table is considered static data: it does not change very often. Does the Rating table need a Form for data entry? Probably not.

Table Tools ->Design->Views->View



Exam 77-885: Microsoft Access 2010
2. Building Tables
2.1.1. Create tables in Design View

Open the Form in Design View

A Combo Box can look up data from one table and add it to another. This example will use a Combo Box to add the Rating from tblRating to tblMovies. Start by opening the Form.

3. Try it: Open the Form in Design View
Go to **All Access Objects->Forms**.
Select a Form: Movies

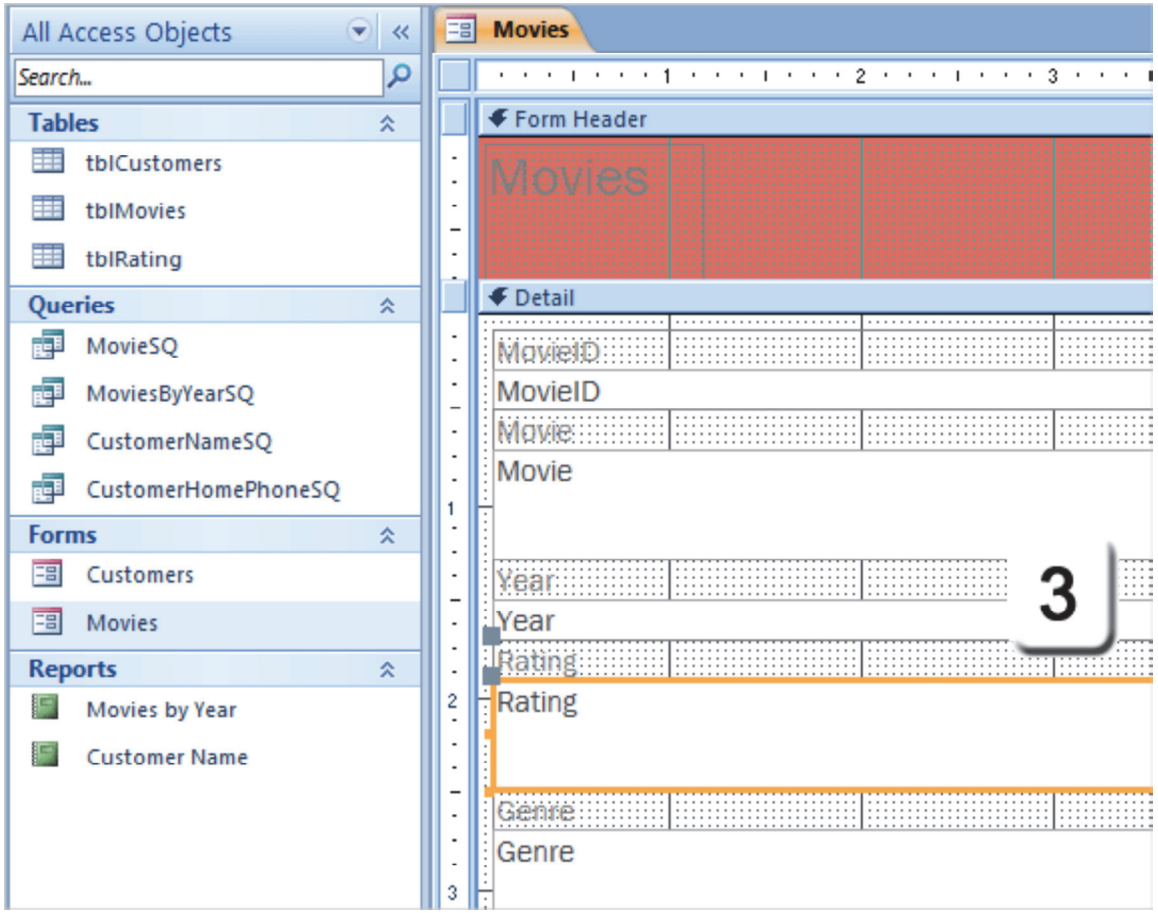
Go to **Home->View->Views**.
Select a View: **Design View**.

What Do You See? The Movie Form has a Control for Rating. It is a Text Box.

The goal of this programming is to delete the Text Box and replace it with a Combo Box so that the User can simply choose the answer from the list instead of typing it into the box.

Try This: Too: Delete Two Fields
Select the Rating Field and delete it.
Select the Genre Field and delete it as well.
Please delete the Control <u>and</u> the Label for both Fields. Keep going...

Home->View->Views->Design View



Exam 77-885: Microsoft Access 2010
2. Building Tables
2.2. Create and Modify Fields: Delete a Field

Use the Data in a Combo Box

The Rating Combo will look up the ratings from tblRating. This example will use the Combo Box Wizard to select the Record Source and the Fields.

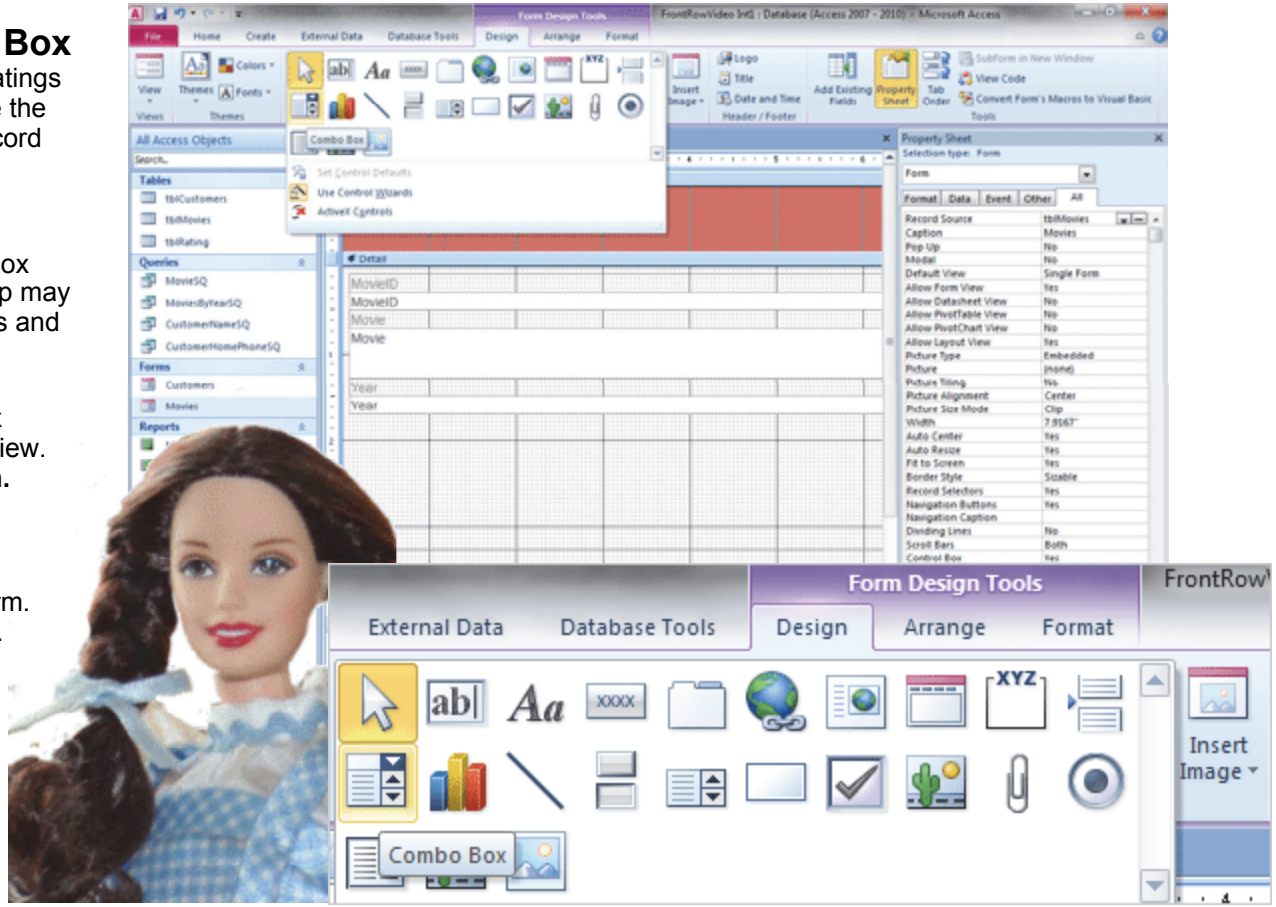
Something to Look For: There are actually seven steps to the Combo Box Wizard, however, the next to last step may be skipped! Here are the steps, clues and options.

Try it: Create a Rating Combo Box
The Movie Form is open in Design View.
Go to **Form Design Tools ->Design.**
Select a **Control: Combo Box.**

And Do This: Start the Wizard
Click on the Detail Section of the Form.
The Combo Box Wizard should start.

Keep going...

Form Design Tools ->Design->Controls->Combo Box



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Add Bound Controls: Drop Down

Take Two

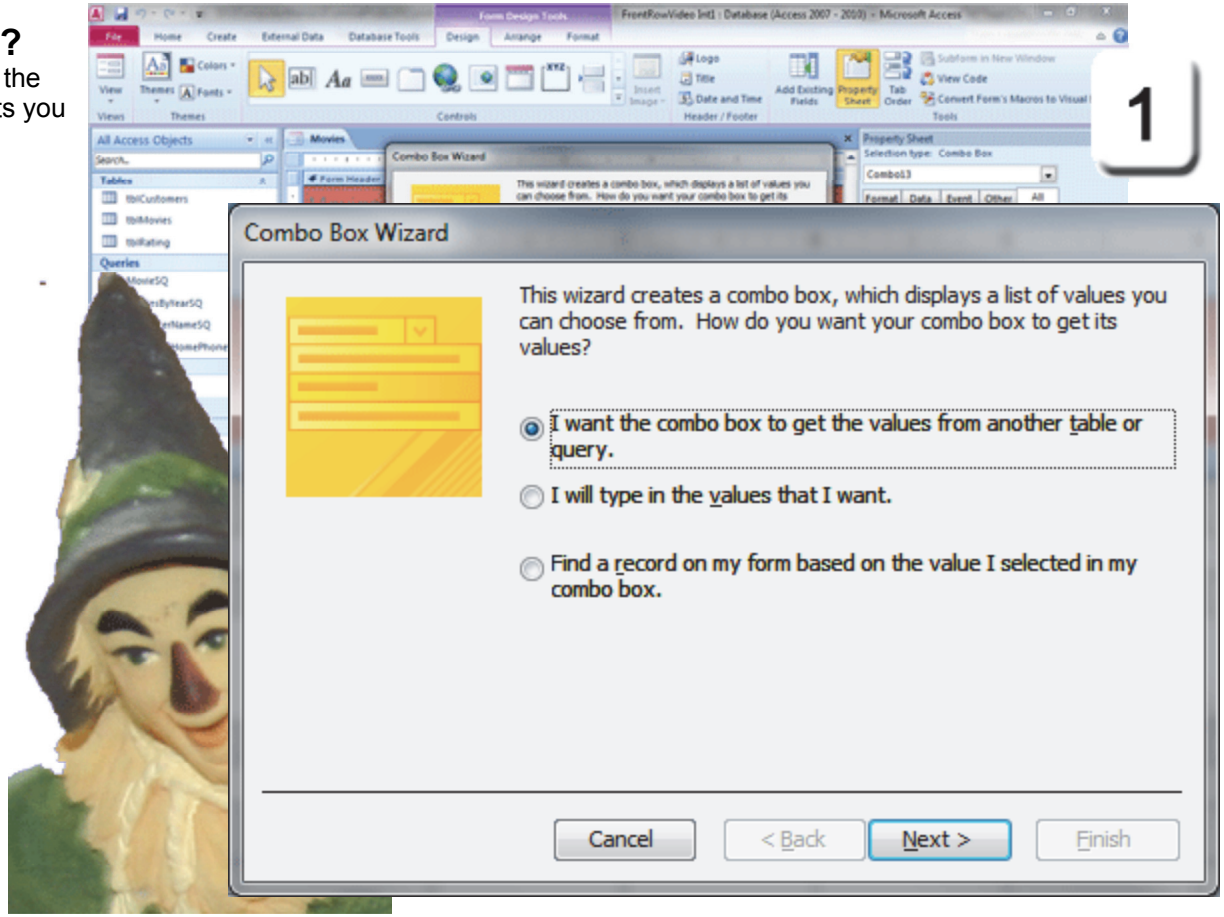
Form Design Tools ->Design->Controls->Combo Box

Combo Wizard: Which Data?

There are three ways to get the data for the Combo Box. The Combo Wizard prompts you to choose from the following:
From another Table or Query
Type the values in a new list
Find a Record.

1. Try it: Choose a Method
Select: I want the combo box to get the values from another table or query.

Click **Next**. Keep going...



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Add Bound Controls: Drop Down

Take Two

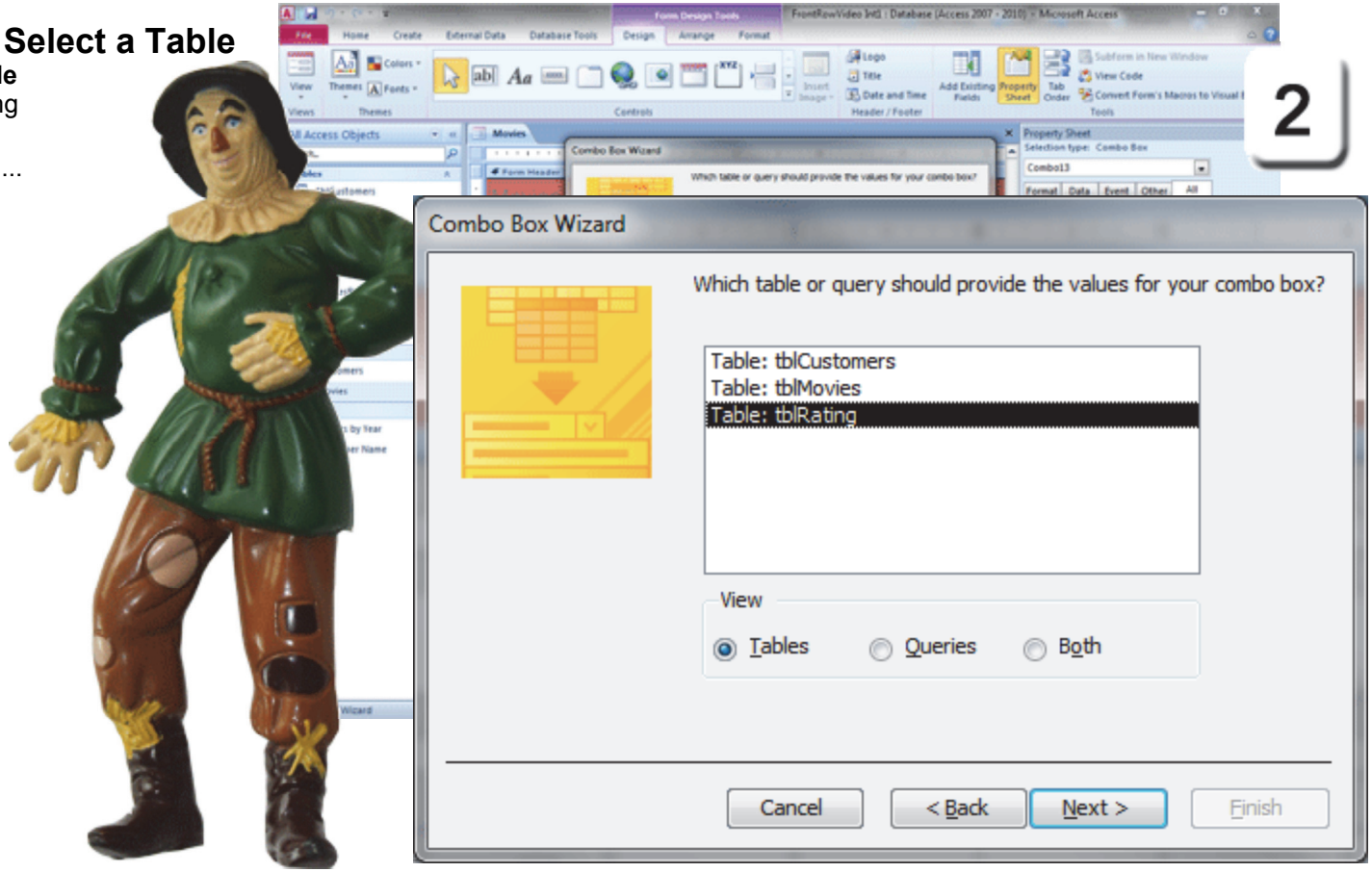
Form Design Tools ->Design->Controls->Combo Box

Combo Wizard: Select a Table

2. Try it: Select a Table

Select a Table: tblRating

Click **Next**. Keep going...



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Add Bound Controls: Drop Down

Take Two

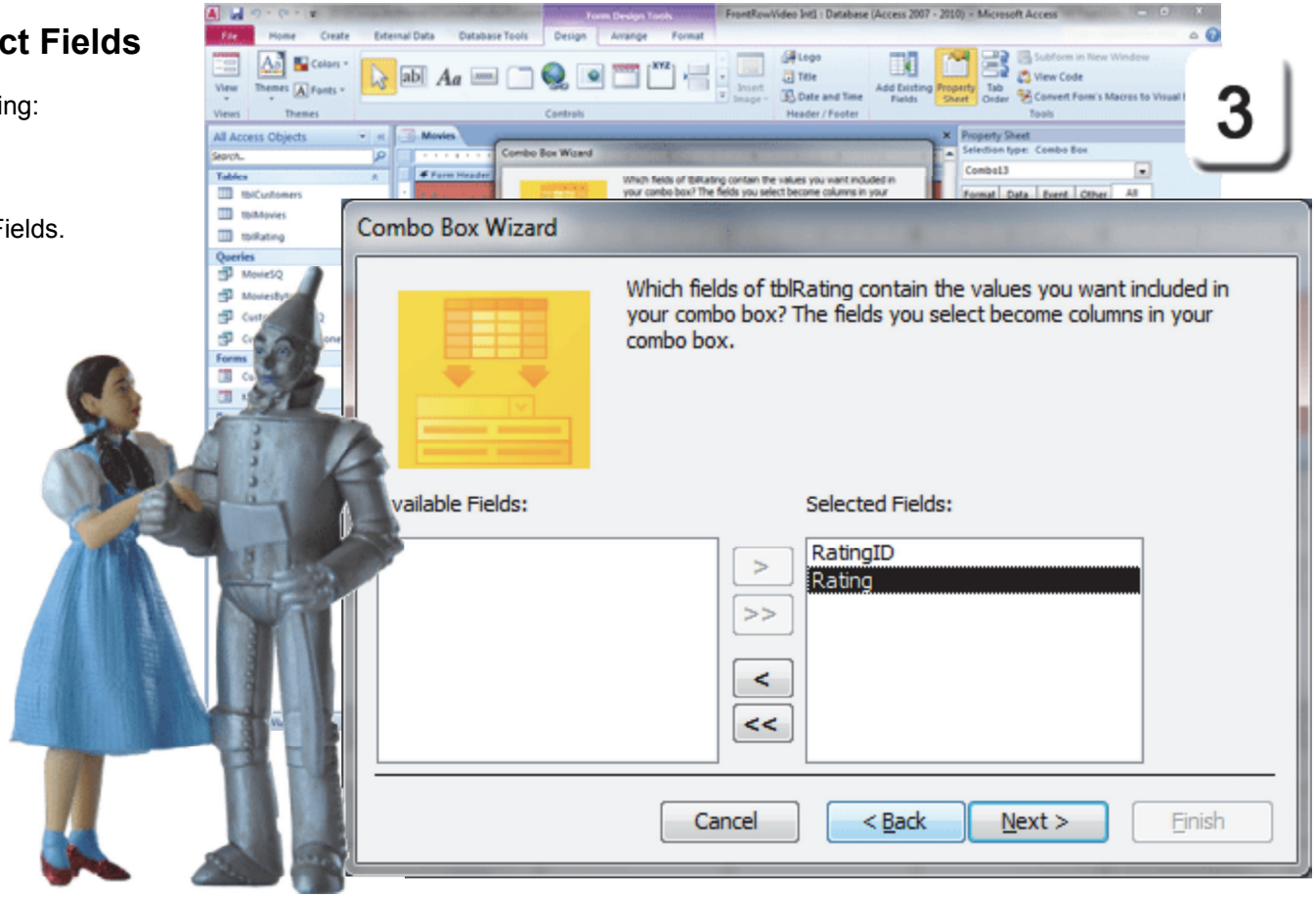
Combo Wizard: Select Fields

3. Try it: Select the Fields

There are two Fields in tblRating:
RatingID (a number)
Rating (text)

Use the arrow to select both Fields.
Click **Next**. Keep going...

Form Design Tools ->Design->Controls->Combo Box



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Add Bound Controls: Drop Down

Take Two

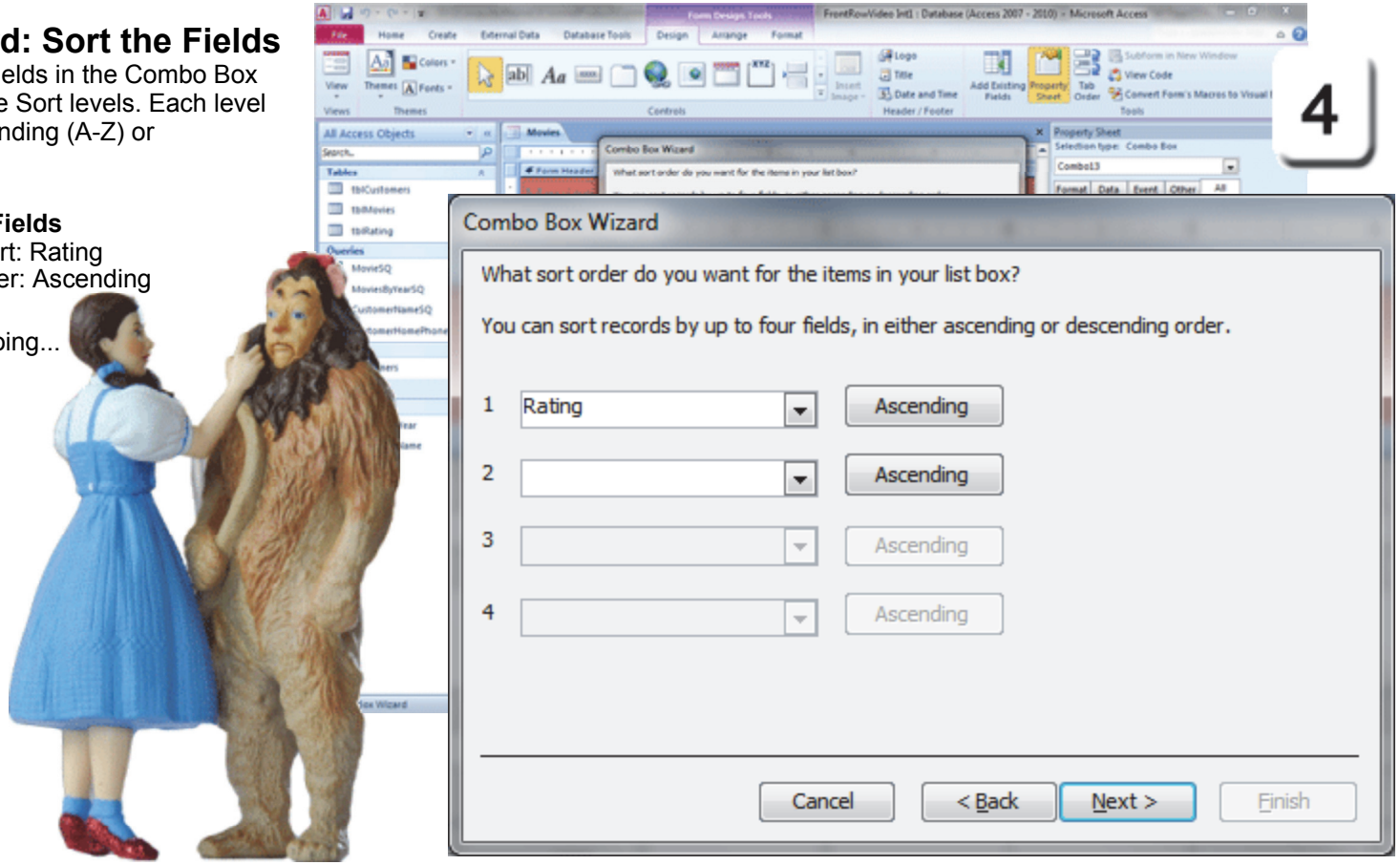
Form Design Tools ->Design->Controls->Combo Box

Combo Wizard: Sort the Fields

You can **Sort** the Fields in the Combo Box List. There are three Sort levels. Each level can be sorted Ascending (A-Z) or Descending.

4. Try it: Sort the Fields
Select a Field to Sort: Rating
Select the Sort Order: Ascending

Click **Next**. Keep going...



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Add Bound Controls: Drop Down

Take Two

Form Design Tools ->Design->Controls->Combo Box

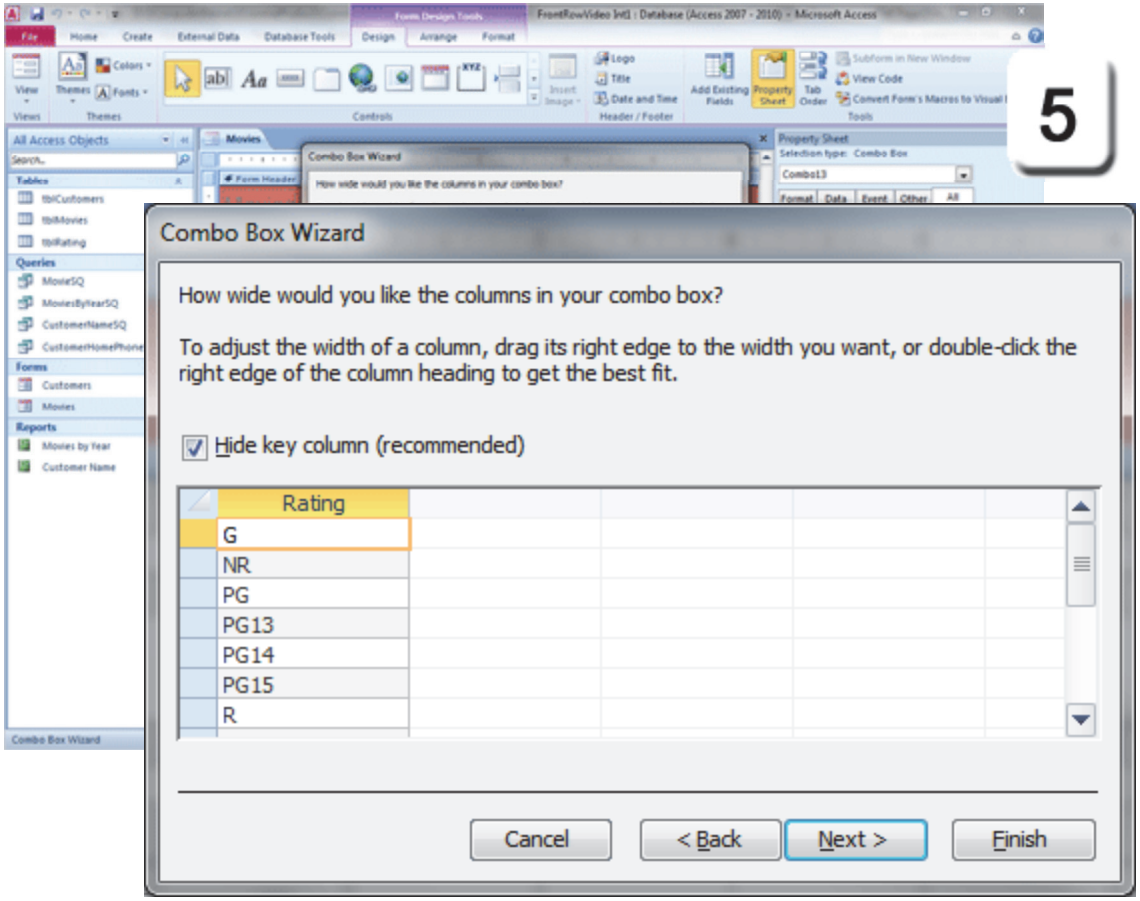
Combo Wizard: Column Width

There are really TWO Columns in this Combo Box: RatingID and Rating. The RatingID Column is hidden because the Column width is 0 (zero). You can adjust the width of the Rating Column if you wish.

5. Try it: Adjust the Column Width
Adjust the Column: Make the Rating Column smaller by dragging the right edge.

What Do You See? By default there is a check mark to **Hide key column**. The key column in this example is RatingID.

Click **Next**. Keep going...



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Add Bound Controls: Drop Down

Combo Wizard: Which Step?

The next to last step in the Combo Box Wizard asks you to select which value to **Store** in your Table.

What Do You See? The list shows the Fields in tblMovies, the Record Source for the Movie Form. There is a Rating Field, which is **TEXT**.

The Combo Box Wizard automatically picked the Primary Key from the Rating Table. The Primary Key, RatingID, is a **NUMBER**.

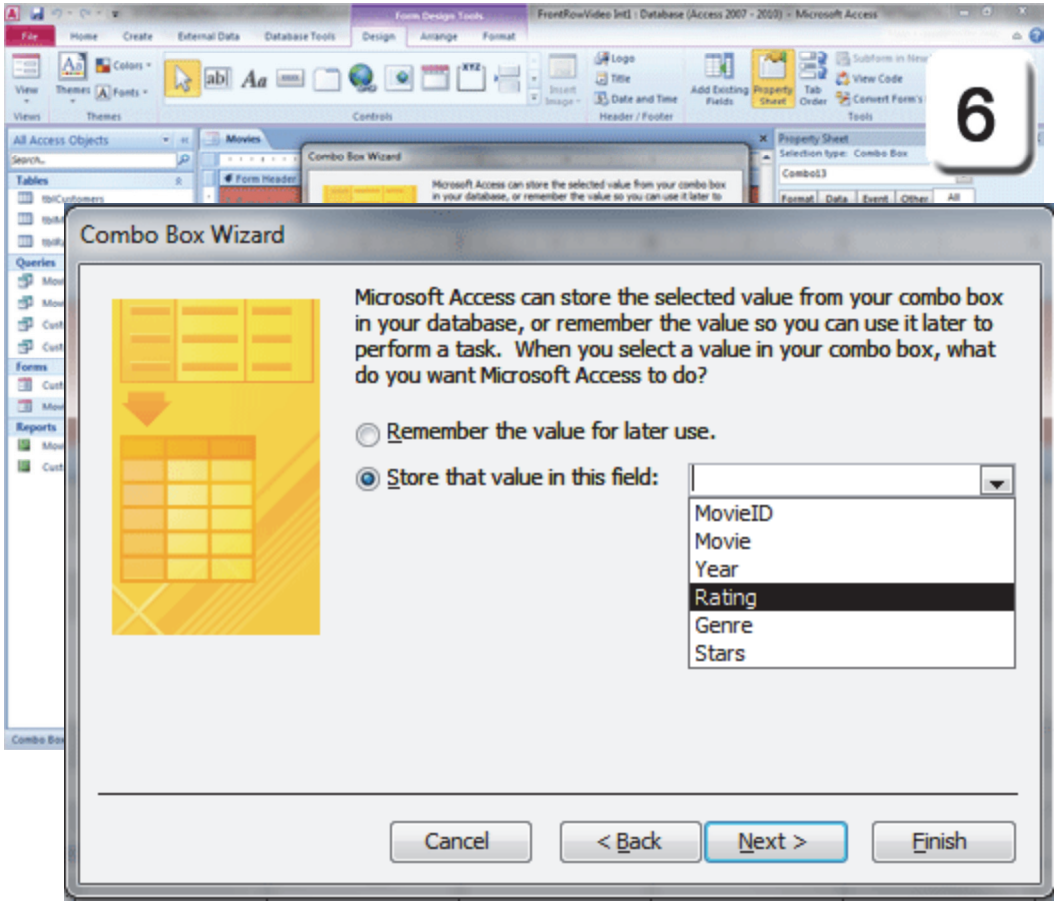
RatingID doesn't match Rating. Text goes with Text. Numbers go with Numbers.

The Wizard chose the Primary Key and the key Column was hidden. However, when you get to this step you cannot select the Field that matches.

How Did This Happen? This step is actually Step 7. The Combo Box Wizard assumed that the Control would save the key data, so it skipped Step 6, the one that asks you to choose a Field.

6. Try it: Go Back a Step
Click **Back.** See what was missed...

Form Design Tools ->Design->Controls->Combo Box



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Add Bound Controls: Drop Down

Take Two

Combo Wizard: Unhide key

The key column in this example is RatingID.

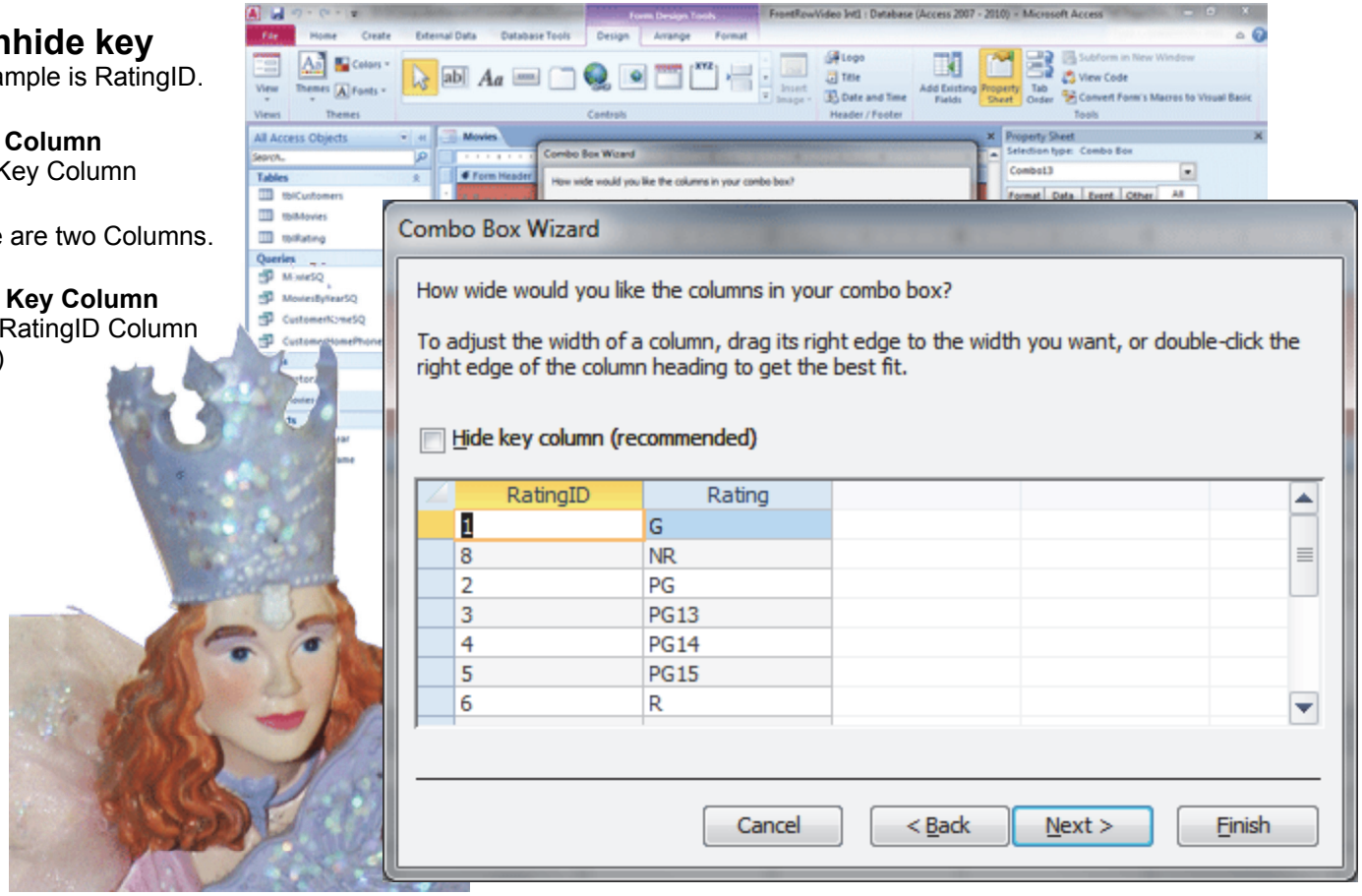
Do This: Unhide the Key Column
Uncheck the option: Hide Key Column

What Do You See? There are two Columns.

Do This, Too: Resize the Key Column
Drag the right edge of the RatingID Column to make the width 0 (zero.)

Click **Next**. Keep going...

Form Design Tools ->Design->Controls->Combo Box



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Add Bound Controls: Drop Down

Take Two

The Missing Step in the Combo Box Wizard: Select the Field to Store

Going back and resizing the key column brings up the missing step and the option to select which Field you wish to store.

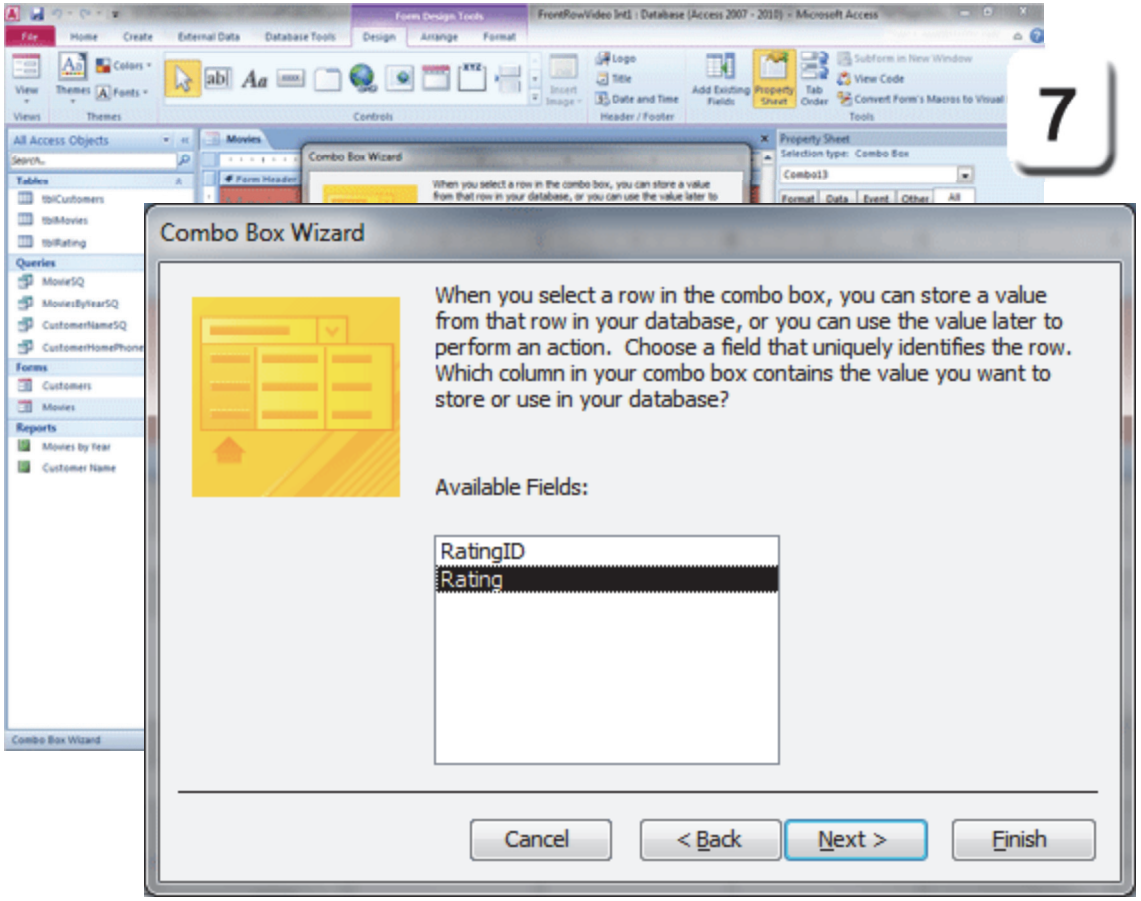
The Combo Box Wizard default is to select the key column, Rating ID. However the tblMovies stores the Rating (G, PG, R), which is Text, and not the RatingID, which is a Number.

Match. Match. Match. The answers from the Combo Box have to match the data type of the Field in the Table. Text always goes with Text. Numbers always go with Numbers.

They have to match.

7. Try it: Select a Field to Store
Select a Field: Rating
Click **Next**. Keep going...

Form Design Tools ->Design->Controls->Combo Box



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Add Bound Controls: Drop Down

Take Two

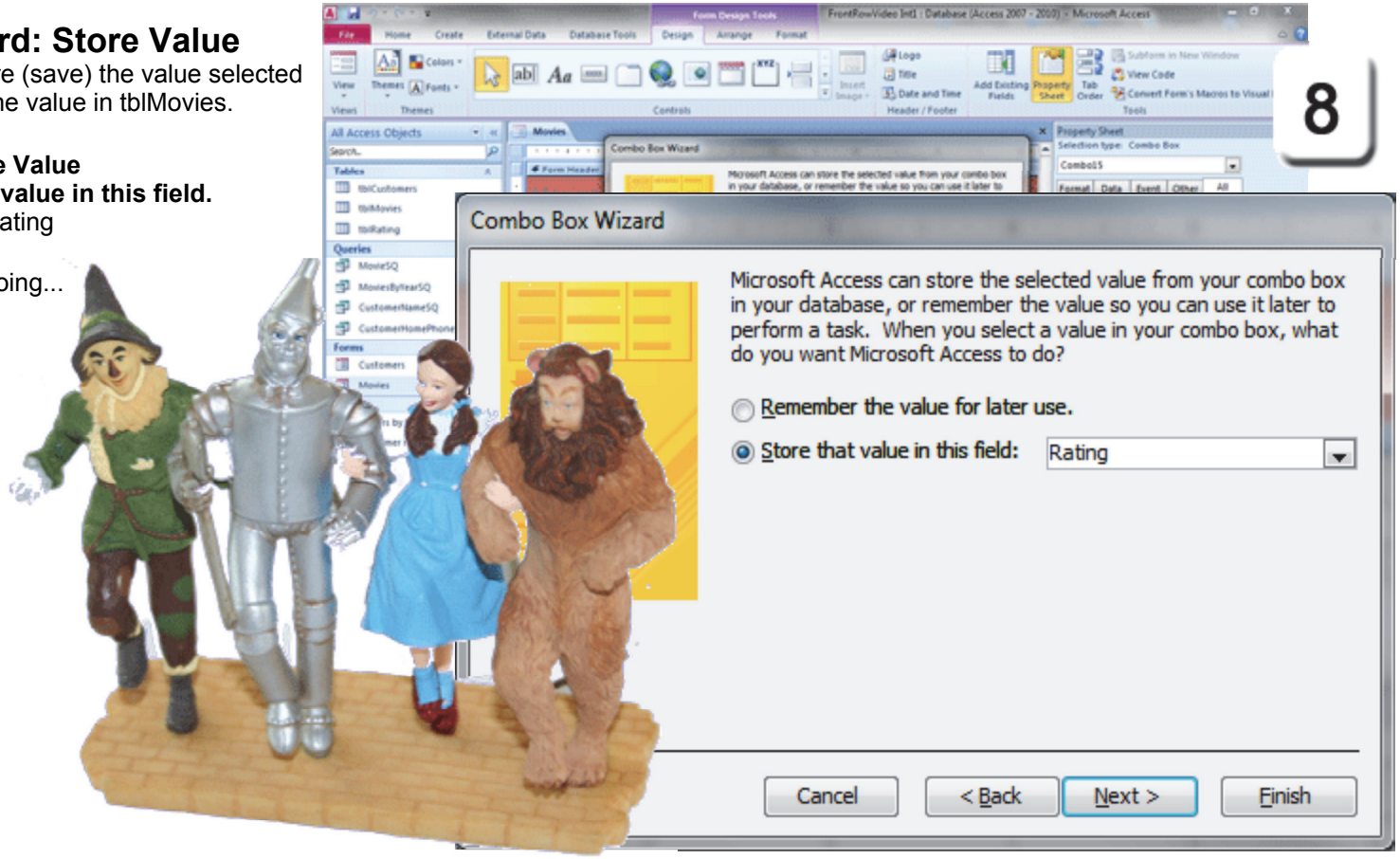
Form Design Tools ->Design->Controls->Combo Box

Combo Wizard: Store Value

Now...you can store (save) the value selected from tblRating to the value in tblMovies.

8. Try it: Store the Value
Select: **Store that value in this field.**
Choose a value: Rating

Click **Next** Keep going...



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Add Bound Controls: Drop Down

Take Two

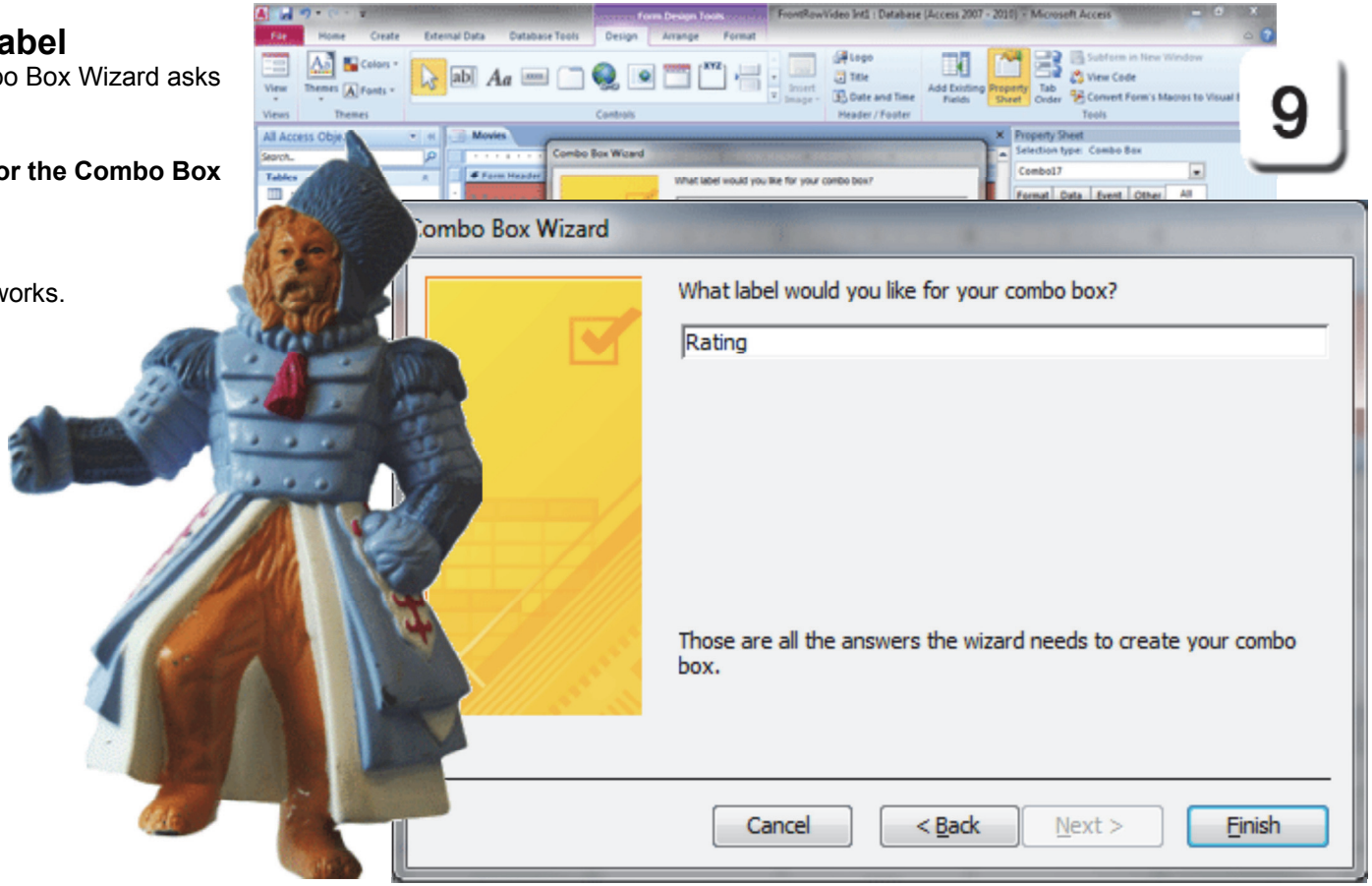
Combo Wizard: Label

The last step of the Combo Box Wizard asks to name this Control.

9. Try it: Enter a Label for the Combo Box
Enter the name: Rating
Click **Finish**.

Very good. Let's see if it works.

Form Design Tools ->Design->Controls->Combo Box



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Add Bound Controls: Drop Down

Test the Form

The programming on the Combo Box Control was written in Design View. Forms should be tested as the User sees them, in Form View.

Before You Begin: Change the View
Go to **Form Design Tools ->Design->Views.**
Choose a **View: Form View**.

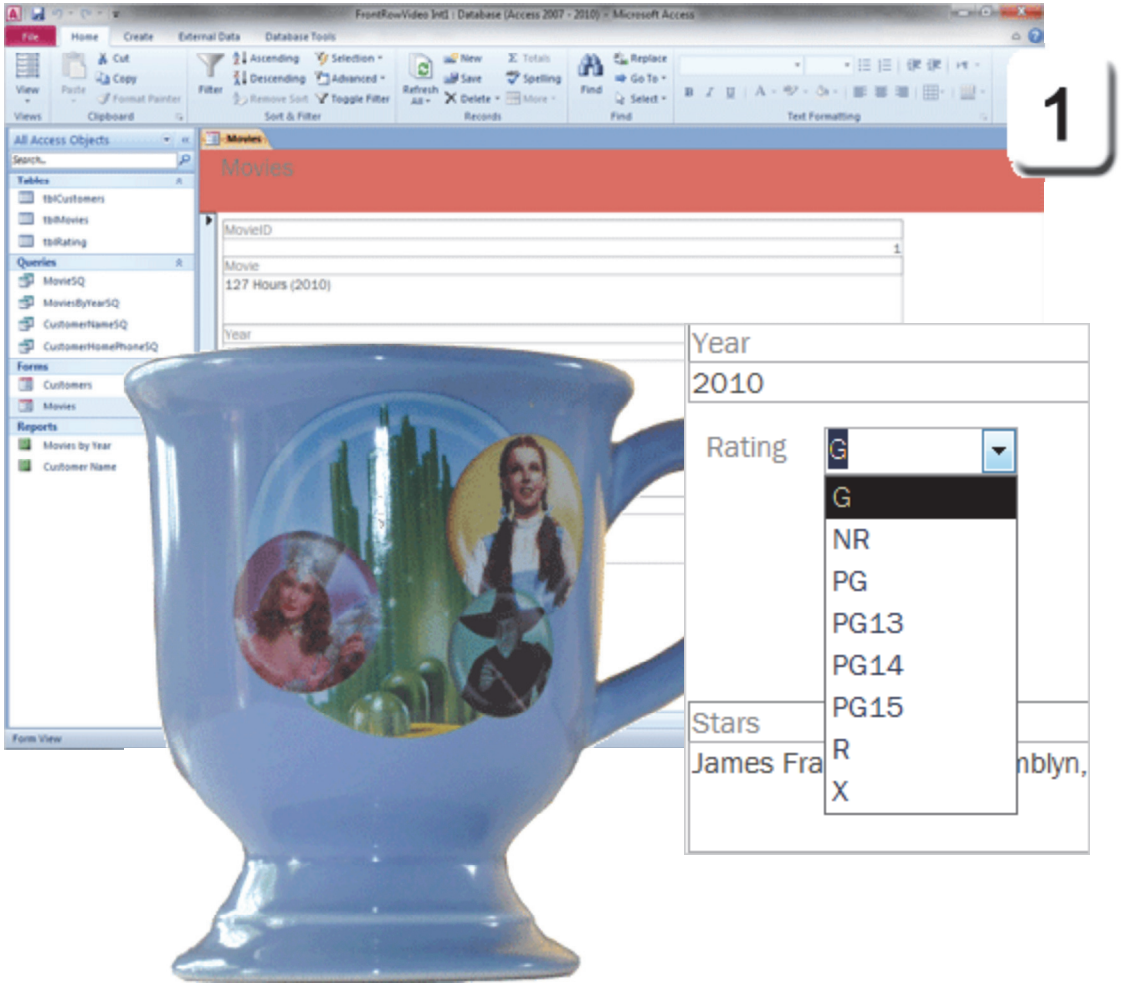
1. Try it: Test the Combo Box Control
The Movie Form is open in Form View.
Select a Rating: G

What Do You See? Can you see the list of ratings? Can you select one from the list?

So far, so good. Keep going...

Where Have You Seen This Before?
Microsoft Excel uses Data Validation to create a Drop Down List that looks up the values in a table.

Form Design Tools ->Design->Views->View



Take Two

What If It Doesn't Work?

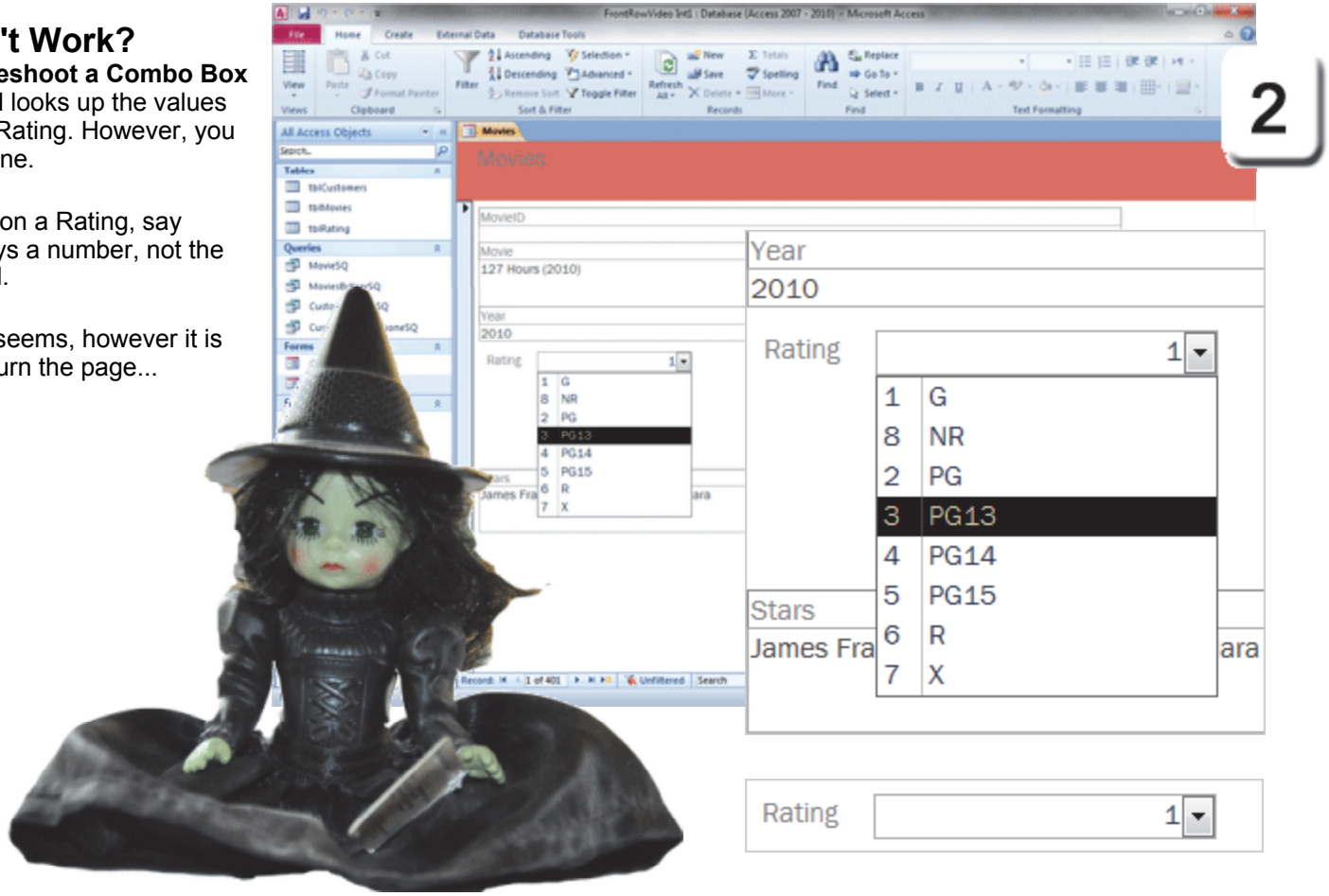
2. Consider it: Troubleshoot a Combo Box

Say the Combo Control looks up the values in the Rating Table, tblRating. However, you see two columns, not one.

Worse, when you click on a Rating, say PG13, the Form displays a number, not the rating that you selected.

This is not as bad at it seems, however it is disconcerting. Please turn the page...

Form Design Tools ->Design->Views->View



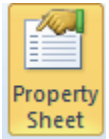
Take Two

Find the Properties

The following pages demonstrate how to correct the issue. These steps are worth reviewing. Please go to the Design View and find the Property Sheet.

Before You Begin: Change the View
Go to **Home>Views->View.**
Choose a **View: Design View.**
The Form Design Tools should be available.

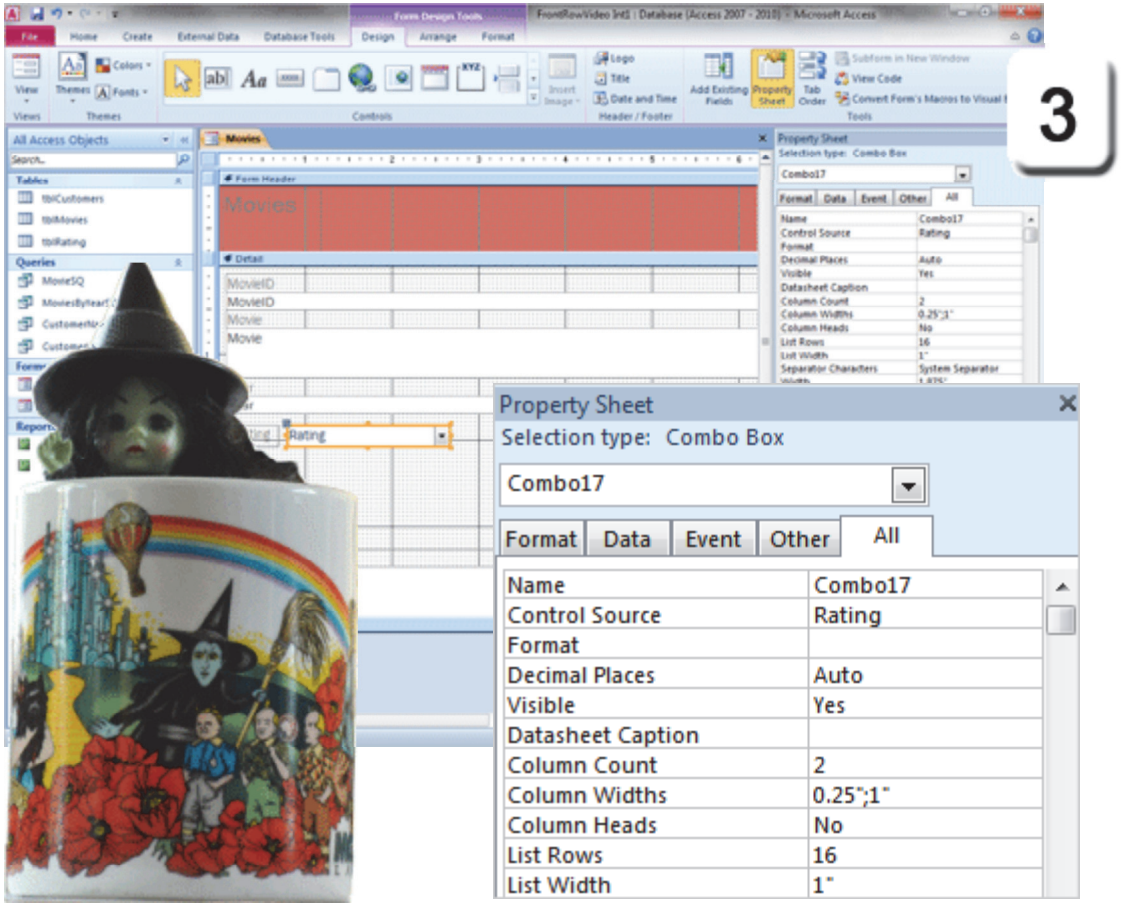
3. Try it: Find the Property Sheet
Click once on the Rating Combo to select it.
Go to **Form Design Tools ->Design->Tools.**
Click on **Property Sheet.**



What Do You See? The Property Sheet should open on the right side of the database.

Keep going...

Form Design Tools ->Design->Tools->Property Sheet



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: View the Property Sheet

Edit the Properties

This Combo Box has tblRating as the Record Source. tblRating has two Fields:
RatingID, (Number)
Rating, (Text)

The Movies Form has tblMovies as the Record Source. tblMovies has many Fields, including:
Rating, (Text)

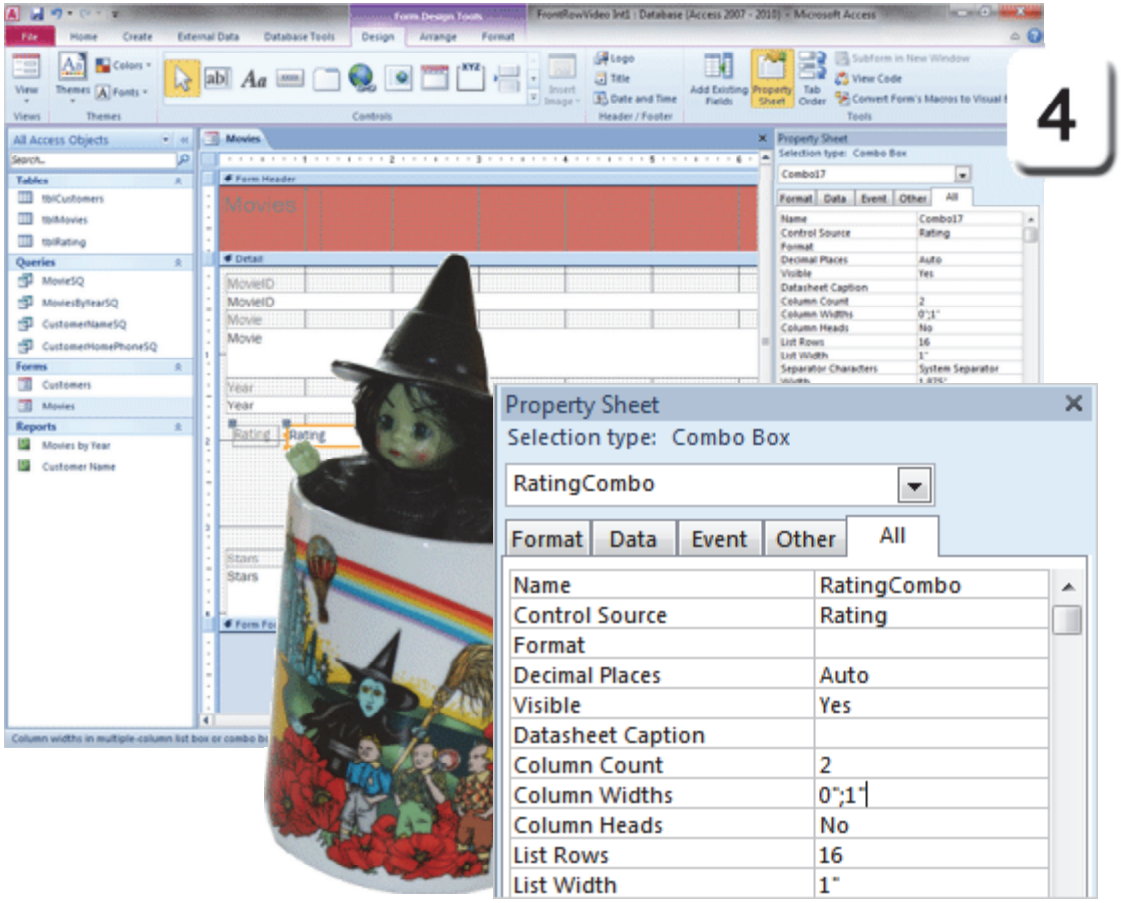
Before You Begin: What Do You See?
The Control Source is Rating, which is Text.
The Column Count is 2.

4. Try it: Edit the Properties
Name: RatingCombo
Column Widths: 0", 1"

Now, the first Column will be hidden (0" wide) and the second Column will show the Rating.
Keep going...!

Memo to Self: The Combo Box shown on this page is Named Combo17. The name on your Combo Box may be Combo1, 2 or whatever the auto number may be.

Form Design Tools ->Design->Tools->Property Sheet



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: View the Property Sheet

Use the Combo Box

Before You Begin: Change the View
Go to **Form Design Tools ->Design->Views.**
Choose a **View: Form View**.

5. Try it: Test the Combo Box Control
The Movie Form is open in Form View.
Select a Rating: R

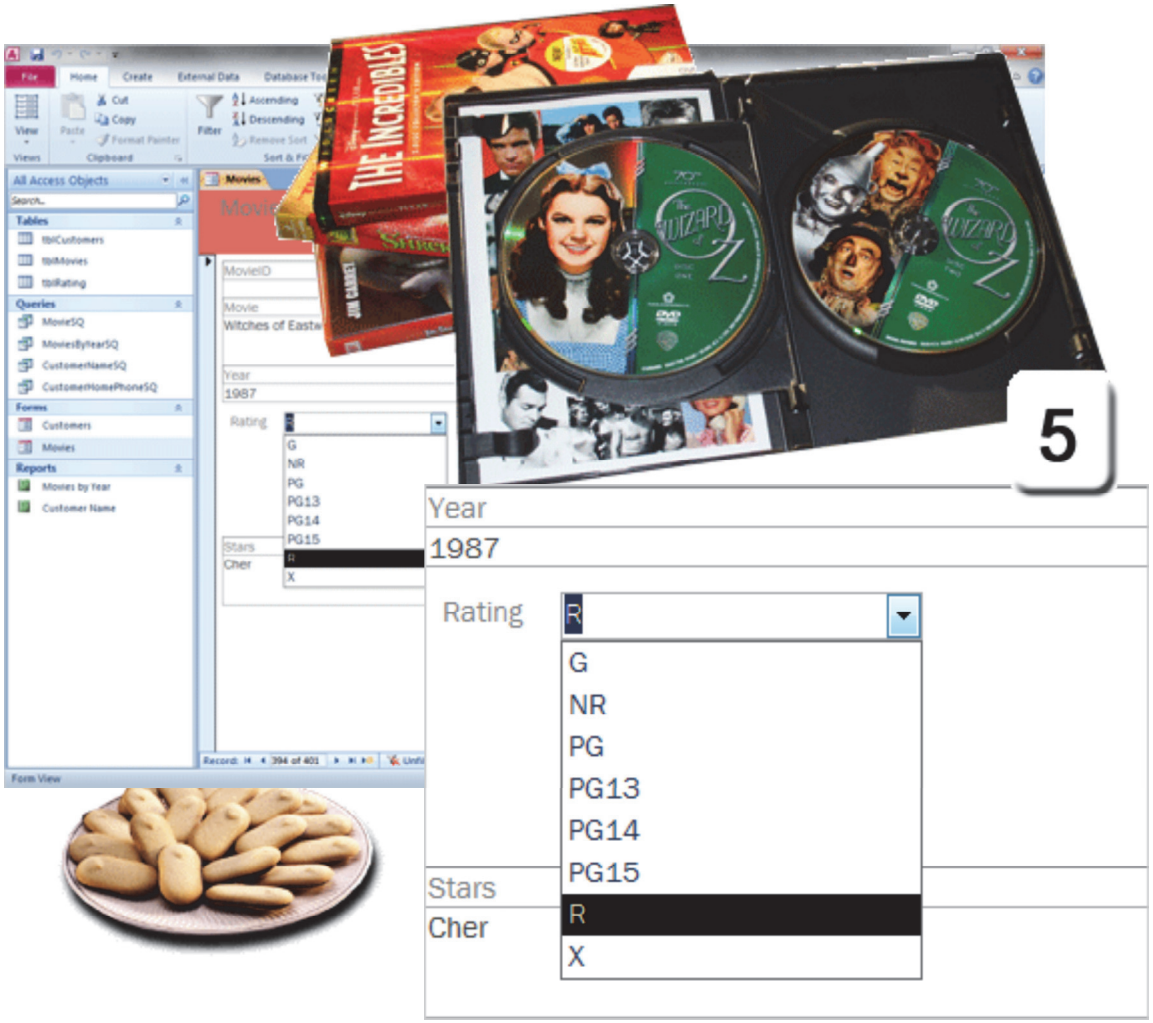
What Do You See? Do you see one Column or two? When you select a value from the list does the Combo store the Text or a Number?

Summary

The Movie Form uses a Combo Box now to look up a value in the Rating Table and store that value in the Movie Table.

This is an example of one-from-many.
Each movie has only one Rating. The Combo Box lets the User select one Rating from a Table that has many Ratings, tblRating.

That was a good start. Go get a cookie and meet me for the next lesson.



Practice Activities

Lesson 1: One-to-Many

Try This: Do the following steps

1. Open the Brown Bag Lunch database you have been working on. Or, you may download **BBL Int ver2.accdb**

2. Create a new Table with the command Create->Tables->Table Design.

3. Add the following Fields and Data Types:
TypeID, AutoNumber (Also make this the Primary Key)

Type, Text

4. Save the Table as tblType.

5. Go to Datasheet View.

6. Add the following to the Type column:

Sandwich, Snacks, Breakfast, Tray, Beverages

7. Open the Form Products and switch to Design View.

8. Delete the Type Box on the Form.

9. Go to Form Design Tools->Design and select a Control: Combo Box.

Add the Combo Box to the form where the Label Type used to be.

10. Choose the option to get the Combo Box values from another source.

Select tblType as the source. Select all available fields.

11. Select the Field Type to sort Ascending.

12. Do NOT hide the Key column. Instead, resize the TypeID column to width zero.

13. Select a field to store: choose Type. Store the value in field Type.

14. Name the Combo Box: Type and finish the Wizard.

15. Change to Form View. Test the Combo Box. Does it display five types of products?

16. Return to Design View. Select the Type Combo Box and open the Property Sheet.

17. Change the Combo Box name to TypeCombo.

Set the column widths to be 0”, 1.25”

18. Save the Form. Close the database.

Test Yourself

1. Which of the following can look up data from one table and add it to another?
A. Select Query
B. Combo Box
C. Table Design
D. Label
Tip: Intermediate Access, page 36

2. What are the options for getting the target data for a combo box?
(Give all correct answers.)
A. From another Table
B. From another Query
C. Type the values I want (in a new list)
D. Find a record on my Form from the values I select.
Tip: Intermediate Access, page 38

3. Which step of the combo box Wizard prompts the user to enter a Label?
A. First step
B. Last step
C. The Wizard does not prompt for a label
D. The third step
Tip: Intermediate Access, page 47

4. Forms should be tested in Form view as a user sees them.
A. True
B. False
Tip: Intermediate Access, page 48

5. Which of the following is true?
(Give all correct answers.)
A. Hiding the key column removes that column from use, including matching the values to store
B. Setting the column width as 0” in the Property sheet hides the column from sight while still allowing the data to be used
C. Microsoft Access hides the Key Column by default
Tip: Intermediate Access, page 51

Take One

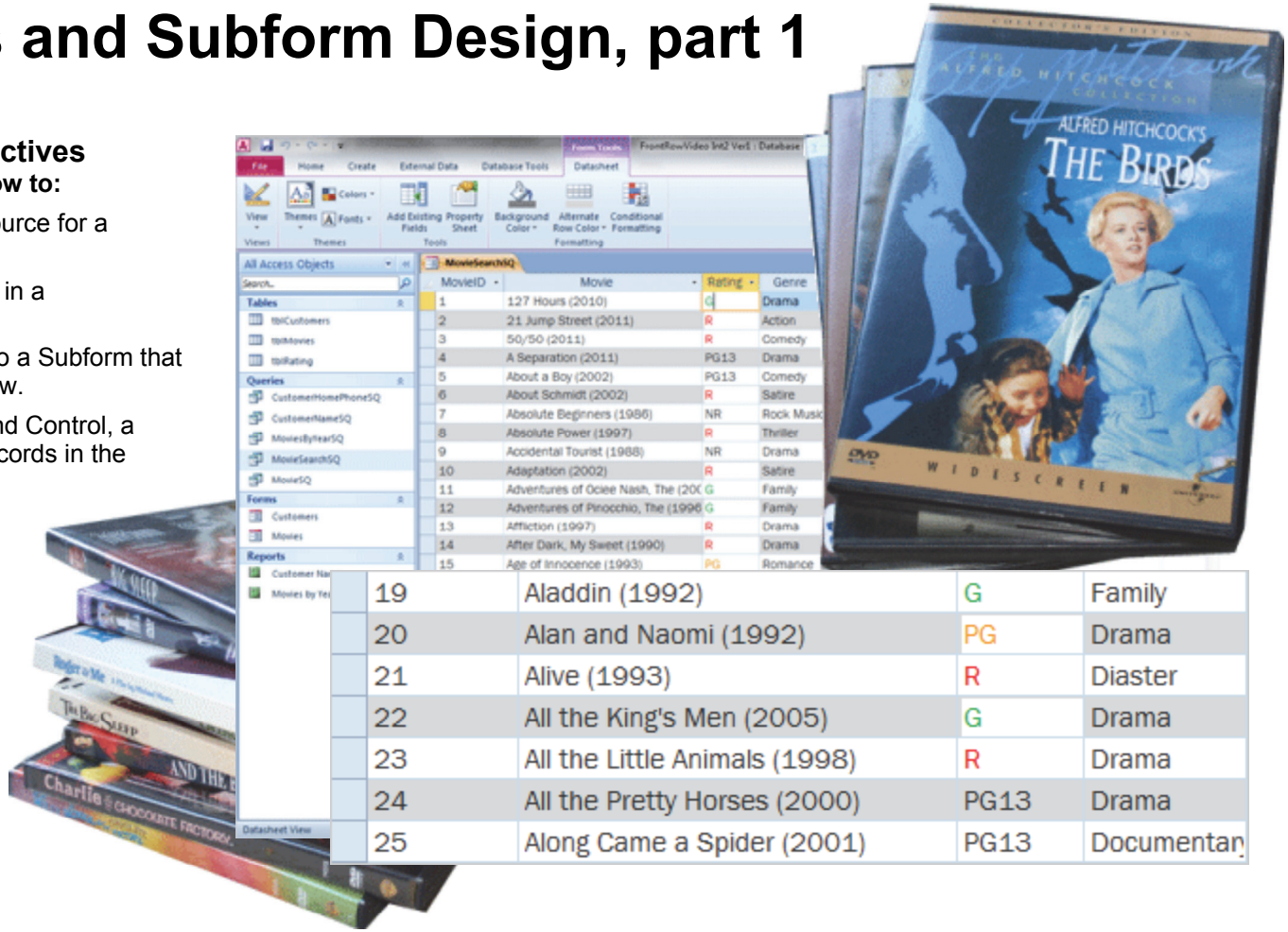
Access 2010: Representing One-to-Many

Forms and Subform Design, part 1

Intermediate Access Objectives

In this lesson, you will learn how to:

1. Use a Query as the Record Source for a Subform.
2. Apply Quick Styles to Controls in a Form/Subform.
3. Apply Conditional Formatting to a Subform that has Datasheet as the Default View.
4. Create a Form that has a Bound Control, a Combo Box, that will filter the Records in the Subform.



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Lesson 3 : Form and Subform Design, part 1

1. Readings
Read Lesson 3 in the Intermediate Access guide, page 55-84.

Project
A Movie Search Form and Movie Subform.

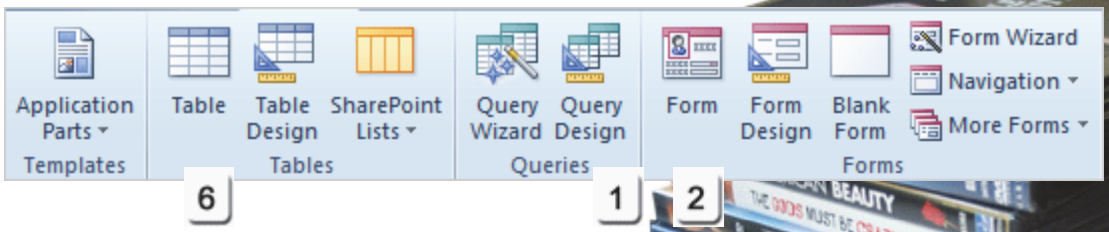
Downloads
FrontRowVideo Int3.accdb
popcorn1.gif, popcorn2.gif, popcorn3.gif, popcorn4.gif, movies1.gif.

BBL Int ver3.accdb

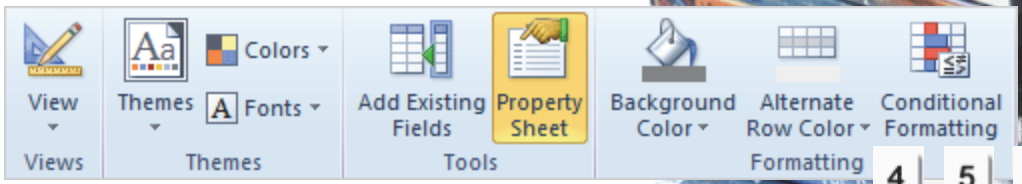
2. Practice
Do the Practice Activity on page 85.

3. Assessment
Review the Test questions on page 86.

Create Ribbon



Form Tools->Datasheet Ribbon



Menu Maps

From the **Create Ribbon**.
1. Create ->Queries ->Query Design, page 61
2. Create ->Forms->More Forms->Datasheet, page 64
6. Create ->Tables->Table Design, page 72

From the **Form Tools->Datasheet Ribbon**
3. Form Tools ->Datasheet, page 65
4. Datasheet->Formatting-> Alternate Row Color, page 66
5. Datasheet->Formatting-> Conditional Formatting, page 67

Representing One-to-Many Relationships

In real life, one customer gets many movies. In Microsoft Access, a one-to-many relationship is created with a Form and a Subform. A Subform is a Form, usually in a Datasheet or List View, that is linked to the Parent Form. These database designs will be taught in two lessons. In the first lesson we will create two new Forms: a MovieSearch Form and a MovieSearchSubform. Each Form will have a new Record Source. The previous lesson used a Combo Box to select one value from many.

This lesson will use a Combo Box to filter the movies: there are many movies that have the same Rating. In the following lesson, we will link the Form and Subform. We will test the programming and troubleshoot the possible errors.

Microsoft Office Access 2010: Example of a Form with a Subform

Take One

What is the Plan?

There are two different Views that will be used in these new forms: **Single Form** and **Datasheet**.

The question is usually at the top of a Form. This is the Parent Form and the Default View will be Single Form. The answer is shown on the bottom as a list. This is the Subform and the Default View will be Datasheet. Here is the design plan.

Create a Record Source for the Subform:
The **MovieSearchSQ** query has one Table.

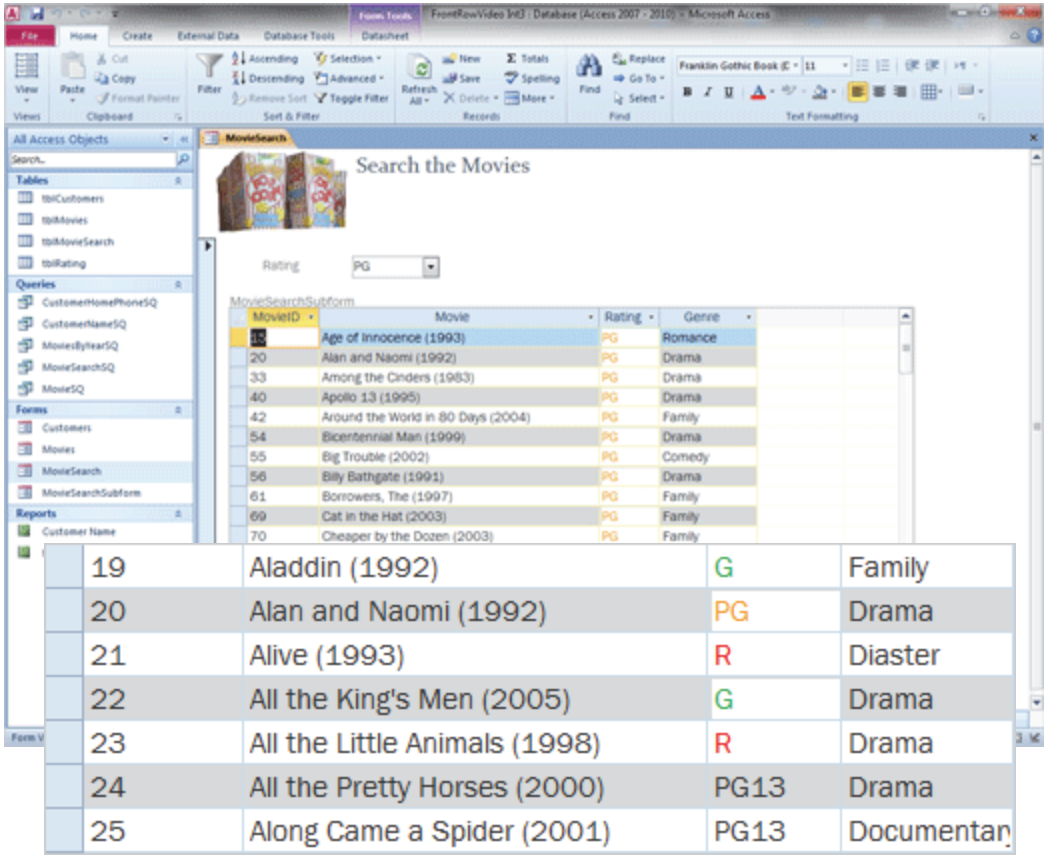
Create the Subform: MovieSearchSubform.
The MovieSearchSubform will be in Datasheet View.

Create a Record Source for the Parent Form: tblMovieSearch, a Table to hold the search criteria.

Create the Parent Form: MovieSearch
The MovieSearch Form will use a Combo Box to look up the Rating. It will be in Single Form View.

That's the plan. Here are the steps.

Microsoft Office Access 2010: Example of a Form with a Subform



Take One

Before You Begin

Before You Begin: Open the Sample Database
Go to **Start -> All Programs ->Microsoft Office**.
Click on **Microsoft Office Access 2010.**
Access will prompt you to open a database.

This lesson uses the database that was developed in the previous lesson. You can continue with the same database if you wish.

The **FrontRowVideo Int3.accdb** database has:

Three Tables: tblCustomers, tblMovies, tblRating

Four Queries: MovieSQ, MoviesByYearSQ, CustomerNameSQ and CustomerHomePhoneSQ

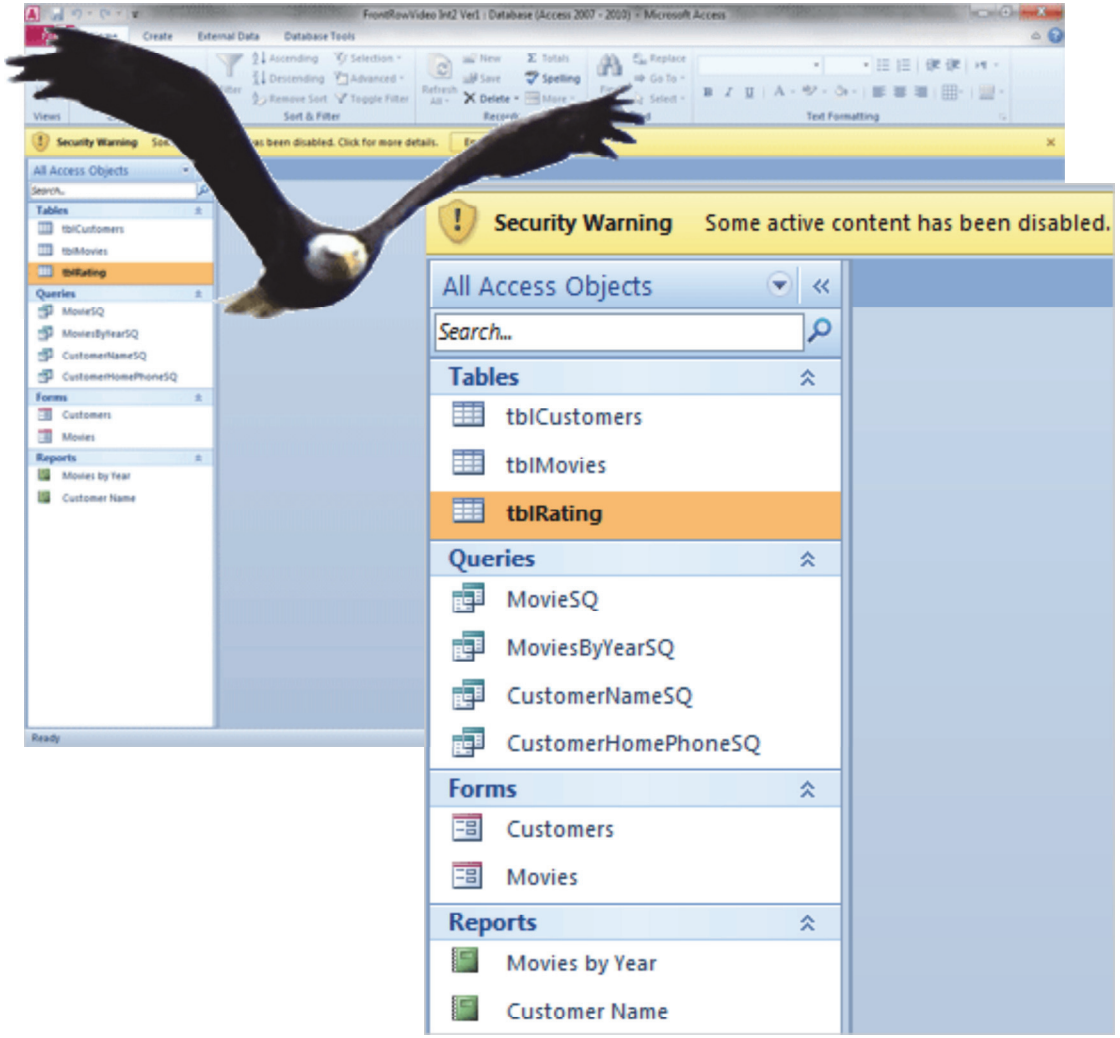
Two Forms: Customers, Movies

Two Reports: Movies by Year, Customer Name

Keep going....

Memo to Self: Databases need to Read and Write. Click **Enable Content** if you see the Security Warning.

Start -> All Programs ->Microsoft Office->Microsoft Access 2010



Take One

Review the Data

A database is only as good as the data. What kind of data is in this database?

Try This: Review the Data
Go the **All Access Objects**.
Double-click a Table: tblMovies

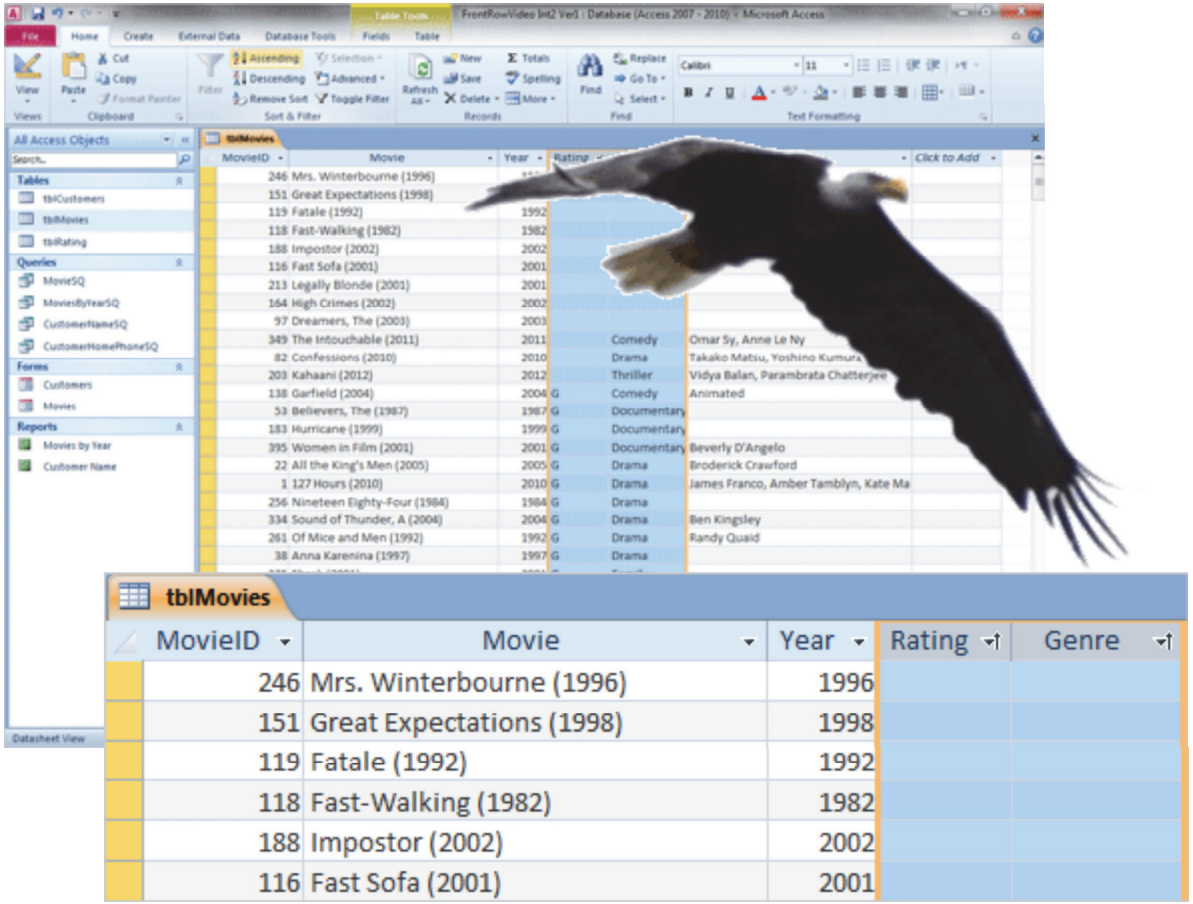
What Do You See? There are 401 movies in tblMovies.

Try This, Too: Sort the Data
Select the Rating and Genre Columns.
Go to **Table Tools->Sort & Filter**.
Select: **Ascending**.

What Do You See, Now? The movie records aren't complete. Some of the movies do not have a Rating, some do not have a Genre. Many are missing both. This will be part of our discussions, later.

OK! Save the Table
Go to **File->Save.**
Close the Table, too.

Table Tools->Sort & Filter->Ascending



Exam 77-885: Microsoft Access 2010
2. Building Tables
2.3. Sort and filter records: Sort

Take One

Create a Record Source for the Movie Subform

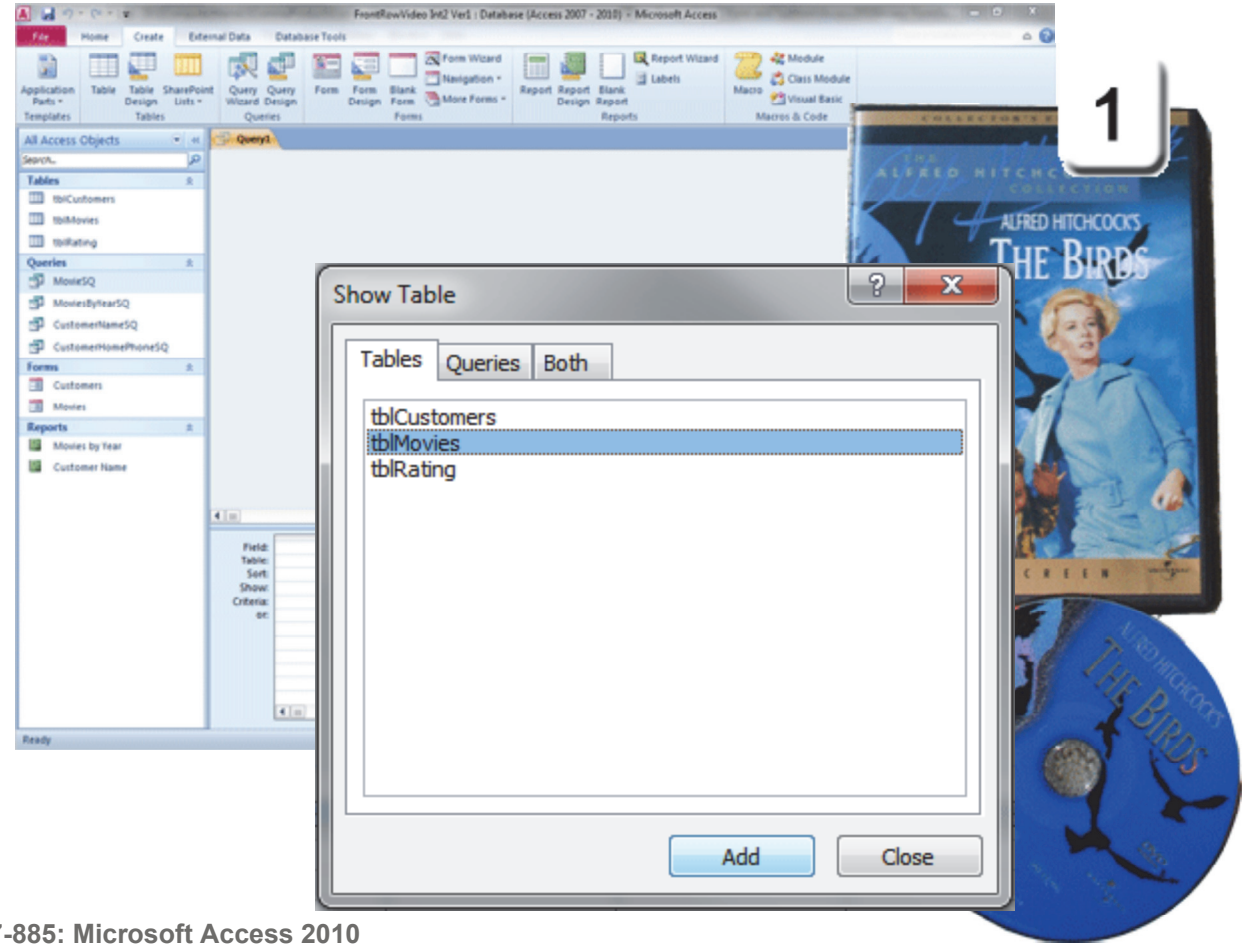
The Subform will be a list of the movies. It will look like a Datasheet. The Record Source for this new Subform will be a Select Query that uses tblMovies.

1. Try it: Create a Query
Go to **Create ->Queries ->Query Design.**

You will be prompted by the **Show Table**. Select a Table: tblMovies.

Click **Add**. Keep going...

Create ->Queries ->Query Design



Exam 77-885: Microsoft Access 2010
4. Creating and Managing Queries
4.2. Manage source tables and relationships: Use the Show Table Command

Take One

Add Fields to the Query

2. Try it: Add Fields to the Query

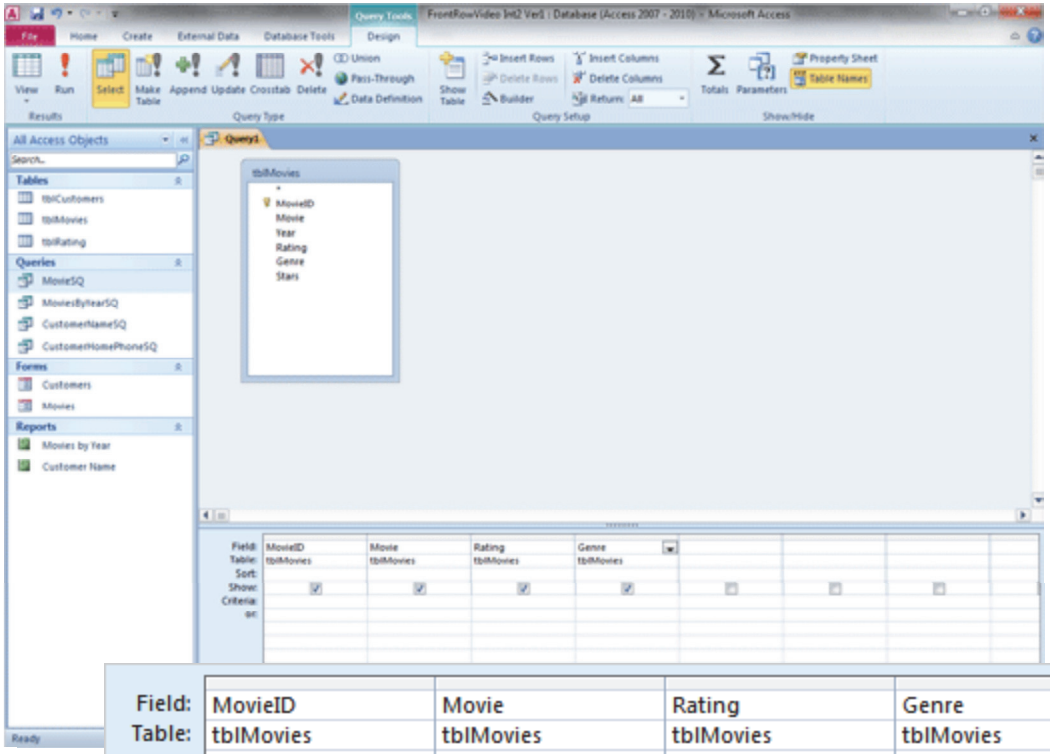
Add the following Fields to the QBE Grid:
MovieID
Movie
Rating
Genre

Do This, Now: Save the Query

Go to **File->Save**.
Enter the name: MovieSearchSQ.

Keep going...

File ->Save



2

Field:	MovieID	Movie	Rating	Genre
Table:	tblMovies	tblMovies	tblMovies	tblMovies
Sort:				
Show:	☑	☑	☑	☑
Criteria:				
or:				

Exam 77-885: Microsoft Access 2010
4. Creating and Managing Queries
4.3. Manipulate fields: Add Fields to a Query

Take One

Run the Query

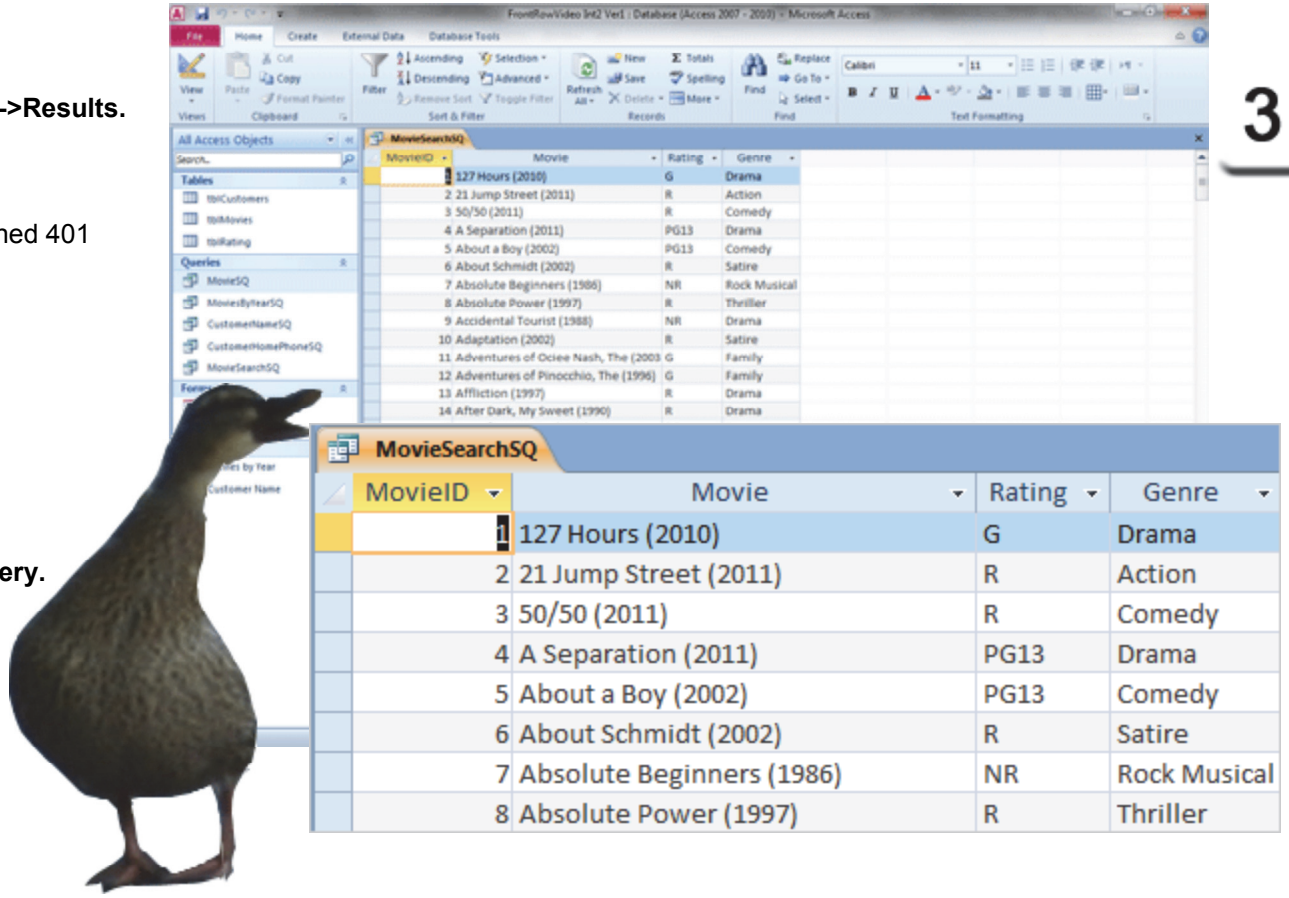
3. Try it: Run the Query
Go to **Query Tools ->Design->Results.**
Click on **Run**.

What Do You See? The **MovieSearchSQ** Query returned 401 movies.
There are four Fields:
MovieID
Movie
Rating
Genre

OK, the query works.
Now, let's build a form with it.

Do This, Now: Close the Query.

Query Tools ->Design->Results->Run



MovieSearchSQ

MovieID	Movie	Rating	Genre
1	127 Hours (2010)	G	Drama
2	21 Jump Street (2011)	R	Action
3	50/50 (2011)	R	Comedy
4	A Separation (2011)	PG13	Drama
5	About a Boy (2002)	PG13	Comedy
6	About Schmidt (2002)	R	Satire
7	Absolute Beginners (1986)	NR	Rock Musical
8	Absolute Power (1997)	R	Thriller

3

Exam 77-885: Microsoft Access 2010
4. Creating and Managing Queries
4.1. Construct queries: Create a Select Query

Take One

Create the Movie Subform

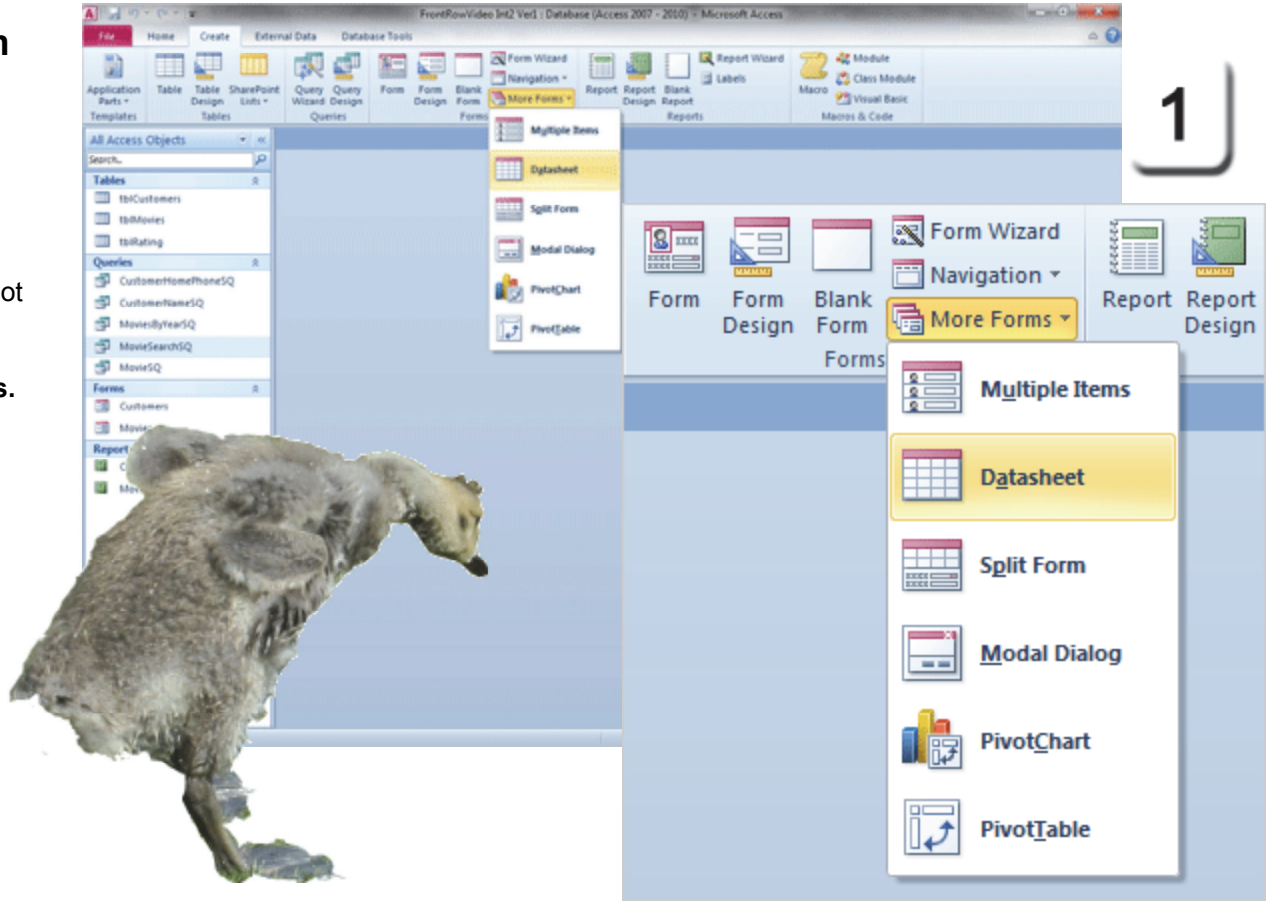
A Datasheet is a good way to list the movies in the Subform. Here are the steps.

1. Try it: Create a Datasheet Form
Go to **All Access Objects: Queries**.
Select a Query: **MovieSearchSQ.**
(Click once to Select the Query. Do not double click or the Query will run)

Go to **Create ->Forms->More Forms.**
Click on **Datasheet**.

Keep going...!

Create ->Forms->More Forms->Datasheet



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.1. Create forms: Datasheet

Take One

Hello, Movie Subform

2. Try it: Review the Datasheet Ribbon

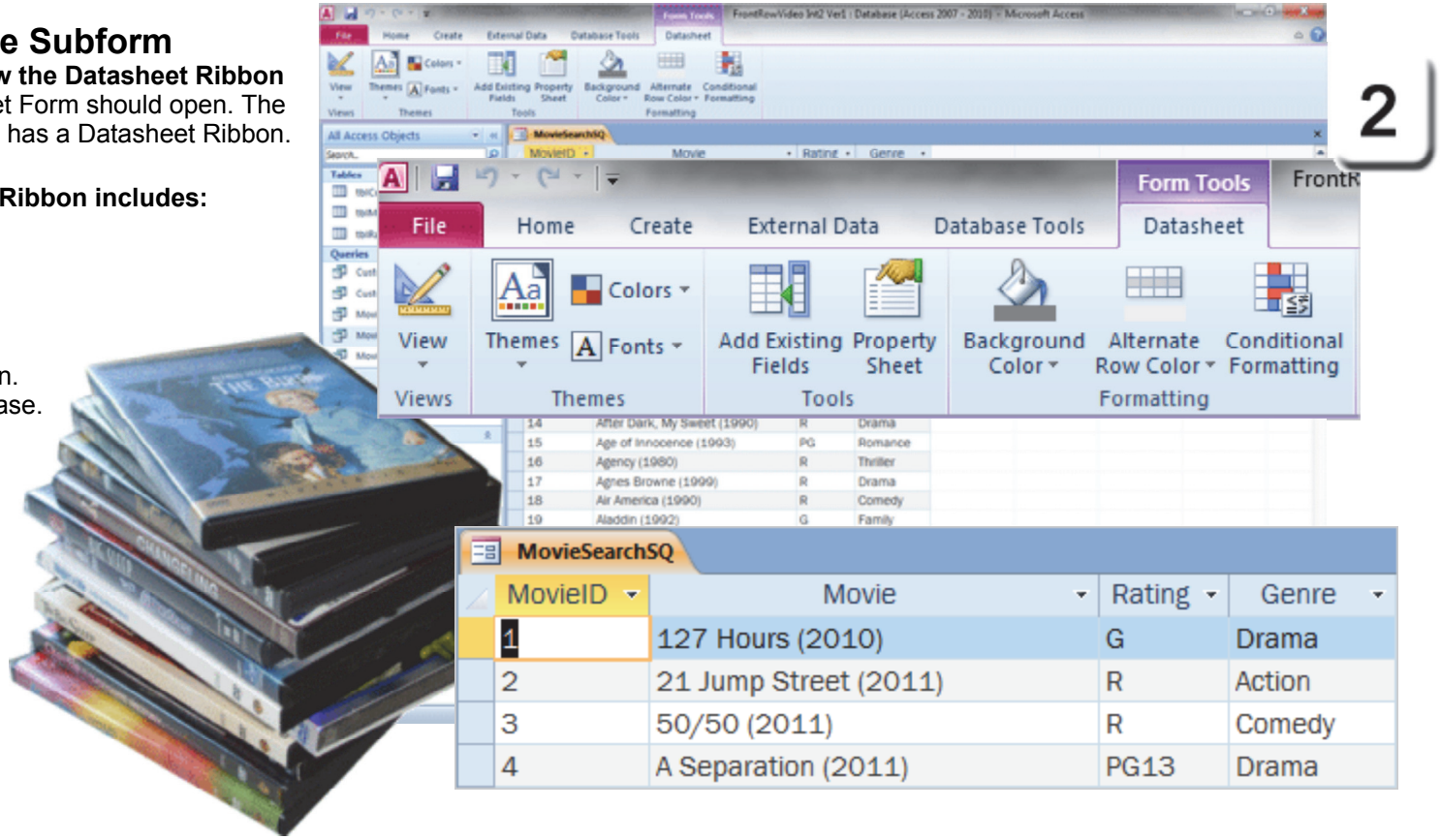
A new Datasheet Form should open. The Form Tools now has a Datasheet Ribbon.

The Datasheet Ribbon includes:

Views
Themes
Tools
Formatting

This could be fun.
Keep going, please.

Form Tools ->Datasheet



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.1. Create forms: Datasheet

Take One

Format the Rows

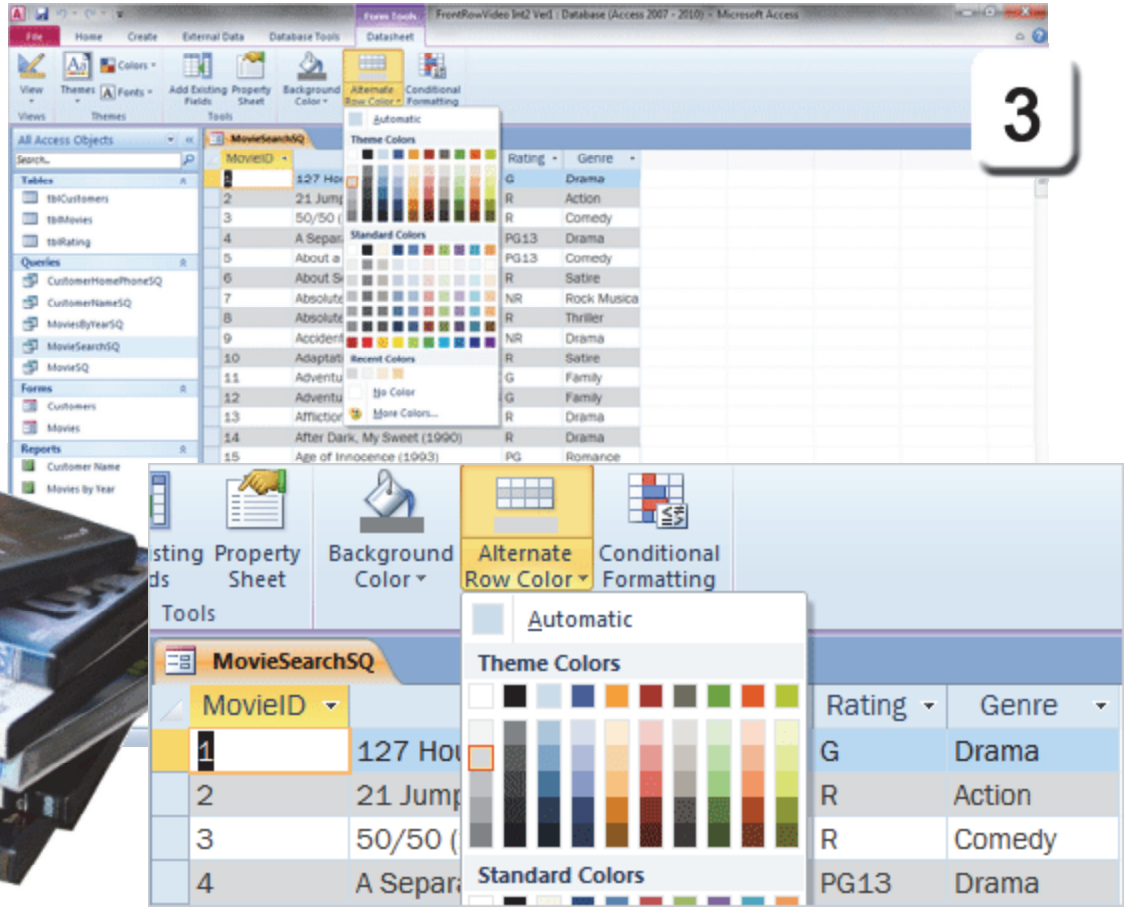
3. Try it: Format the Rows

The Datasheet form is still open.
Go to **Form Tools ->Datasheet->Formatting.**
Click on **Alternate Row Color.**
Select a **Color**: White, Background1, Darker 15% (light grey).

What Do You See? Every other Row should be filled with the color you selected. Formatting the Rows in alternating colors should make them easier to read.

Keep going...

Form Tools ->Datasheet->Formatting-> Alternate Row Color



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.1. Create forms: Format the Datasheet

Take One

Use Conditional Formatting

Conditional Formatting formats the color depending on the Rules that you set up. This example will format the Rating data.

Before You Begin: Select the Rating Column in the Datasheet Form. Selecting the Column is important in this example.

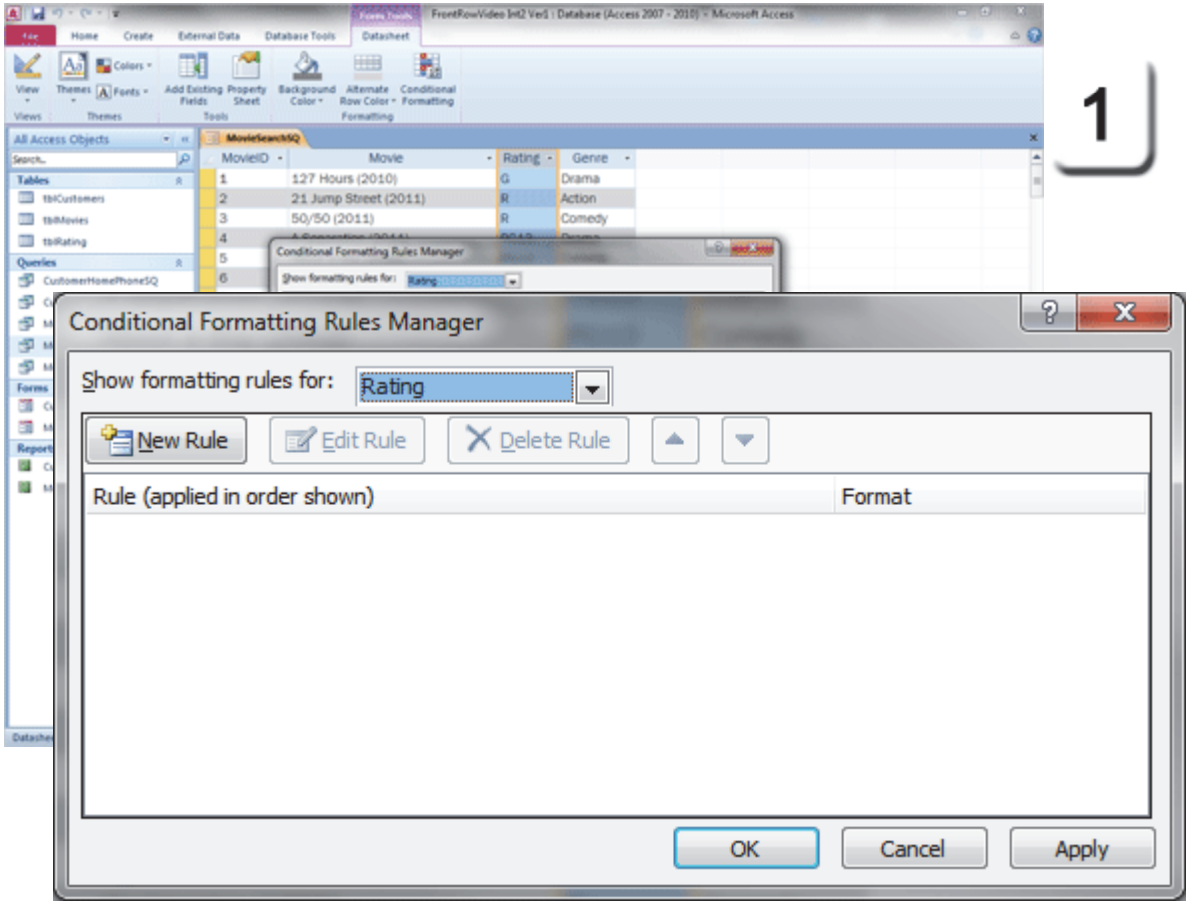
1. Try it: Use Conditional Formatting
Go to **Form Tools ->Datasheet.**
Go to **Formatting.**
Click on **Conditional Formatting.**

The **Conditional Formatting Rule Manager** should open. The Rating Column was selected so this formatting will be applied to the Rating data.

Do This, Now: Create a New Rule
Click on **New Rule**.

Keep going...

Form Tools ->Datasheet->Formatting-> Conditional Formatting



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.4. Apply Form Format options: Use Conditional Formatting

Take One

Edit the Formatting Rule

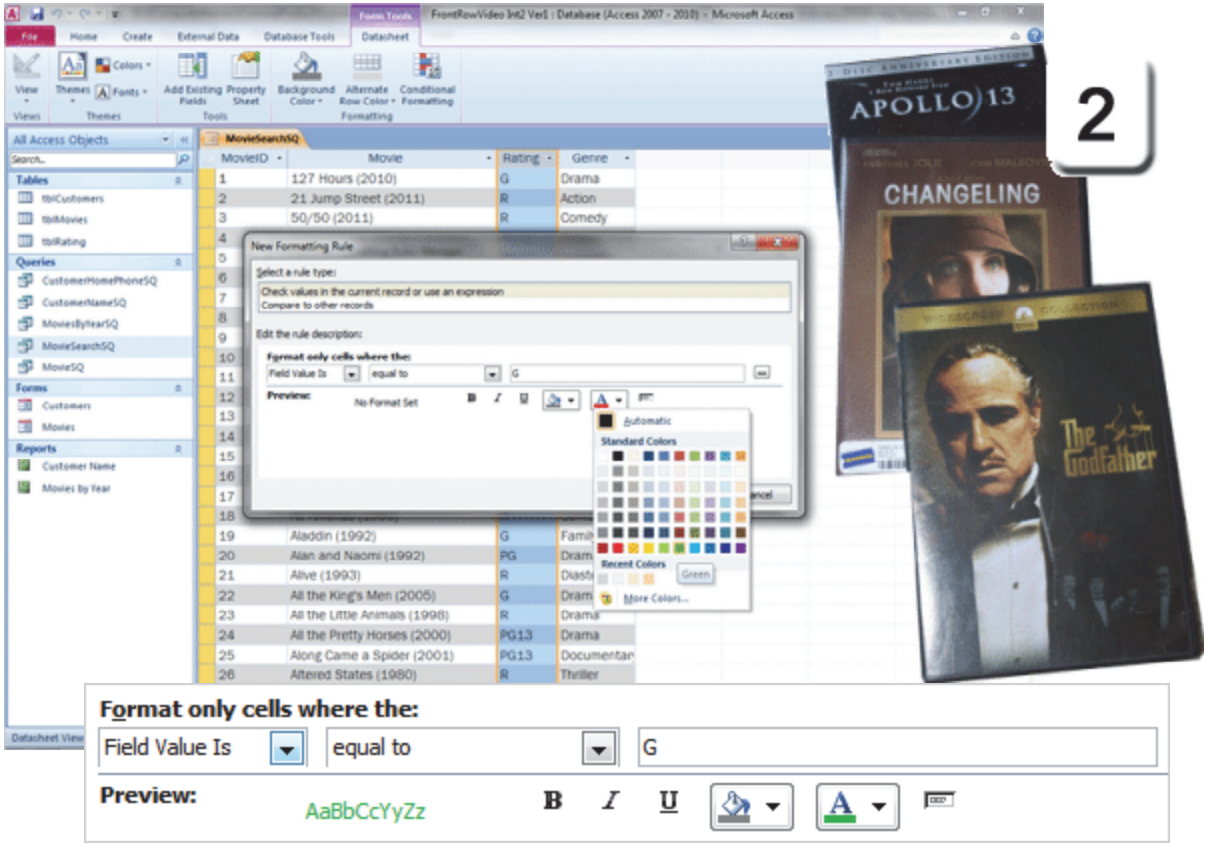
Each Rating in the Rating Table can be assigned a different color.

For example, G rated movies could be formatted green. R rated movies could be formatted red.

2. Try it: Edit the Formatting Rule
Field Value is: equal to
Enter the Rating: G
Format the color: green

Keep going...

Form Tools ->Datasheet->Formatting-> Conditional Formatting



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.4. Apply Form Format options: Use Conditional Formatting

Take One

Add More Rules

3. Try it: Add More Rules

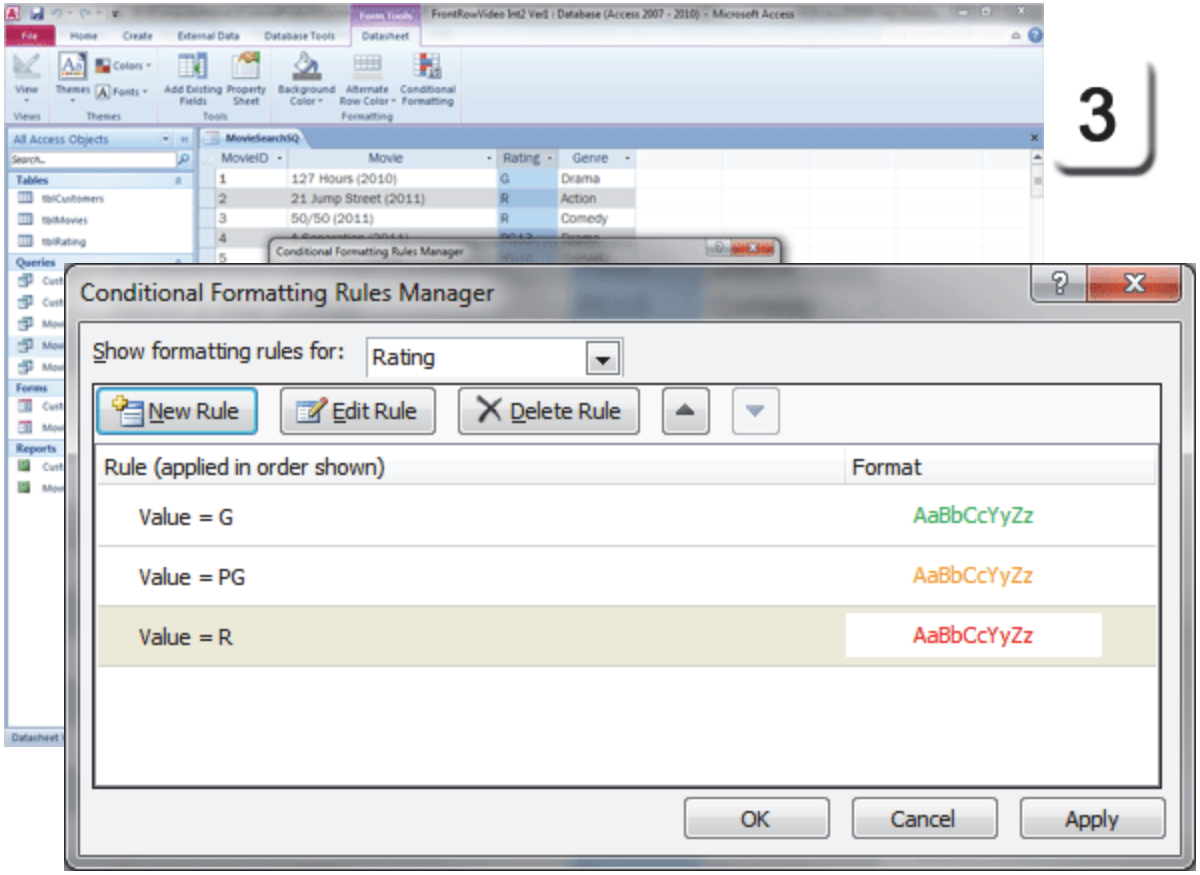
Add a Rule for the PG Rating
Click on **New Rule**.
Field Value is: equal to
Enter the Rating: PG
Format the color: orange

Add a Rule for the R Rating
Click on **New Rule**.
Field Value is: equal to
Enter the Rating: R
Format the color: red

Show formatting rule for Rating:
There should be three rules.

Click **OK**. So...what do you see?

Form Tools ->Datasheet->Formatting-> Conditional Formatting



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.4. Apply Form Format options: Use Conditional Formatting

Take One

Review the Formatting

4. Try it: Review the Formatting

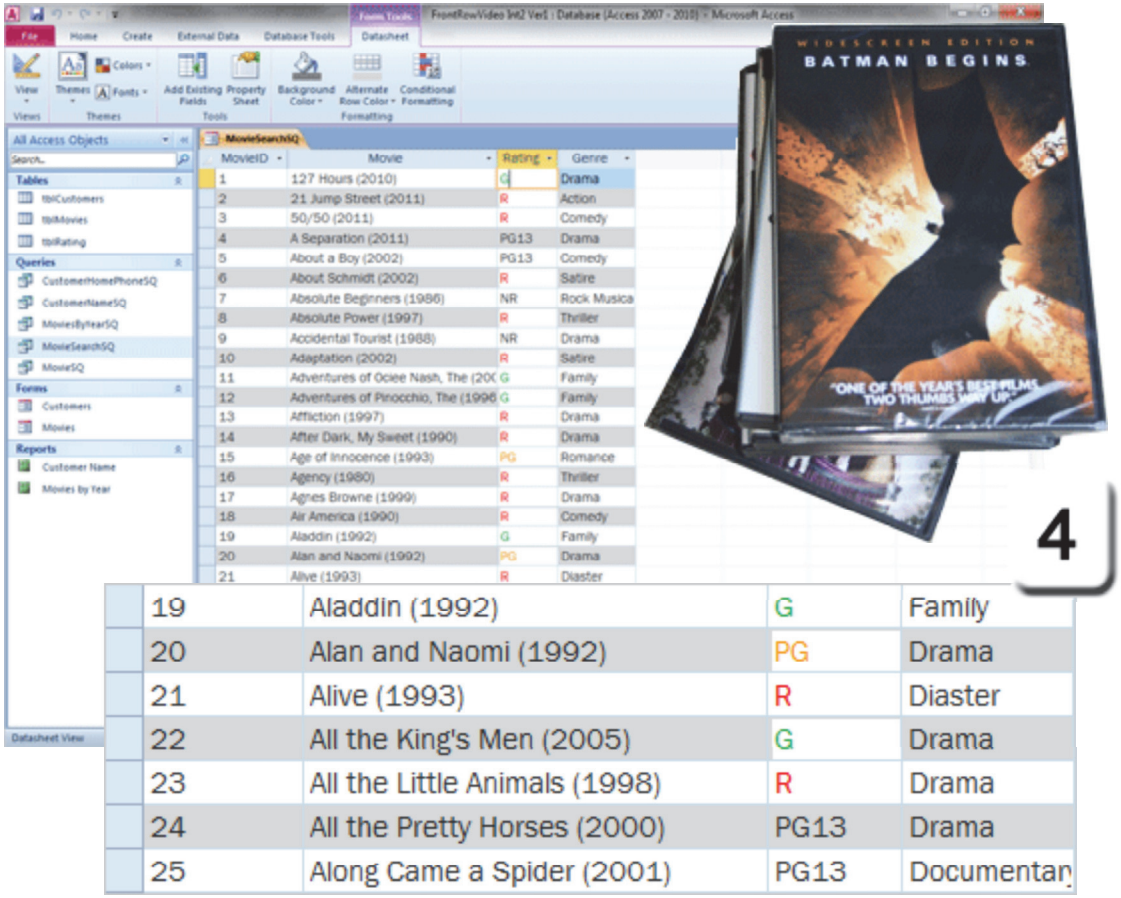
The Rating data has been formatted based on the Conditional Formatting Rules that you just programmed:
Green for G
Orange for PG
Red for R

What Else Do You See? The **PG13, PG14 and PG15** Ratings were not formatted with a Conditional Formatting Rule. They are still the default Theme color, black.

Keep Looking: The Conditional Formatting also over-wrote the Table formatting for alternating colors on the Rows.

Made you look.

Form Tools ->Datasheet->Formatting-> Conditional Formatting



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.4. Apply Form Format options: Use Conditional Formatting

Take One

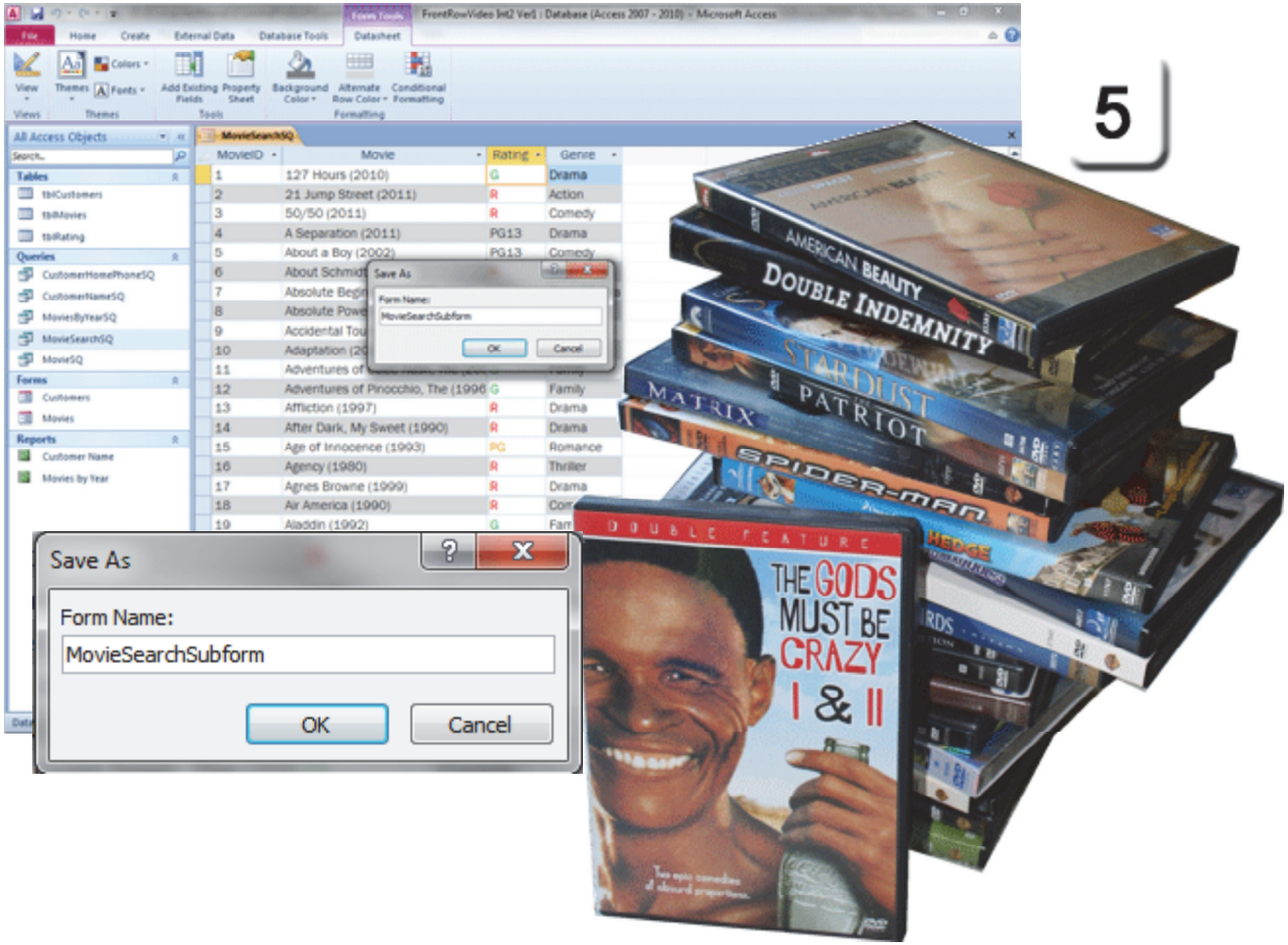
Finish the Subform

A Subform doesn't need many embellishments. It doesn't have a Form Header for logos or branding.

5. Do This, Now: Save the Subform
Go to **File->Save.**
Enter the Form Name: MovieSearchSubform.

Click **OK** and close the Subform.
Very Good.

File ->Save



Take One

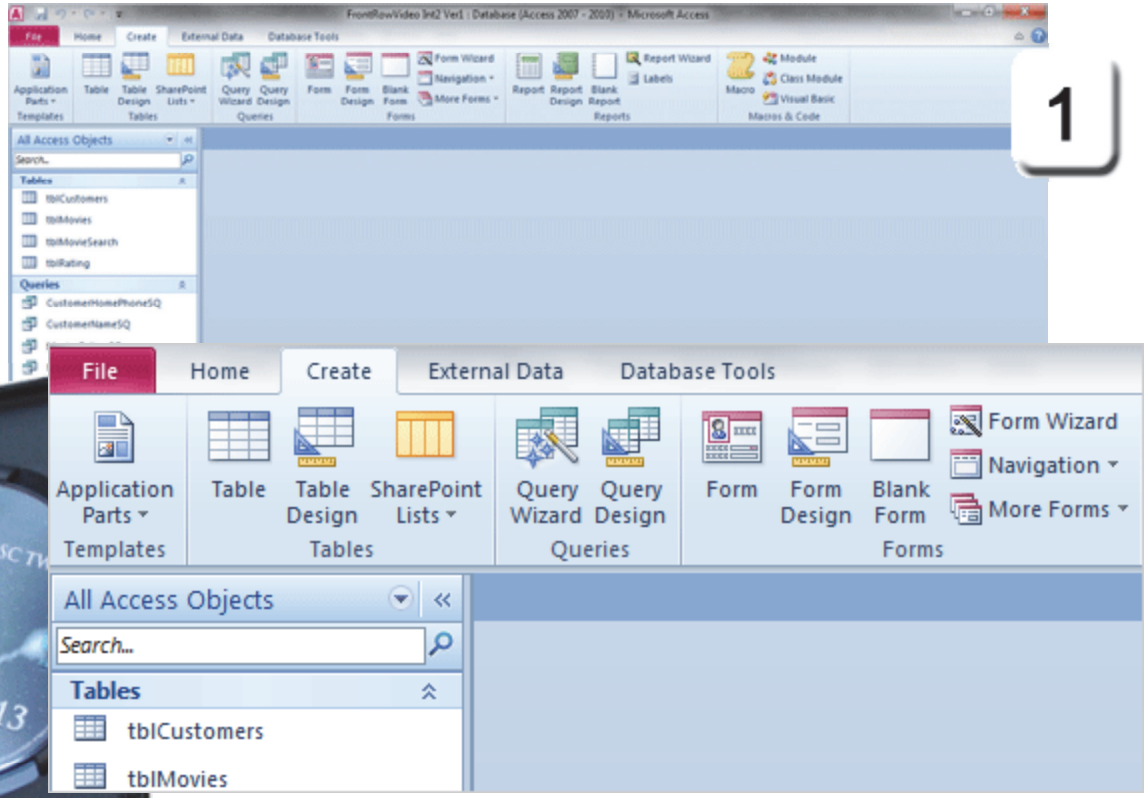
Create a Record Source for the Movie Search Form

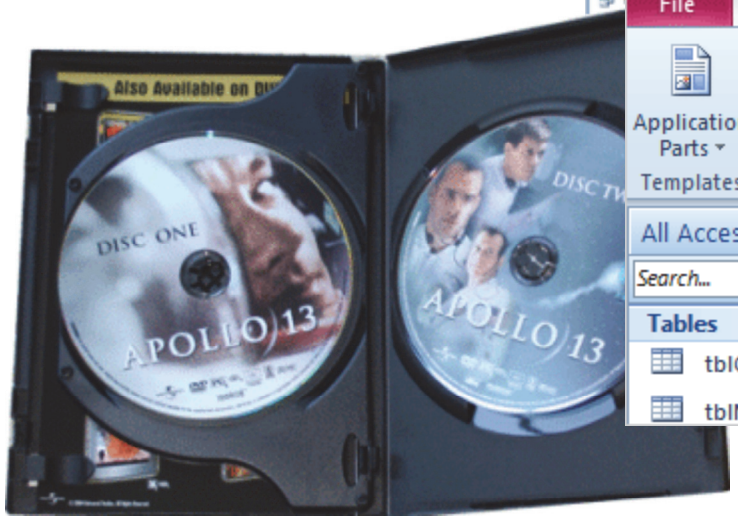
The Record Source for the new Movie Search Form will be a new Table, tblMovieSearch, which will have three Fields.

1. Try it: Create a Table
Go to **Create ->Tables->Table Design.**

Keep going...

Create ->Tables->Table Design





Exam 77-885: Microsoft Access 2010
2. Building Tables
2.1.1. Create tables in Design View

Take One

Edit the Fields

2. Try it: Edit the Fields
Enter the following, please:

Field Name: MovieSearchID
Data Type: AutoNumber

Field Name: Rating
Data Type: Text

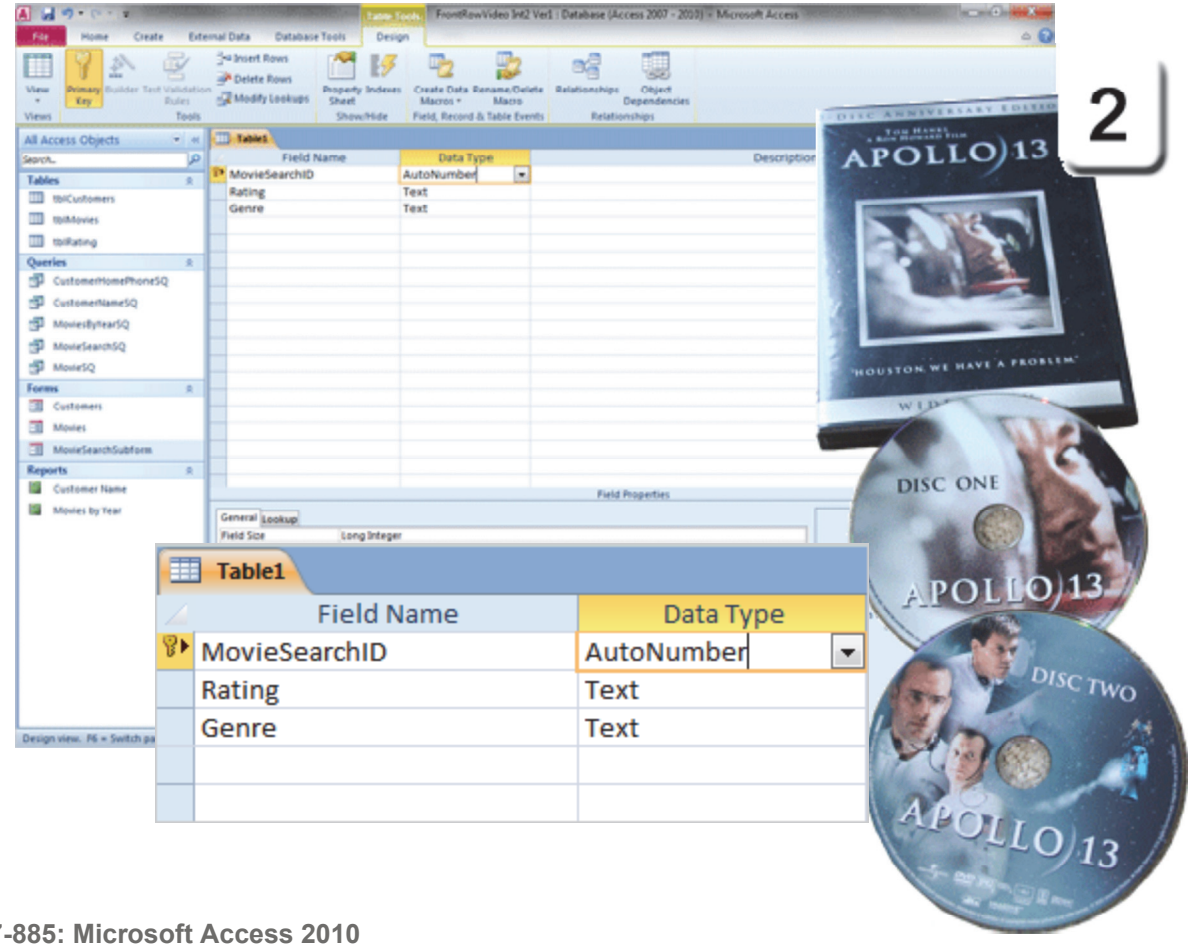
Field Name: Genre
Data Type: Text

Try This, Too: Create a Primary Key
Select a Field: MovieSearchID
Go to **Table Tools ->Design->Tools.**
Click on **Primary Key.**

What Do You See? The MovieSearchID Field has the symbol for the Key. In the Field Properties, the values are **Indexed (yes),** so that there will be no duplicates.

Keep going...!

Table Tools ->Design->Tools->Primary Key



Exam 77-885: Microsoft Access 2010
2. Building Tables
2.1.1. Create tables in Design View

Take One

Save the MovieSearch Table

3. Try it: Save the Table
Go to **File ->Save.**
Enter a name: tblMovieSearch.

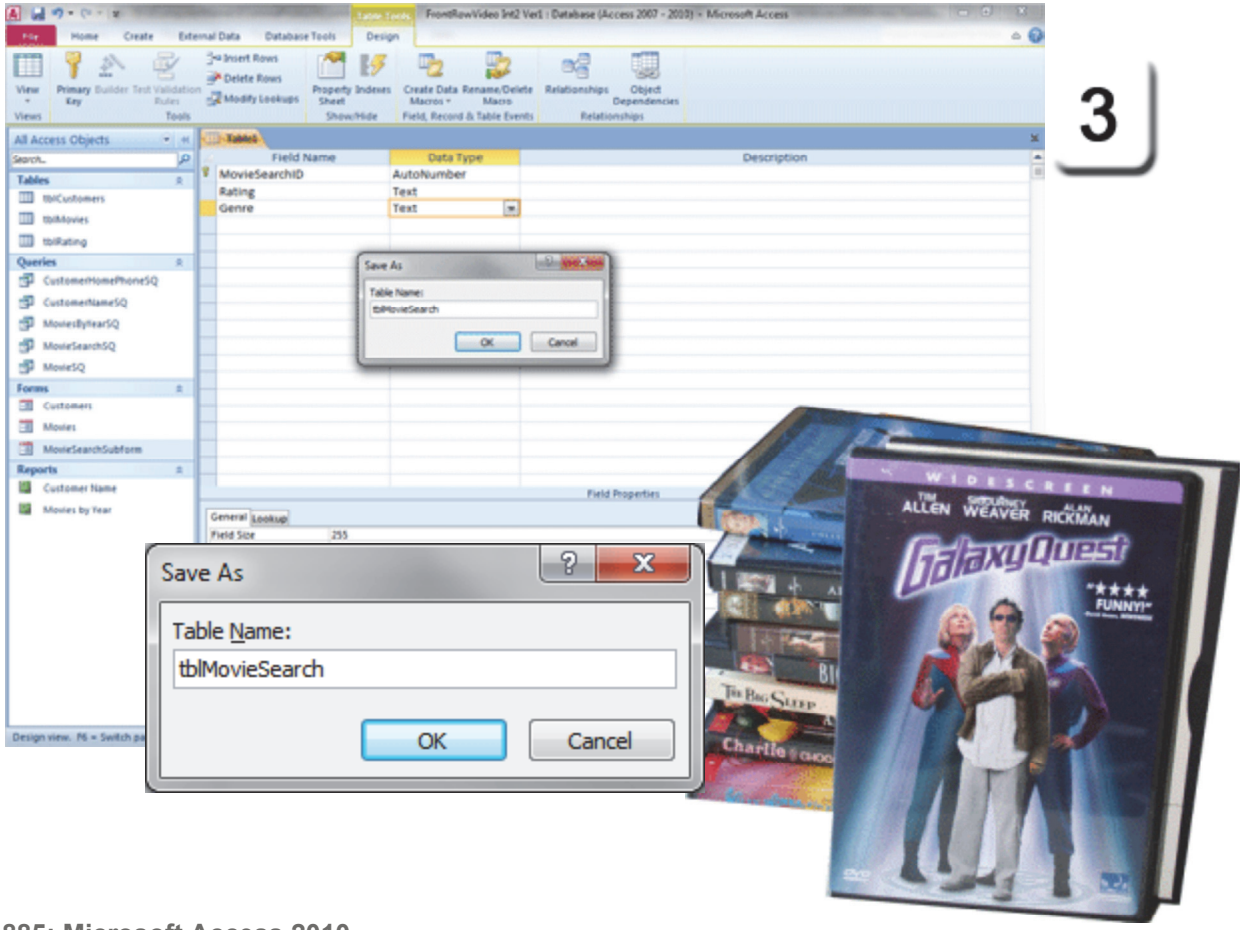
Click **OK**.

This little table will be the Record Source for the Master Form, the top part of the Movie Search Form.

The purpose of **tblMovieSearch** is to hold the Rating value that the user selects from the Combo Box.

Close tblMovieSearch. Keep going...

File ->Save



Exam 77-885: Microsoft Access 2010
2. Building Tables
2.1.1. Create tables in Design View

Take One

Create a Movie Search Form

This Form will give the User a Combo Box to Filter the movies. For example, the Rating Combo Box could be used to show only G rated movies.

1. Try it: Create a New Form
Go to **Create ->Forms->Form Design.**

Try This, Too: View the Property Sheet
Go to **Form Design Tools->Design->Tools**. Click on **Property Sheet.**

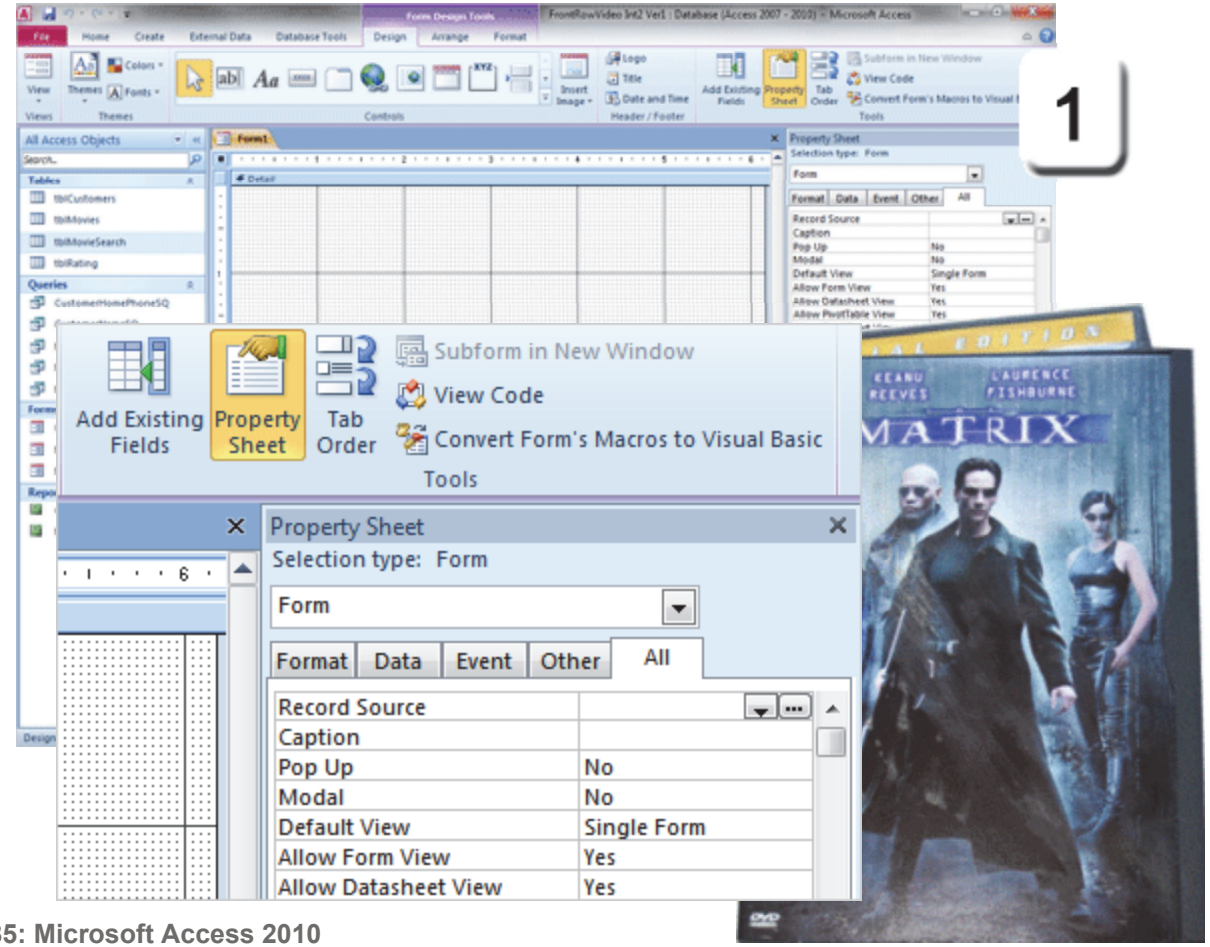
What Do You See? The Property Sheet should open on the left side of the screen. The Selection type is form.

What Else Do You See? The Record Source is blank. This Form is not connected to a Table or Query, yet.

It is **Unbound**.

Keep going...

Create ->Forms->Form Design



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: View the Property Sheet

Take One

Movie Form Design: Select a Record Source

When a Form has a Record Source then it is **Bound**. This Movie Search Form will use tblMovieSearch for the Record Source.

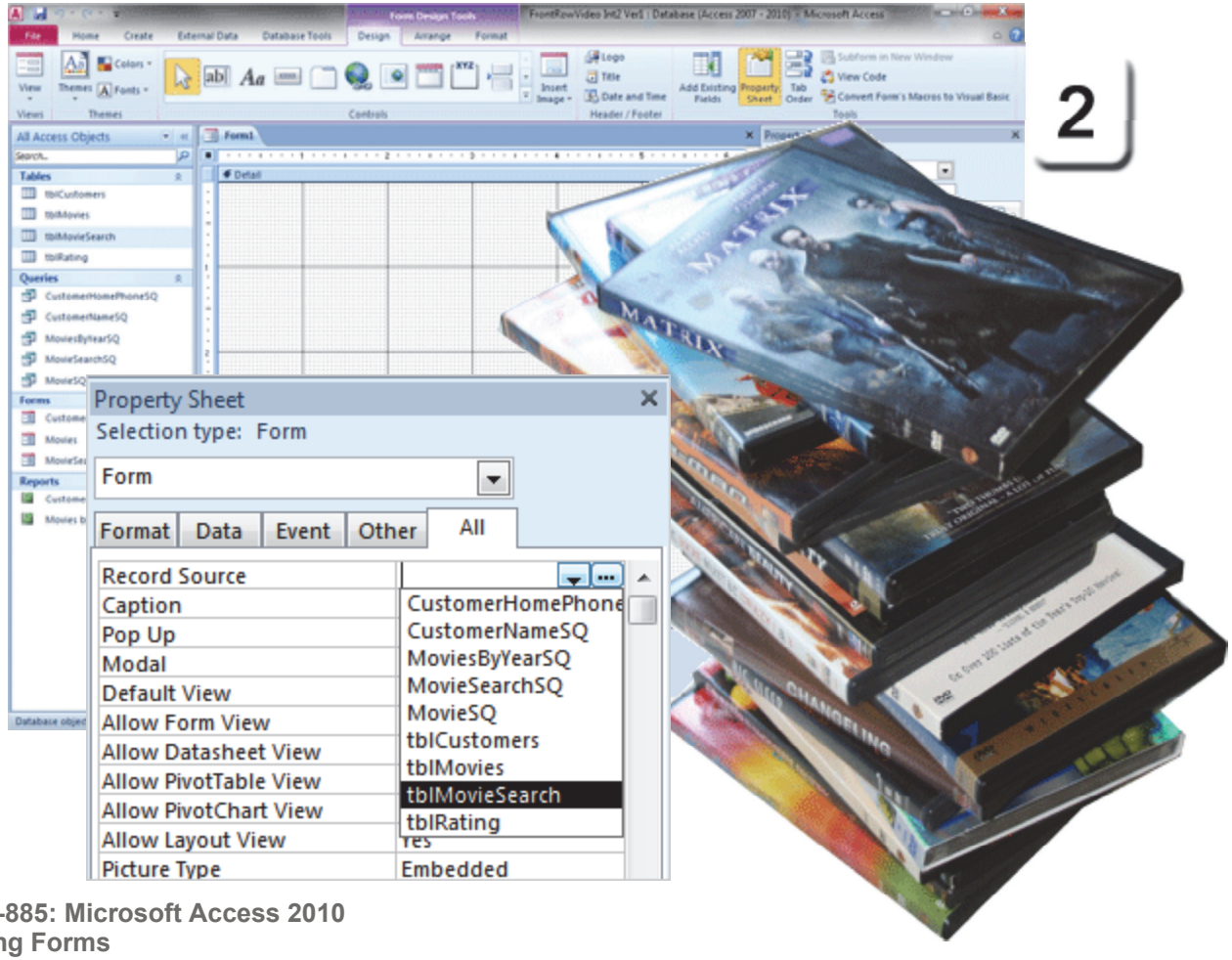
2. Try it: Select a Record Source
The new Form is open in Design View and the Property Sheet is open.

Go to **Property Sheet->All.**
Click on **Record Source**.
Select: tblMovieSearch.

Now, this Form is Bound to a Table. The Fields in tblMovieSearch are available in the Field List if you click on Add Existing Fields.

Keep going...

Form Design Tools->Design->Tools->Property Sheet



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: View the Property Sheet

Take One

Movie Form Design: Add a Title to the Header

The Header is a excellent place to confirm that this is the right Form. A little branding works, too. This step will add a Title to the Form Header.

3. Try it: Add a Title to the Header
The Form is still open in Design View. The Property Sheet is open.

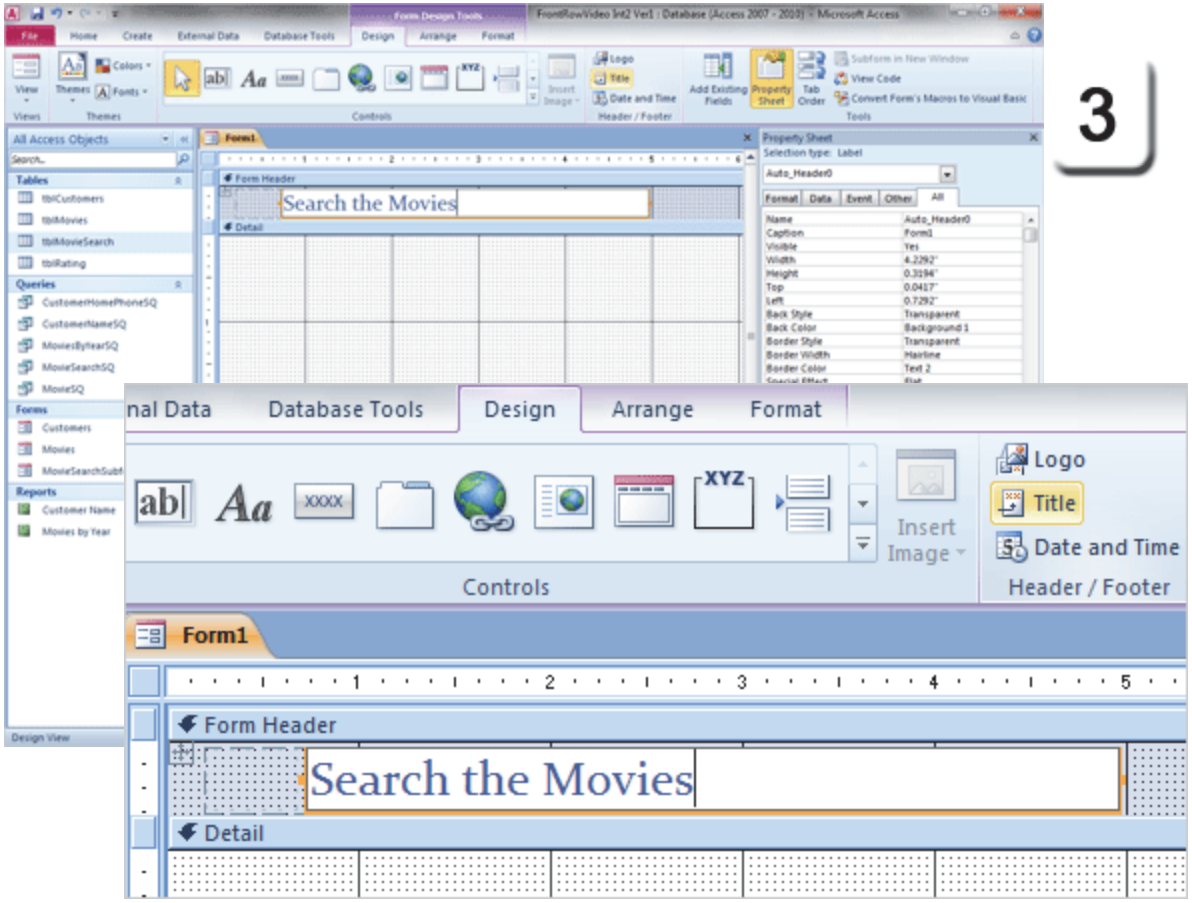
Go to **Form Design Tools->Design.**
Go to **Header/Footer->Title.**

What Do You See? A new Form Header will be added to this Form. There should be a new Label in the Header.

Edit the Label: Search the Movies

Keep going...

Form Design Tools->Design->Header/Footer->Title



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Format the Header or Footer

Take One

Movie Form Design: Add a Combo Box

Controls can be Bound or Unbound as well. A Control is Bound if it has a Field in a Table or Query as a Record Source.

The following pages will add a Rating Combo Box to this Form. This Combo Box will be used to filter the movies in the Subform. You'll see. It's cool.

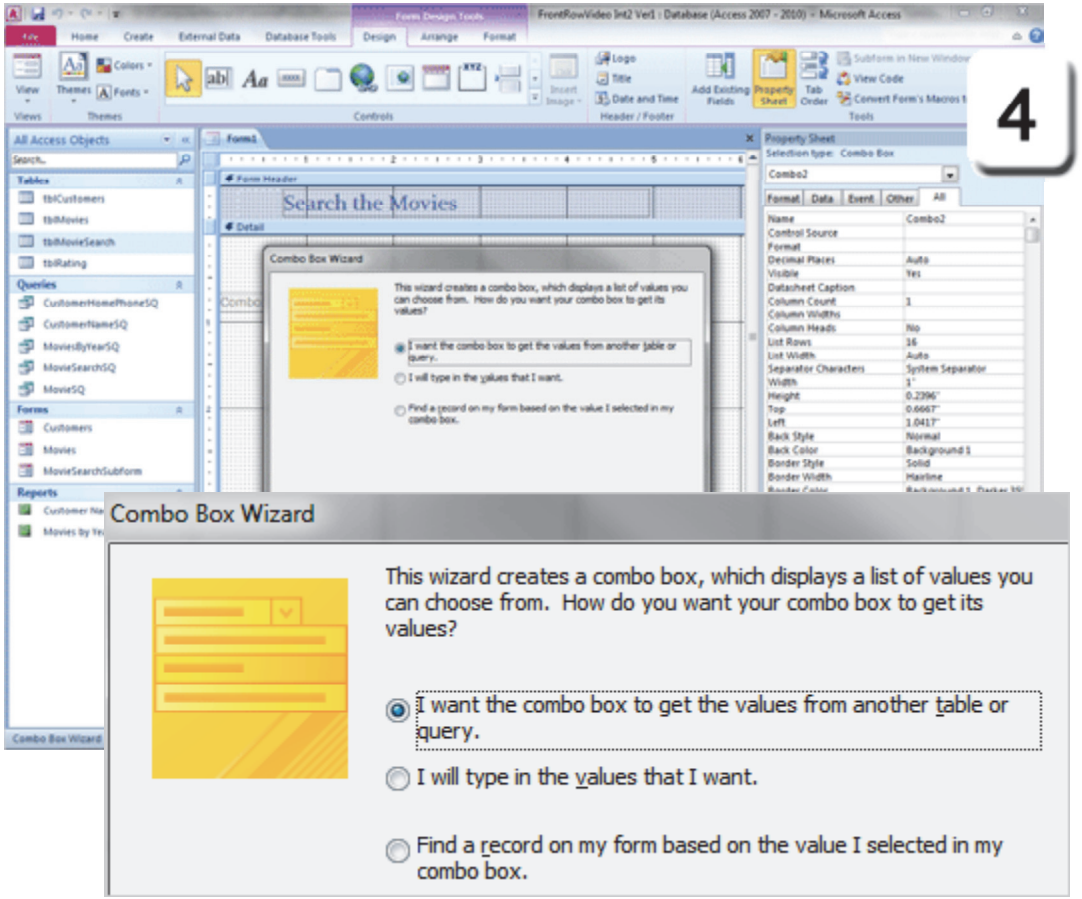
4. Try it: Add a Combo Box
The Form is still open in Design View.
The Property Sheet is open.

Go to **Form Design Tools->Design->Controls**.
Select a Control: **Combo Box**.

Click anywhere in the Detail section of the Form.
The Combo Box Wizard will open.

Keep going...

Form Design Tools->Design->Controls



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Add a Bound Control

Take One

Movie Form Design: Combo Box Options

Here are the answers to the first steps in the Combo Box Wizard.

5. Try it: Walk through the Wizard
Get the values from a Table or Query

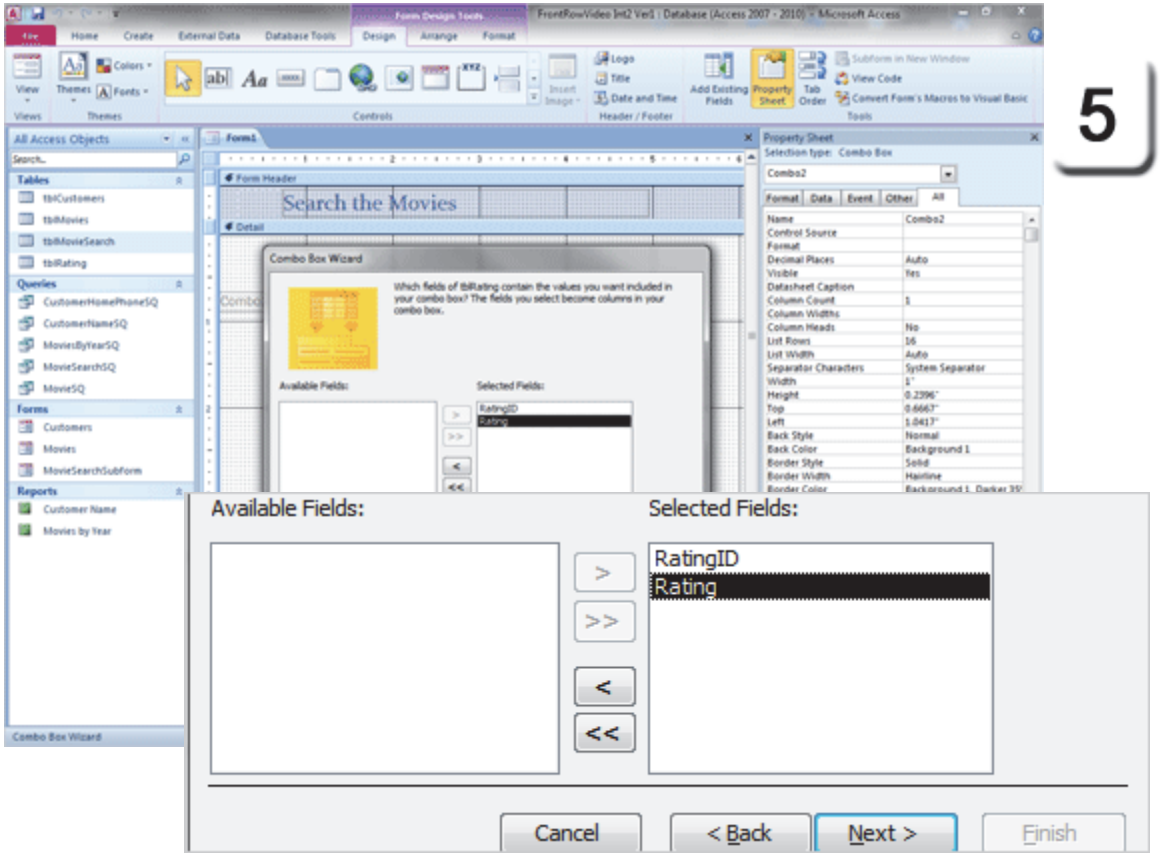
Go Next. Select a Record Source
Select a Table: tblRating

Go Next: Select the Fields
Select both available Fields:
RatingID (a number)
Rating (text)

Go Next: Sort the Fields
Select Rating to Sort (ascending)

Go Next: Keep going...

Form Design Tools->Design->Controls



5

Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Add a Bound Control

Take One

Movie Form Design: Combo Box Key Decision

6. Try it: Unhide the Key Column

Uncheck the option: Hide key column.

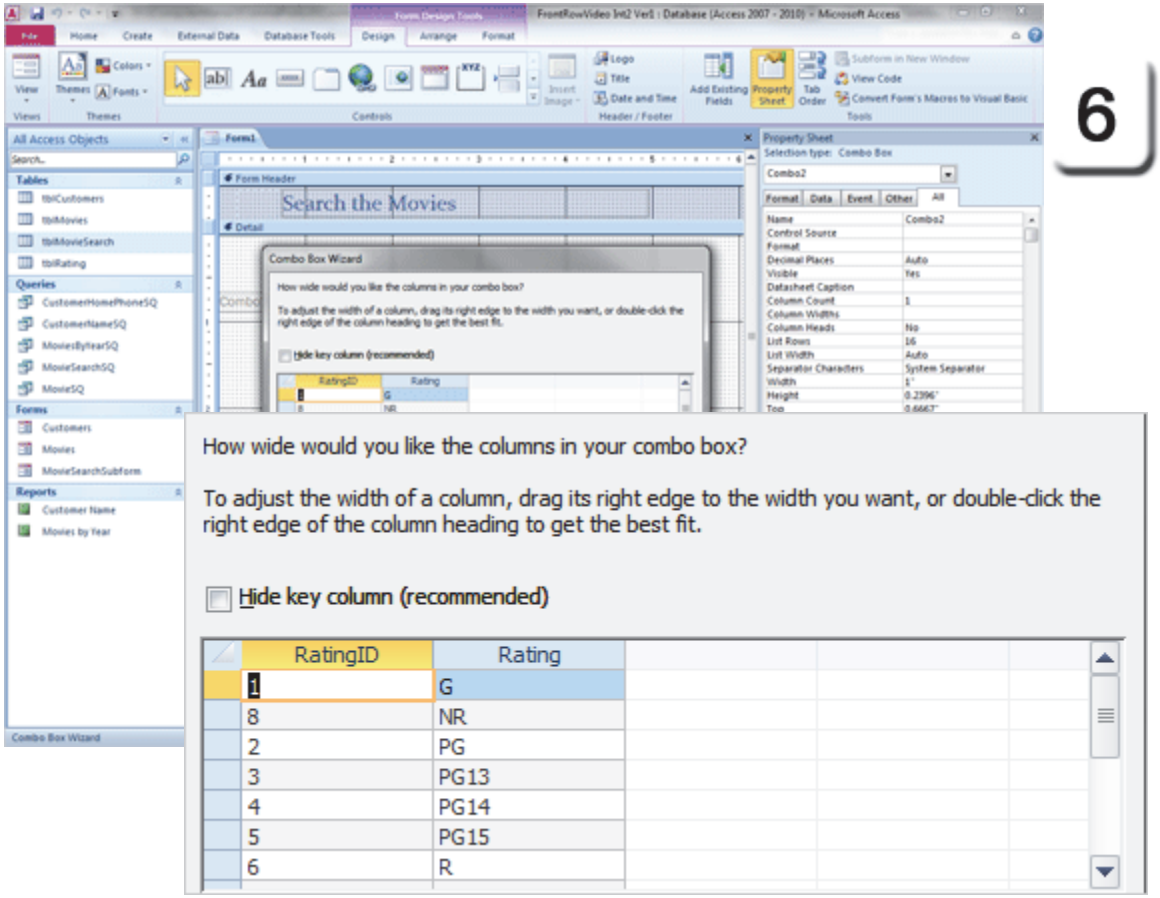
What Do You See? This Combo has two columns: RatingID and Rating.

Click **Next**.

Memo to Self: This option lets you choose which Field should be stored.

If the key column is hidden, the Combo Box Wizard will select the Primary Key, RatingID, by default.

Form Design Tools->Design->Controls



6

Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Add a Bound Control

Take One

Movie Form Design: Save the Rating Data

The last two steps in the Combo Box Wizard prompt you to select the Field you wish to store in tblMovieSeach.

7. Try it: Select the Rating Field
Select a Field: Rating
Click **Next**.

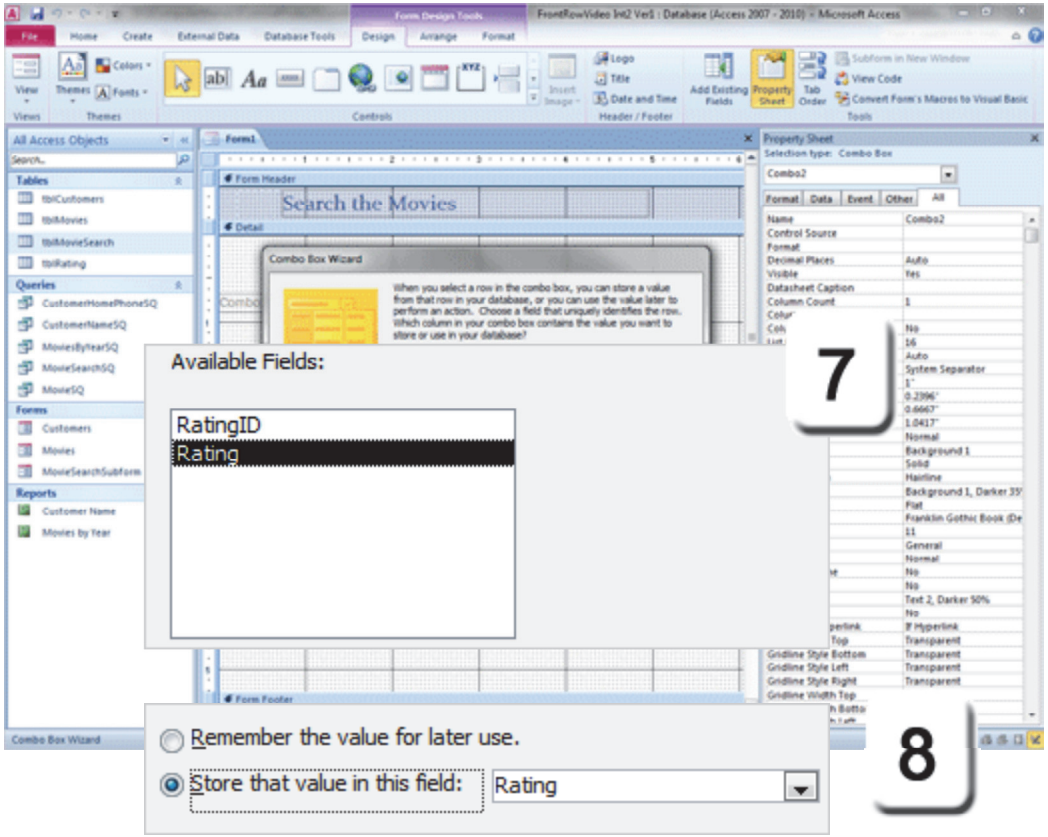
8. Try it: Store the Rating Field Data
Select a Field to Store: Rating
Click **Next**.

OK, Do This Now: Finish the Wizard
Enter the Label: Rating.
Click **Finish**.

What Do You See? There should be a new Combo Box on this Form.

One more step...

Form Design Tools->Design->Controls



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Add a Bound Control

Take One

Movie Form Design: Edit the Combo Box

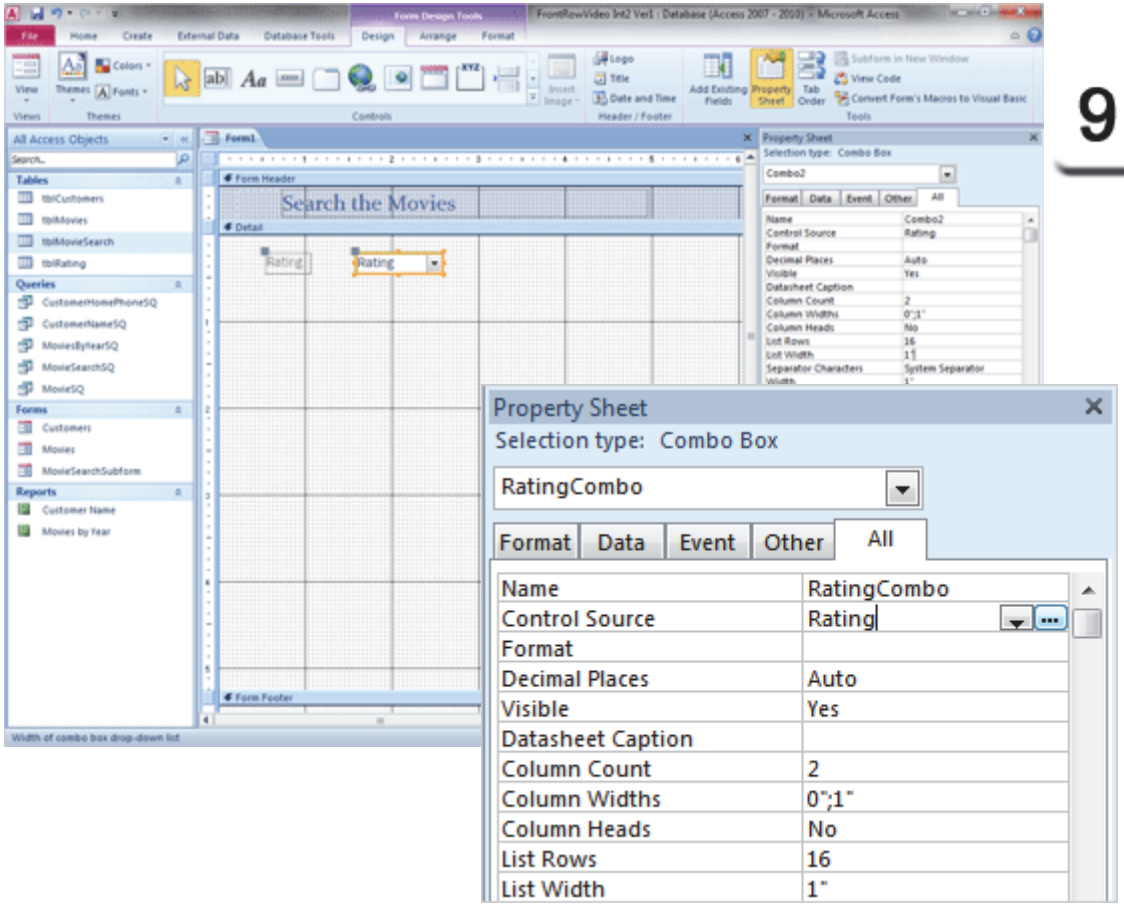
The Rating Combo Box Control has two columns. The first Column is the RatingID, which the User does not need to see. You can edit the Column Width to be zero so that it is hidden.

9. Try it: Edit the Combo Box Property
The Form is still open in Design View.
The Property Sheet is open.
Go to Property Sheet->All.
Edit the following:
Name: RatingCombo
Column Widths: 0";1"
List Width: 1"

Do This, Now; Save the Form
Go to **File->Save.**
Enter the Form Name: MovieSearch

OK, does it work?

Form Design Tools->Design->Tools->Property Sheet



9

Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Edit a Bound Control

Take One

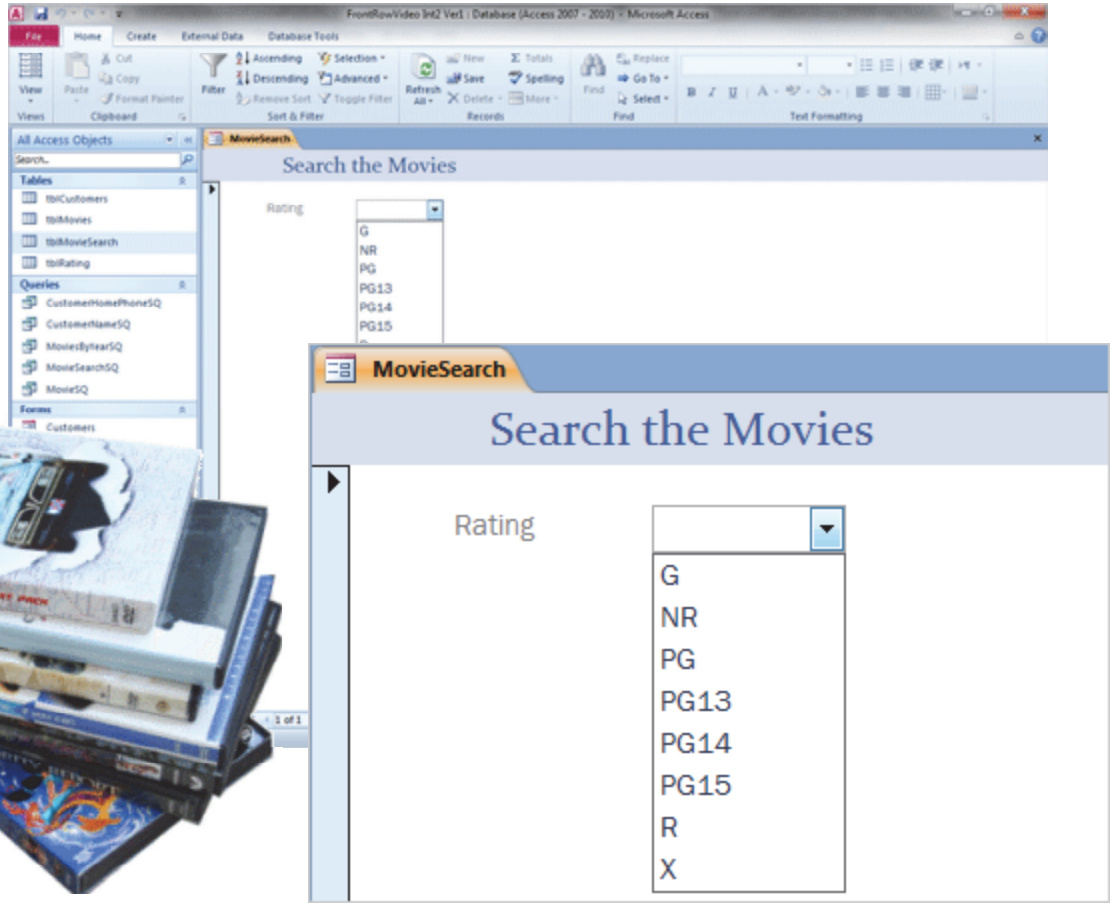
Test the Combo Box

Before You Begin: Change the View
Go to **Form Design Tools->Design->Views.**
Select a **View**: Form View.

Try it: Test the Rating Combo Box
There are two parts to the test:
Can you see the list of options?
Can you select an option from the list?

What Do You See? Does your Combo work?

Form Design Tools->Design->Views->View->Form View



Take One

So Far, So Good...

The objectives for this lesson were

Create a Record Source for the Subform: MovieSearchSQ..

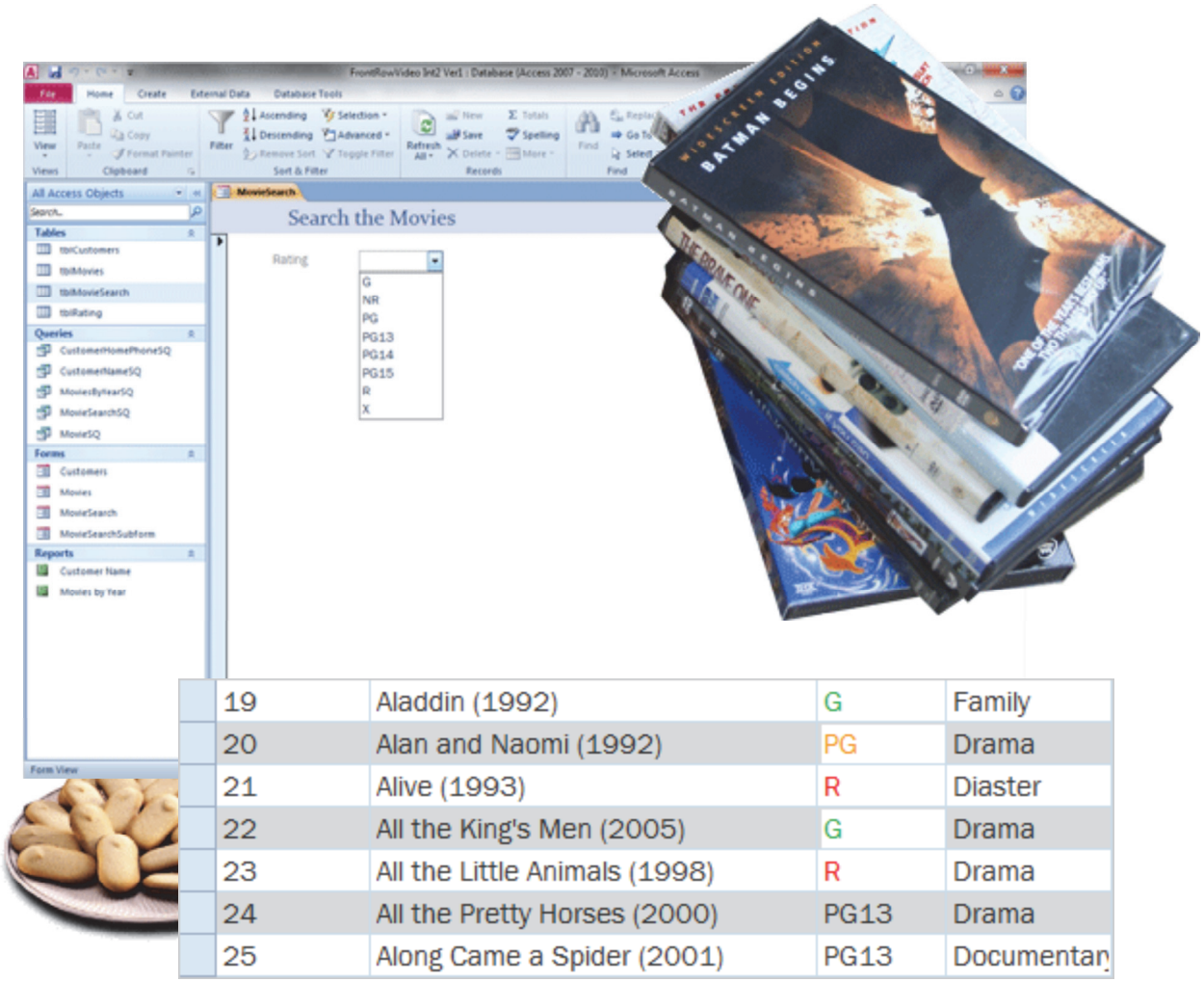
Create a MovieSearchSubform that displays movies as a Datasheet.

Create a Record Source for the MovieSearch Form, **tblMovieSearch,** a simple Table to hold the search criteria.

Design a **MovieSearch** Form that uses a Combo Box to look up the Rating.

In the next lesson, we will link the Form and Subform together.

Grab a cookie and come back when you are ready!



Practice Activities

Lesson 3: Form and Subform Design, part 1

Try This: Do the following steps

1. Open the Brown Bag Lunch database you have been working on. Or, you may download **BBL Int ver3.accdb**.
2. Create a new Query using the Create Queries->Query Design command. Use tbleProducts as the record source.
3. Add the following fields to the QBE Grid: ProductID, Item, Type, Specialty
4. Save the Query as ProductSearchSQ. Run the Query to test it, then close the Query.
5. Under All Access Objects->Queries, select the Product SearchSQ Query .
Go to Create->Forms->More Forms->Datasheet
6. Format the Datasheet with Alternate Row colors. Use a light color of your choice.
7. Apply Conditional Formatting to the Specialty column as follows:
Vegetarian has green text
Gluten Free has orange text
Low-Fat has pink text
8. Save the Form as ProductSearchSubform and close the form.
9. Create a new Table. Add the following Field and Data Types:
ProductSearchID, Autonumber (Also make this the Primary Key)
Type, Text
Specialty, Text
10. Save the Table as tblProductSearch. Close the Table
11. Create a new Form using the command Create->Forms->Form Design.
12. Using the Property Sheet, select the record source: tblProductSearch
13. Add a Header to the Form. Edit the Label to say: Search Products
14. Add a Combo Box to the detail section of the Form. Get the values from the Table tblType.
Select both available Fields.
15. Uncheck the option to hide the Key column. Set the Field Type to be stored in the Type Field. Finish the Wizard.
16. Using the Property Sheet, rename the Combo Box as TypeCombobox. Set the column widths as 0”, 1”
17. Save the Form as Product Search
18. Save and close the database.

Test Yourself

1. In Microsoft Access, a one-to-many relationship is created using which of the following?
A. A Table and a Form
B. A Form and a Subform
C. Form design and Table design
D. Macros and Forms
Tip: Intermediate Access, page 57

2. Which command formats text based on the rules you create?
A. Themes
B. Styles
C. Conditional Formatting
D. Design
Tip: Intermediate Access, page 67

3. Which of the following things are not parts of a Subform?
A. Form Header
B. Logos
C. Branding
D. Data
Tip: Intermediate Access, page 71

4. Which of the following is true about an Unbound Form?
A. The Form is not connected to a Table or Query
B. Once a record course is connected to the Form, it is considered Bound.
Tip: Intermediate Access, page 75, 76

5. If the Key column is hidden during the Combo Box Wizard, then Access will select the Primary Key (the ID field) by default for the field to store.
A. True
B. False
Tip: Intermediate Access, page 80

Take Two

Access 2010: Representing One-to-Many

Forms and Subform Design, part 2

Intermediate Access Objectives

In this lesson, you will learn how to:

1. Review the Properties for a Form: Record Source, Controls, View.
2. Use the Subform Wizard to add a Subform to a Form and link them by a common Field.
3. Create a Combo Box to filter the Records in the Subform.
4. Add a Macro to Refresh the Records in the Subform when the Combo Box is changed.

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Lesson 4 : Forms and Subform Design, part 2

1. Readings
Read Lesson 4 in the Intermediate Access guide, page 87-114.

Project
Link a Form to a Subform and test it.

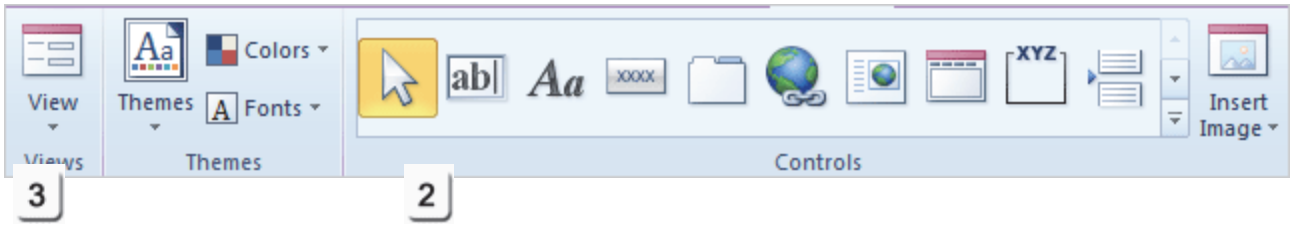
Downloads
FrontRowVideo Int4.accdb
popcorn1.gif, popcorn2.gif, popcorn3.gif, popcorn4.gif, movies1.gif.

BBL Int ver4.accdb

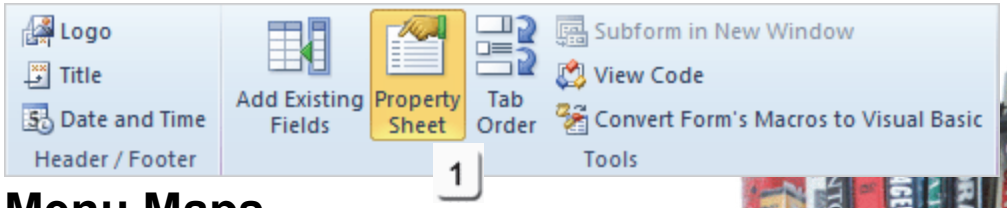
2. Practice
Do the Practice Activity on page 115.

3. Assessment
Review the Test questions on page 116.

Form Design Tools->Design Ribbon



Form Design Tools->Design Ribbon



Menu Maps

From the **Home Ribbon**
Home ->Views->View->Form Design, page 92
Home ->Records->Refresh, page 102

From the **Form Design Tools->Design Ribbon**
1. Form Design Tools->Design->Tools->Property Sheet, page 93
2. Form Design Tools->Controls->Subform/Subreport, page 96
3. Form Design Tools->Design->Views->View, page 101

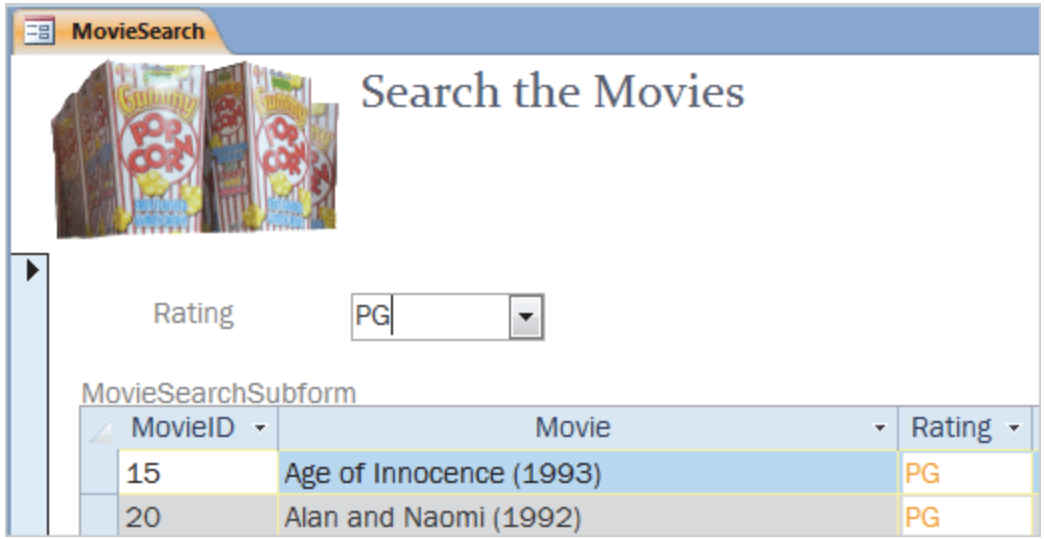
From the **Macro Ribbon**
1. Macro Tools->Design, page 105

Forms and Subform Design, part 2

Access 2010: Example of the completed Form and Subform

Forms and Subform Design, part 1 defined the scope of the programming: we wanted to search the movies by Rating. This is a one-to-many relationship. Microsoft Access represents a one-to-many relationship with a Form and Subform. The Movie Search Form stores the Rating in a new table, tblMovieSearch. The Movie Search Subform lists the movies that match that criteria. It looks up the movies with a Select Query based on the movies Table: tblMovies.

Forms and Subform Design, part 2 links the Form and Subform by a common Field: Rating. This lesson walks through the steps and offers some options for troubleshooting the programming. Let's get started.



What Are the Objectives?

Both the Form and the Subform have a Rating Control, which is Text. First, we will confirm that both Forms have the same Field. Then, we'll use the Subform Wizard to walk through the steps.

Review the Form and Subform
Open both Forms in Design View
Identify the Record Source
Confirm the Default View

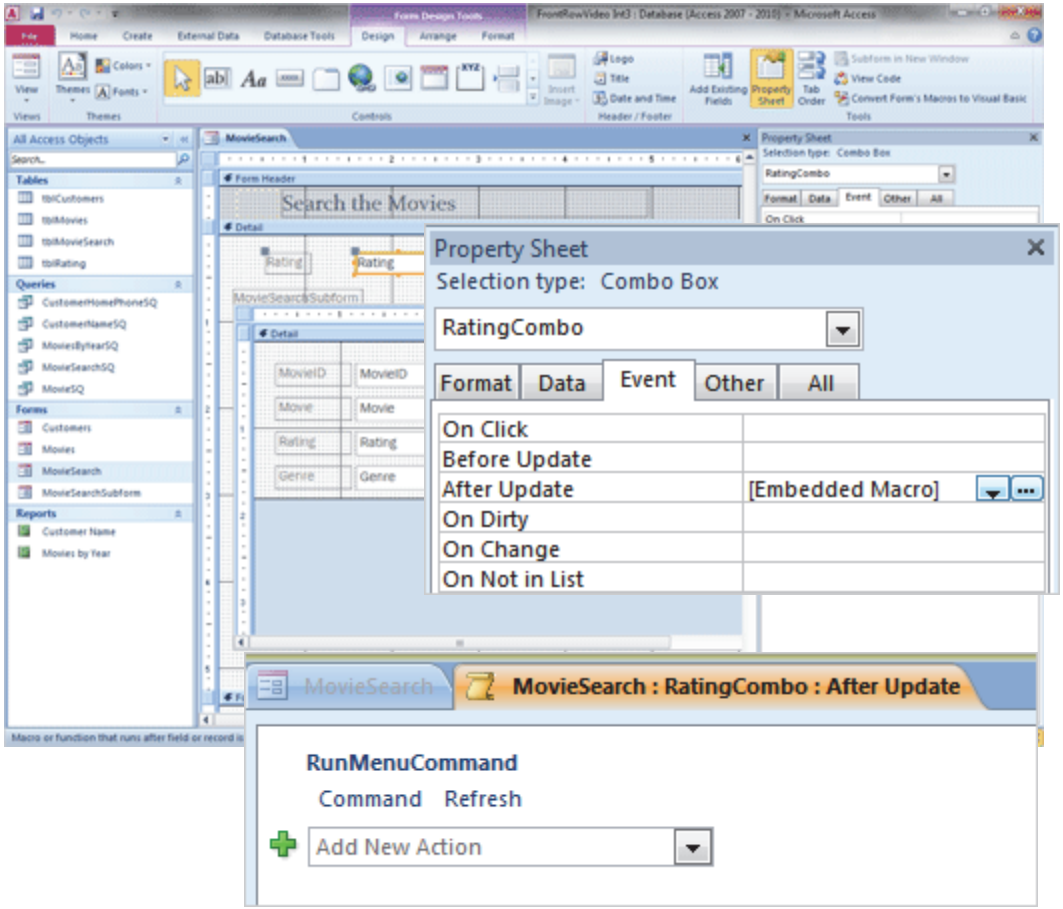
Use the Subform Wizard to Link the Forms
Select the Subform
Define the common Field: Rating

Review the Subform Properties
Confirm the Master and Child Links
Test the Movie Search Form
Automate the Form with a bit of code (a Macro!)

Troubleshoot the Programming
Review the Form and Control Properties
Review the Master and Child Links
Review the Embedded Macro

That's the plan. That's a lot...maybe not ;-D

Microsoft Access 2010: Example of a Form Control with a Macro



Before You Begin

Before You Begin: Open the Sample Database
Go to **Start -> All Programs ->Microsoft Office**.
Click on **Microsoft Office Access 2010**.
Access will prompt you to open a database.

This lesson uses the database that was programmed in the previous lesson. You can continue with the same database if you wish.

The **FrontRowVideo Int4.accdb** database has:
Four Tables: tblCustomers, tblMovies, tblMovieSearch and tblRating.

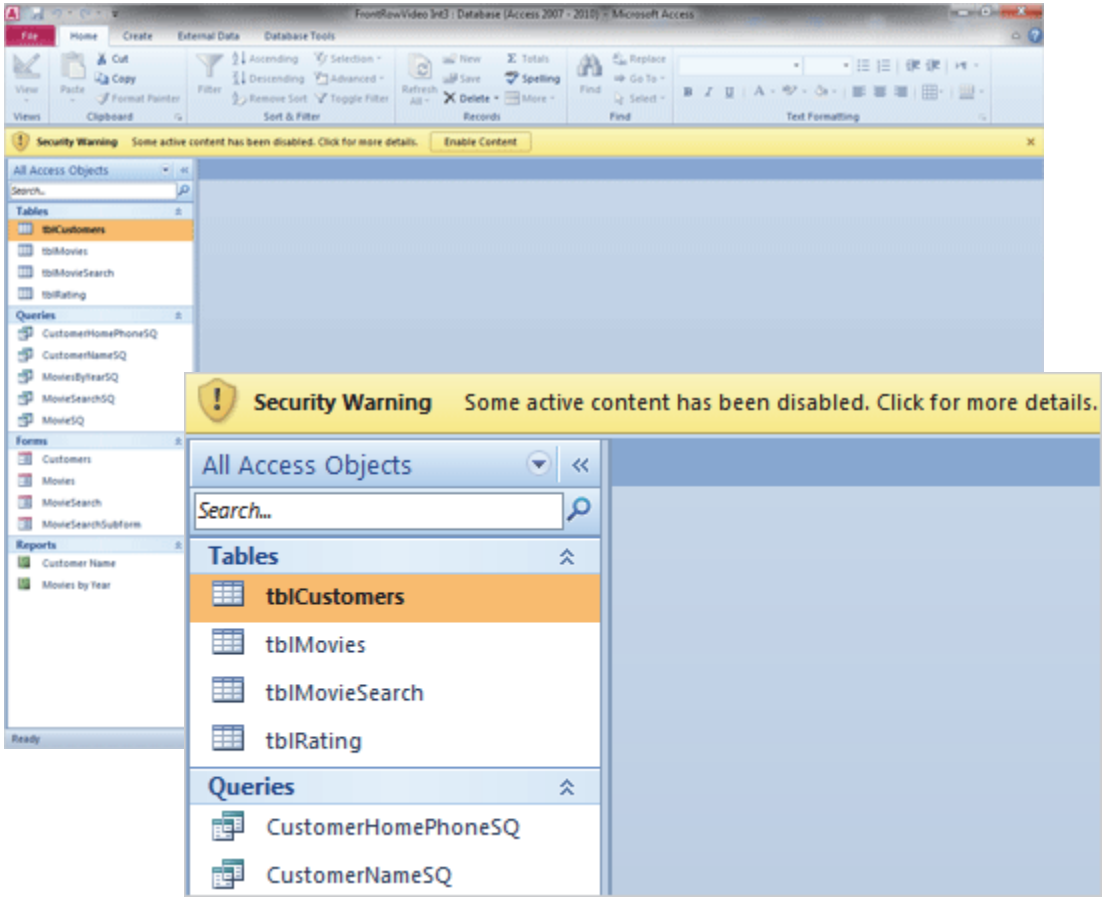
Five Queries: CustomerHomePhoneSQ, CustomerNameSQ, MoviesByYearSQ, MovieSQ, and MovieSearchSQ.

Four Forms: Customers, Movies, MovieSearch and MovieSearchSubform.

Two Reports: Movies by Year, Customer Name
Keep going...

Memo to Self: Click **Enable Content** if you see the Security Warning.

Start -> All Programs ->Microsoft Office->Microsoft Office Access 2010



Take Two

Open the MovieSearch Form

Let's begin by reviewing the Form and Subform designs.

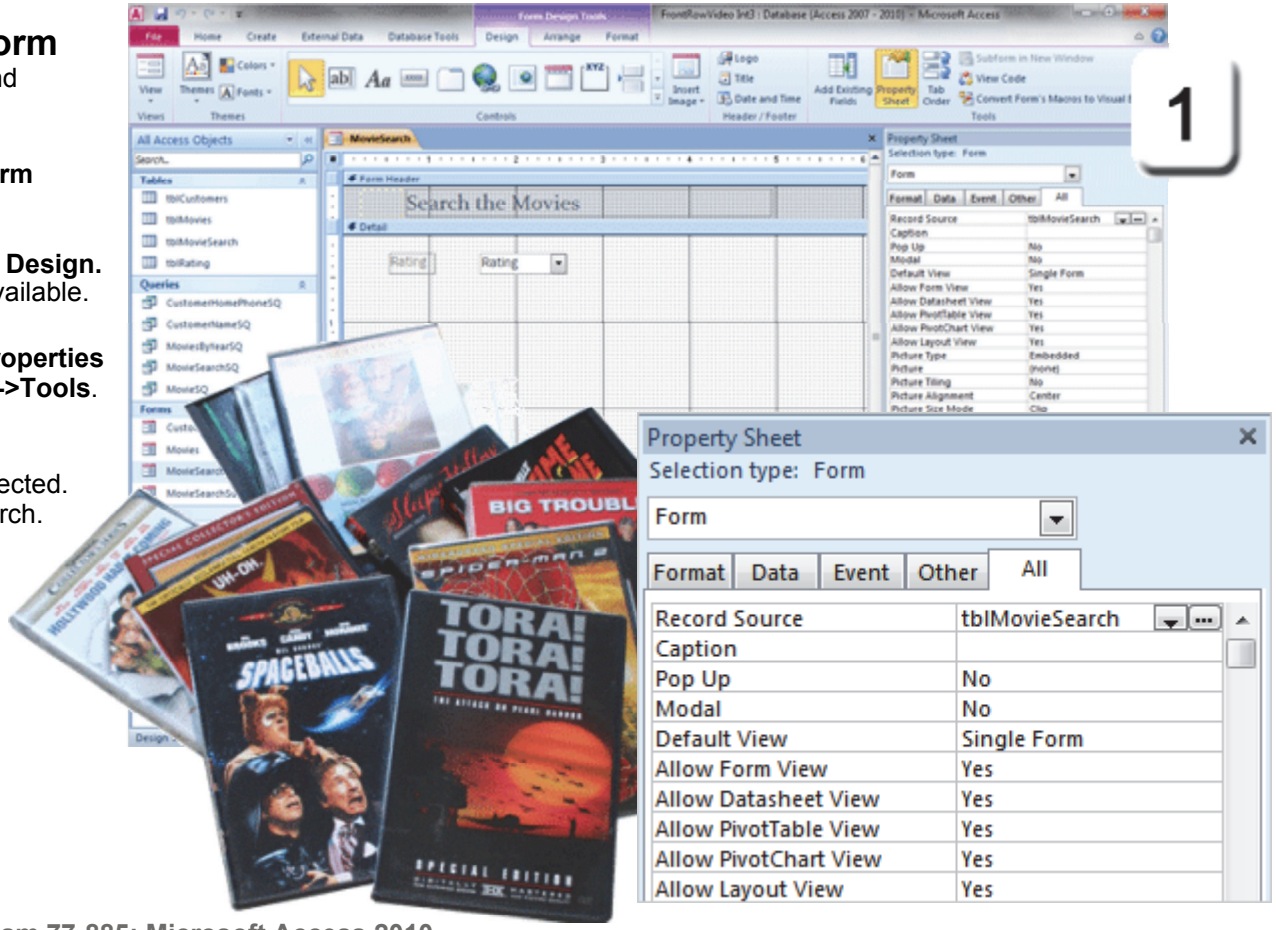
1. Try it: Open the MovieSearchForm
Go to **All Access Objects->Forms**.
Open a Form: MovieSearch.
Go to **Home ->Views->View->Form Design.**
The Form Design Tools should be available.

Try This, Too: Review the Form Properties
Go to **Form Design Tools->Design->Tools**.
Click on **Property Sheet**.

What Do You See? The Form is selected.
The **Record Source** is: tblMovieSearch.
Default View: Single Form.

Keep going...

Home ->Views->View->Form Design



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: View the Property Sheet

Take Two

Review the Combo Properties

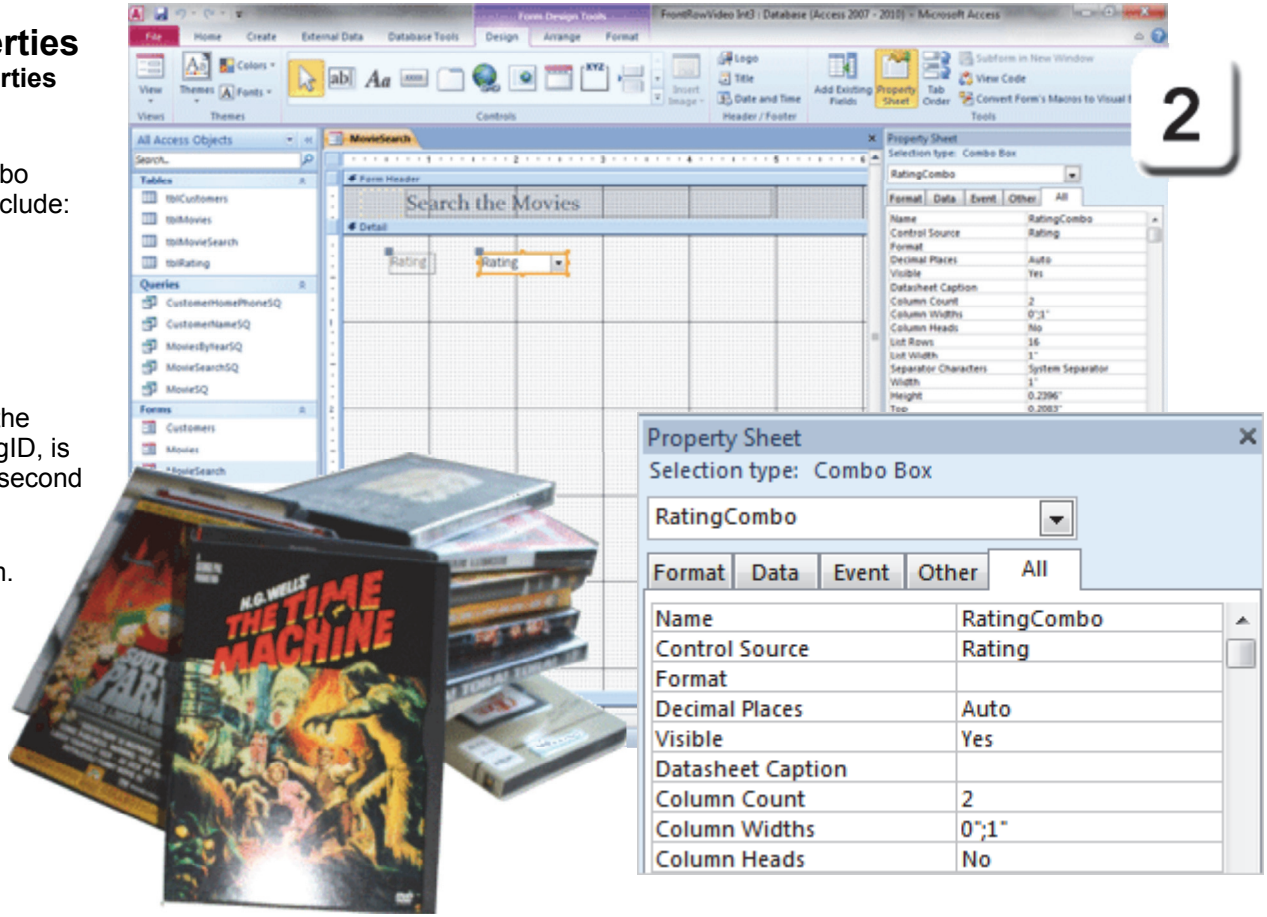
2. Try it: Review the Combo Properties
Select the Rating Combo.

What Do You See? The RatingCombo control is selected. The Properties include:
Name: RatingCombo
Control Source: Rating
Visible: Yes
Column Count: 2
Column Widths: 0"; 1"

That means there are 2 Columns in the Combo Box. The first Column, RatingID, is hidden because the width is 0". The second Column, Rating, has a width of 1".

Please **Close** the MovieSearch Form.

Form Design Tools->Design->Tools->Property Sheet



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: View the Property Sheet

Open the MovieSearch Subform

In the previous lesson we worked with the MovieSearch Subform in Datasheet View. Let's open the MovieSearch Subform in Design View and look at the Properties.

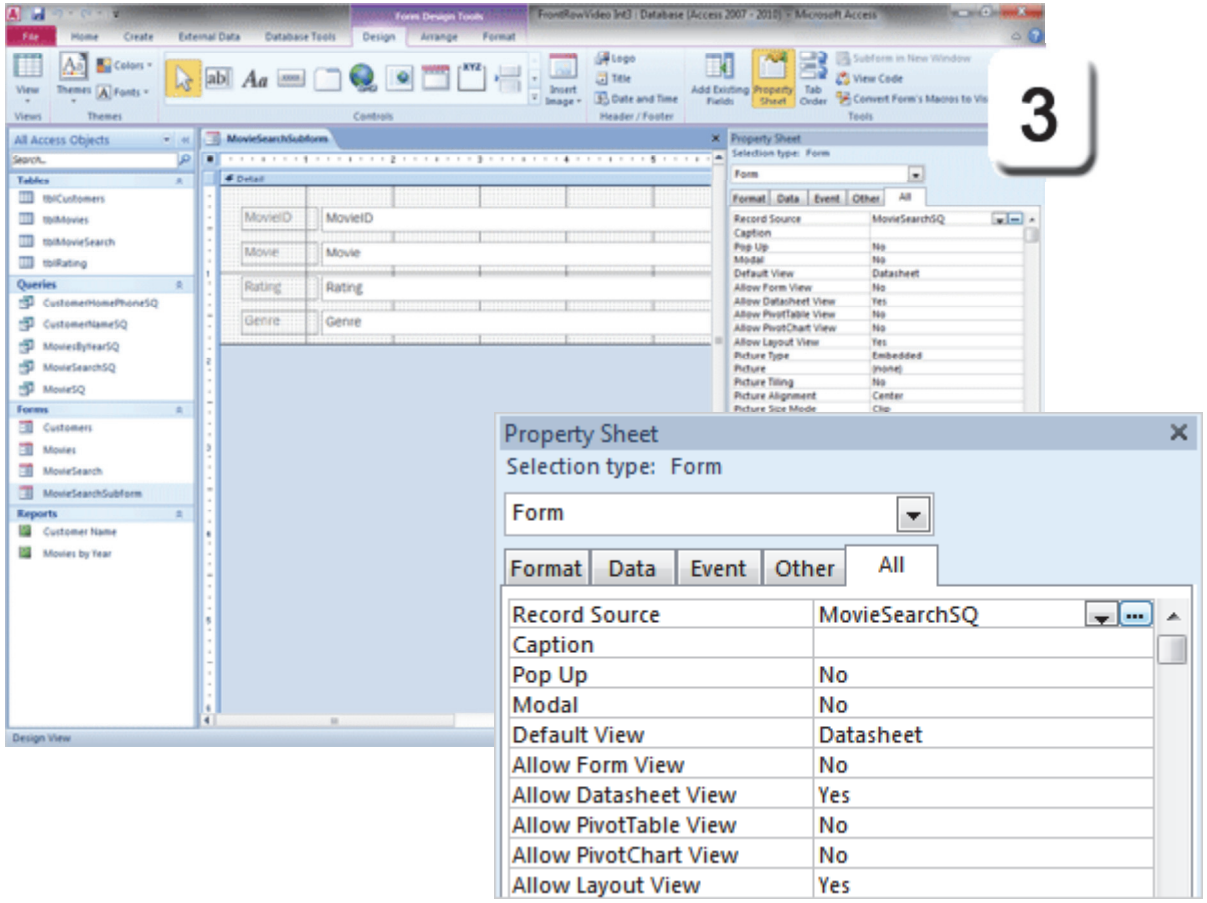
3. Try it: Open the MovieSearchForm
Go to **All Access Objects->Forms.**
Open a Form: MovieSearchSubform.
Go to **Home ->Views->View->Form Design.**
The Form Design Tools should be available.

Try This, Too: Review the Form Properties
Go to **Form Design Tools->Design->Tools.**
Click on **Property Sheet.**

What Do You See? The Form is selected.
The **Record Source** is: MovieSearchSQ.
Default View: Datasheet.

Keep going...

Home ->Views->View->Form Design



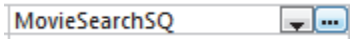
Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: View the Property Sheet

Review the Record Source

The MovieSearchSubform uses a Query to look up the answers. You can use the Property Sheet to open the Record Source if you wish.

4. Try it: Review the Record Source
The Form is Open in Design View.
The Property Sheet is available.

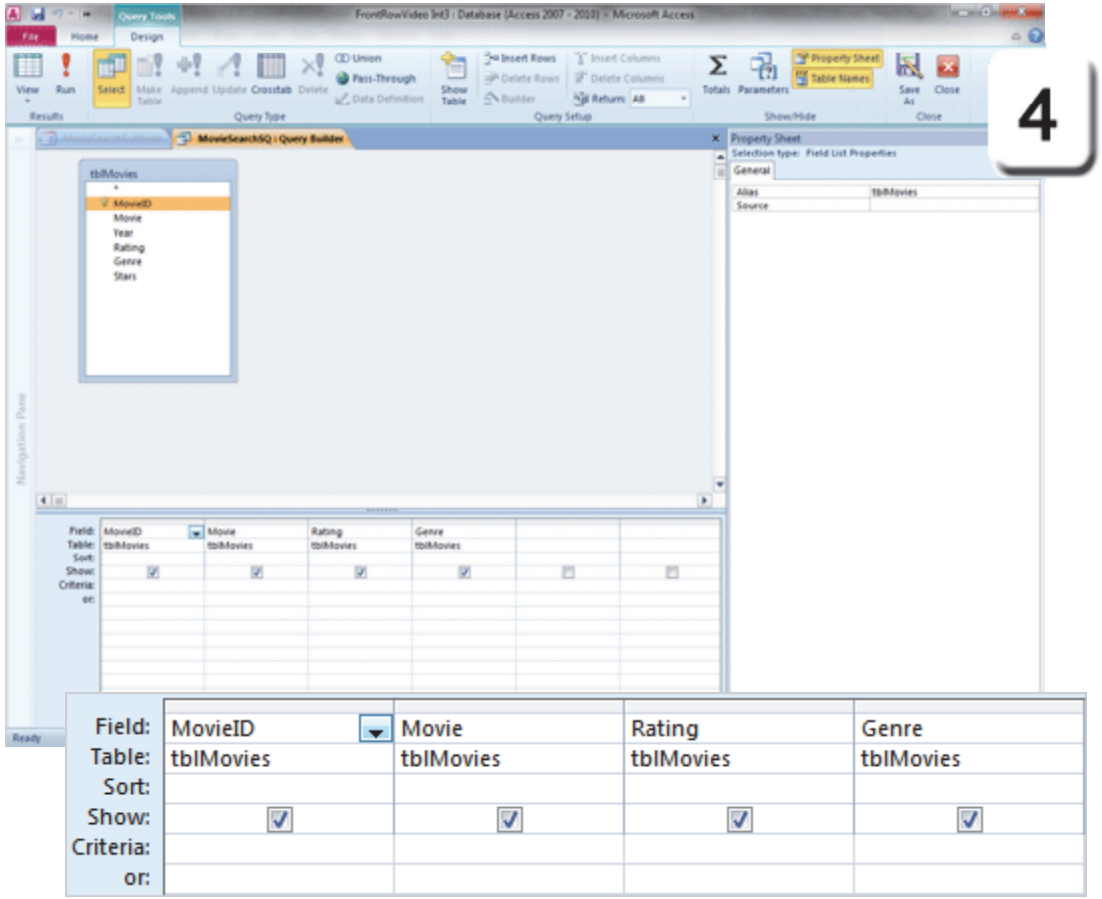
Click on the Record Source: MovieSearchSQ.
There should be a **3-Dot Builder** button to the right of the Record Source.
Click on the **3-Dot Builder**.



What Do You See? MovieSearchSQ should open in Design View. There are four Fields:
MovieID
Movie
Rating
Genre

Please **Close** the MovieSearchSQ Query.
You should return to the MovieSearchSubfrom.
Please **Close** the MovieSearchSubform.

Form Design Tools->Design->Tools->Property Sheet



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: View the Property Sheet

Add the Subform to a Form

The Subform is ready to be added to the MovieSearch Form. First, you need to open the Master Form in Design View. Then you can add the Child Subform as a Control.

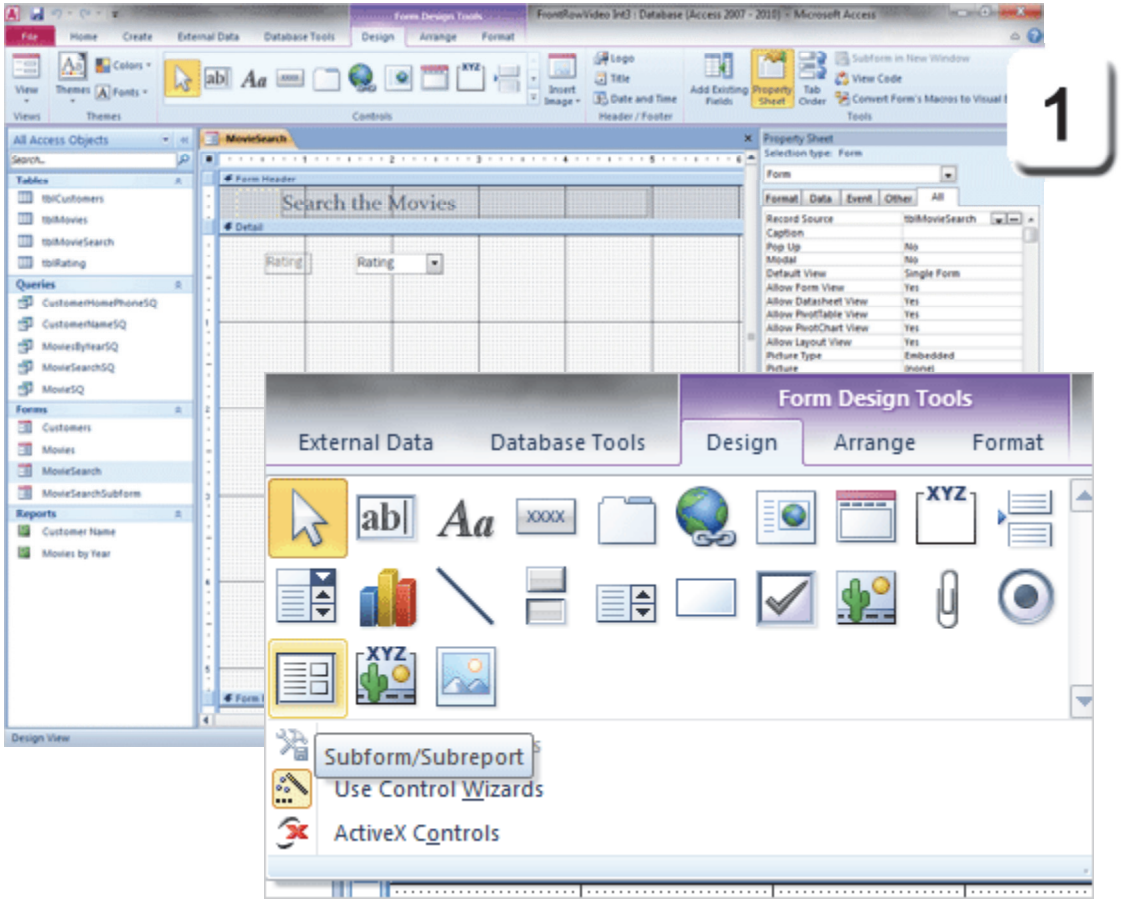
1. Try it: Open the Master Form
Go to **All Access Objects->Forms**.
Open a Form: MovieSearch..
Go to **Home ->Views->View->Form Design.**
The Form Design Tools should be available.

Try This, Too: Add a Subform
Go to **Form Design Tools->Controls**.
Click on **Subform/Subreport.**

What Do You See? Your mouse should have a little square symbol following the cursor.

Keep going...

Form Design Tools->Controls->Subform/Subreport



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Add a Subform

Take Two

The Subform Wizard

2. Try it: Select a Subform

The mouse should have a little symbol following the cursor after you click on Subform/Subreport.

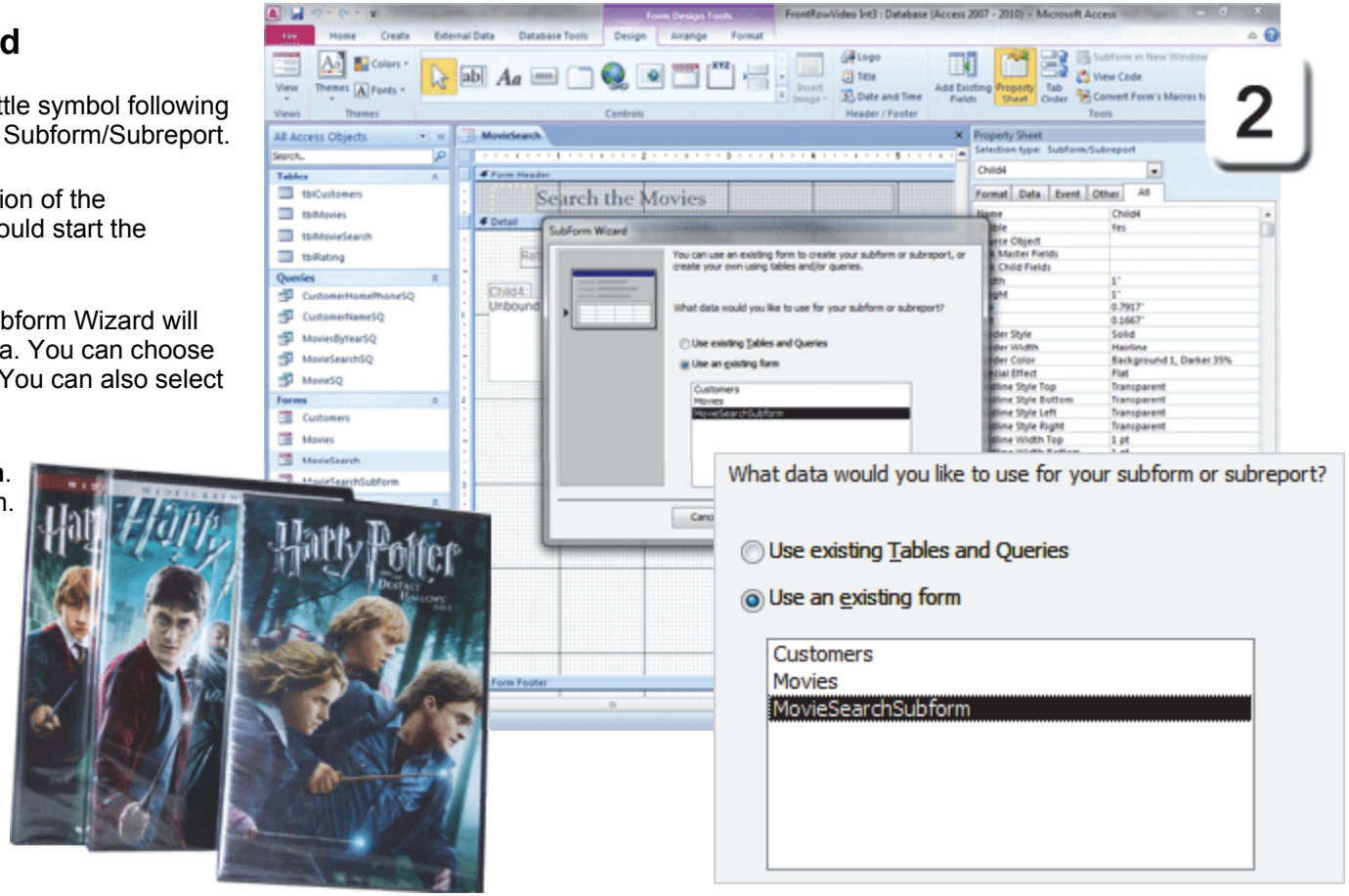
Now, click in the **Detail** section of the MovieSearch Form. This should start the **Subform Wizard**.

What Do You See? The Subform Wizard will prompt you to select the data. You can choose an existing Table or Query. You can also select an existing Form.

Go to **Use an existing form**. Select MovieSearchSubform.

Click **Next**. Keep going...

Form Design Tools->Controls->Subform/Subreport



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Add a Subform

Subform: Select a Field

The next step in the Subform Wizard asks you to choose which Field(s) will be used to link the Master Form to the Child, the Subform.

The default option is: **Choose from a list**. The Computer Mama sez it is often easier to **Define your own**.

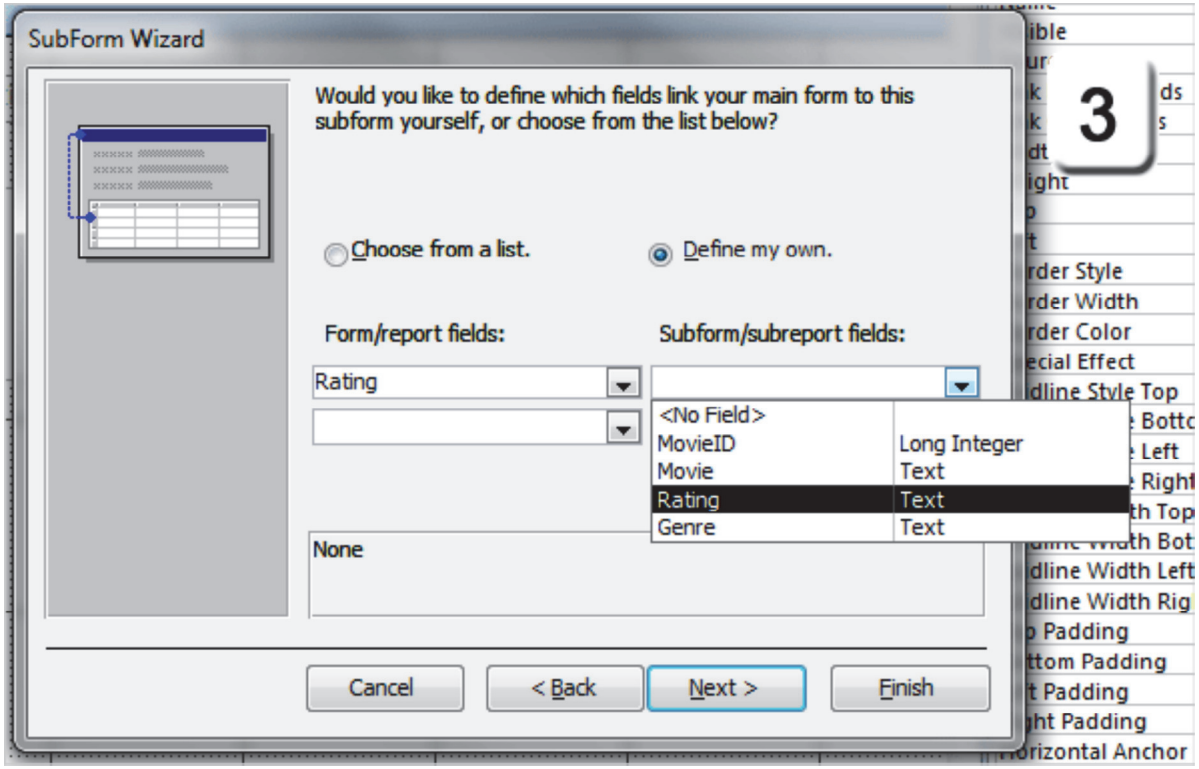
3. Try it: Select a Field
Select: **Define my own.**
Select a Form/report Field: Rating
Select a Subform/subreport Field: Rating.

Click **Next**. Keep going...

Memo to Self: Rating (Text) on the Master Form matches with Rating (Text) on the Subform.

Match, match, match.

Form Design Tools->Controls->Subform/Subreport



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Add a Subform

Take Two

Form Design Tools->Controls->Subform/Subreport

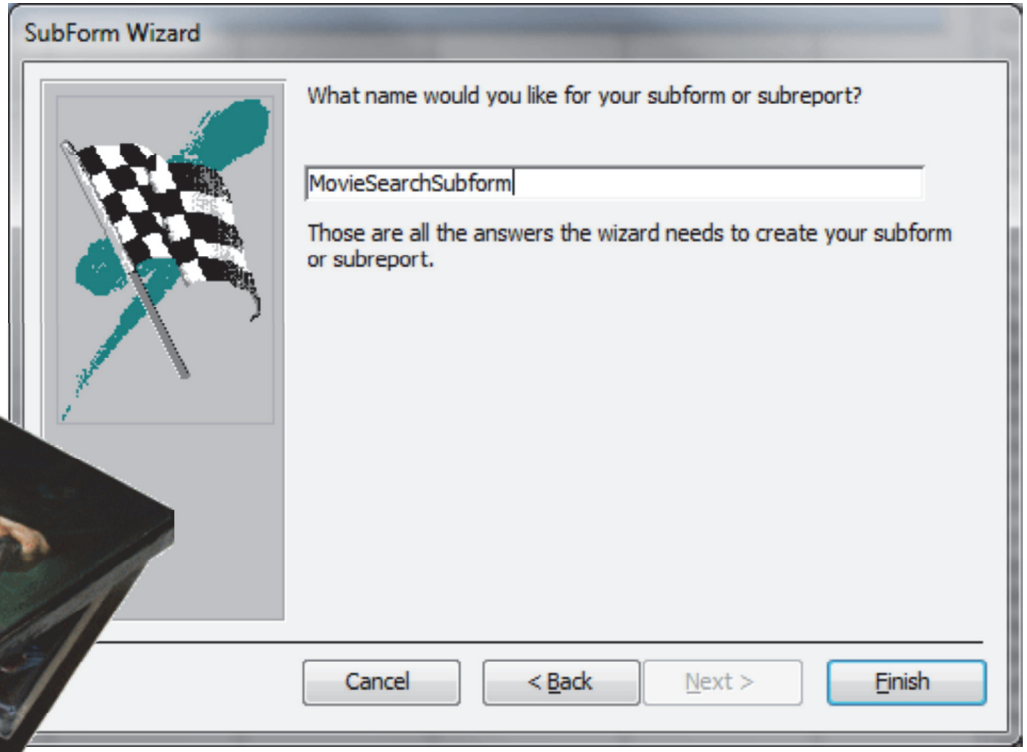
Finish the Subform Wizard

4. Try it: Name the Subform

Enter the Subform Name: MovieSearchSubform.

Click **Finish** to close the Subform Wizard.

So...what do you see? Keep going...!



4

Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Add a Subform

Hello, Subform!

There should be a new Subform in the Detail section of the MovieSearch Form. Each option that you selected with the Subform Wizard is saved in the Property Sheet.

1. Try it: Review the Subform Properties
Select the Subform: there should be a yellow border around the Subform when it is selected.

Go to **Property Sheet->All.**

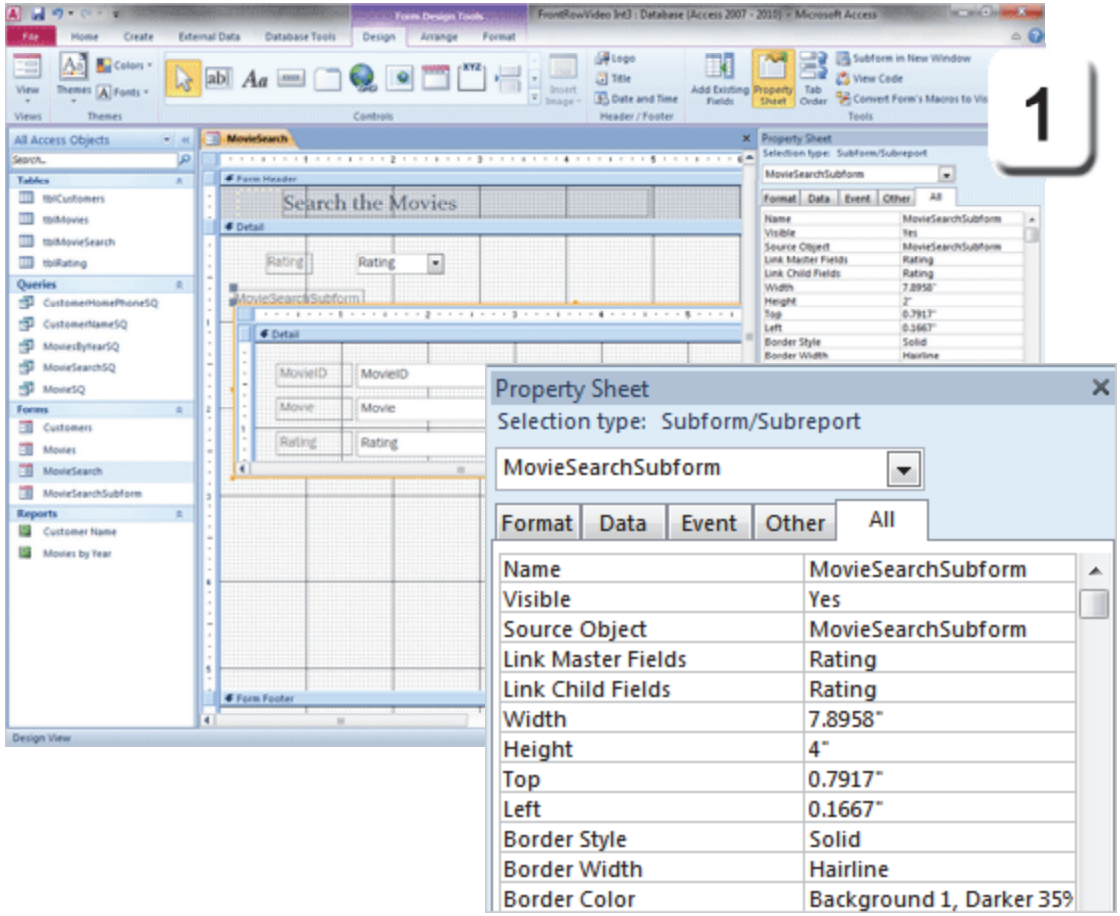
What Do You See? The Subform is selected. The Name is: MovieSearchSubform.

Link Master Fields: Rating
Link Child Fields: Rating

Try This, Too: Edit the Subform Properties
Edit the Height: 4"

Well, does it work? Let's go see...

Form Design Tools->Design



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: View the Property Sheet

Test the New Subform

There's only one way to find out if a Form works: go to Form View and act like a User.

2. Try it: Test the New Subform
Go to **Form Design Tools->Design->Views.**
Select a **View**: Form View.

What Do You See? The Rating Combo has PG. The Subform shows 71 movies in this database that match the PG Rating.

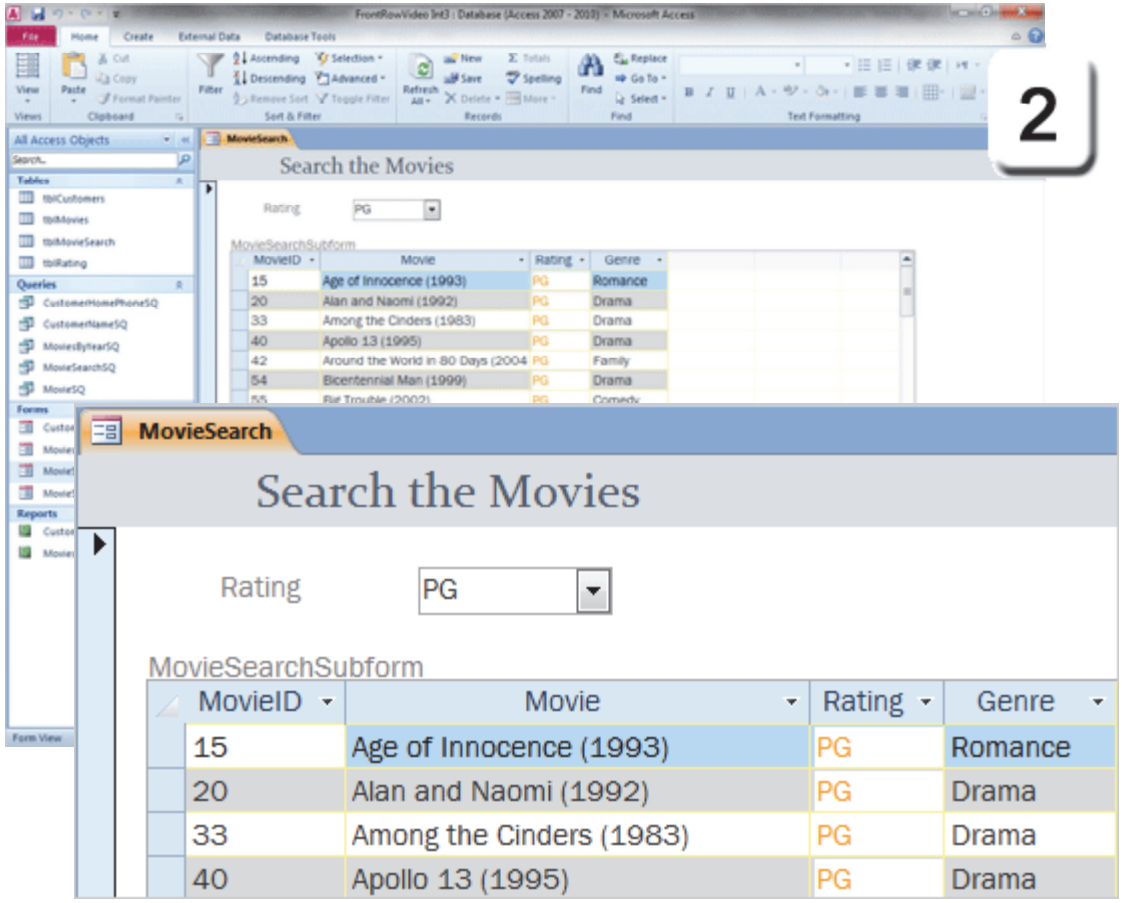
What Else Do You See? The values in the Rating Column have Conditional Formatting. The PG Rating is formatted orange.

Keep going...

What If It Doesn't Work? Sometimes the MovieSearch Form doesn't show anything when you go to Form View.

Please try this: Refresh the Records
Go to **Home->Records->Refresh**.
Did that work?
We'll address this issue on the next page.

Form Design Tools->Design->Views->View



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.1. Create forms: Use the Form Design Tools

Take Two

Test the Rating Combo

The purpose of having the Rating Combo is to filter the movie list in the Subform to find the movies that match.

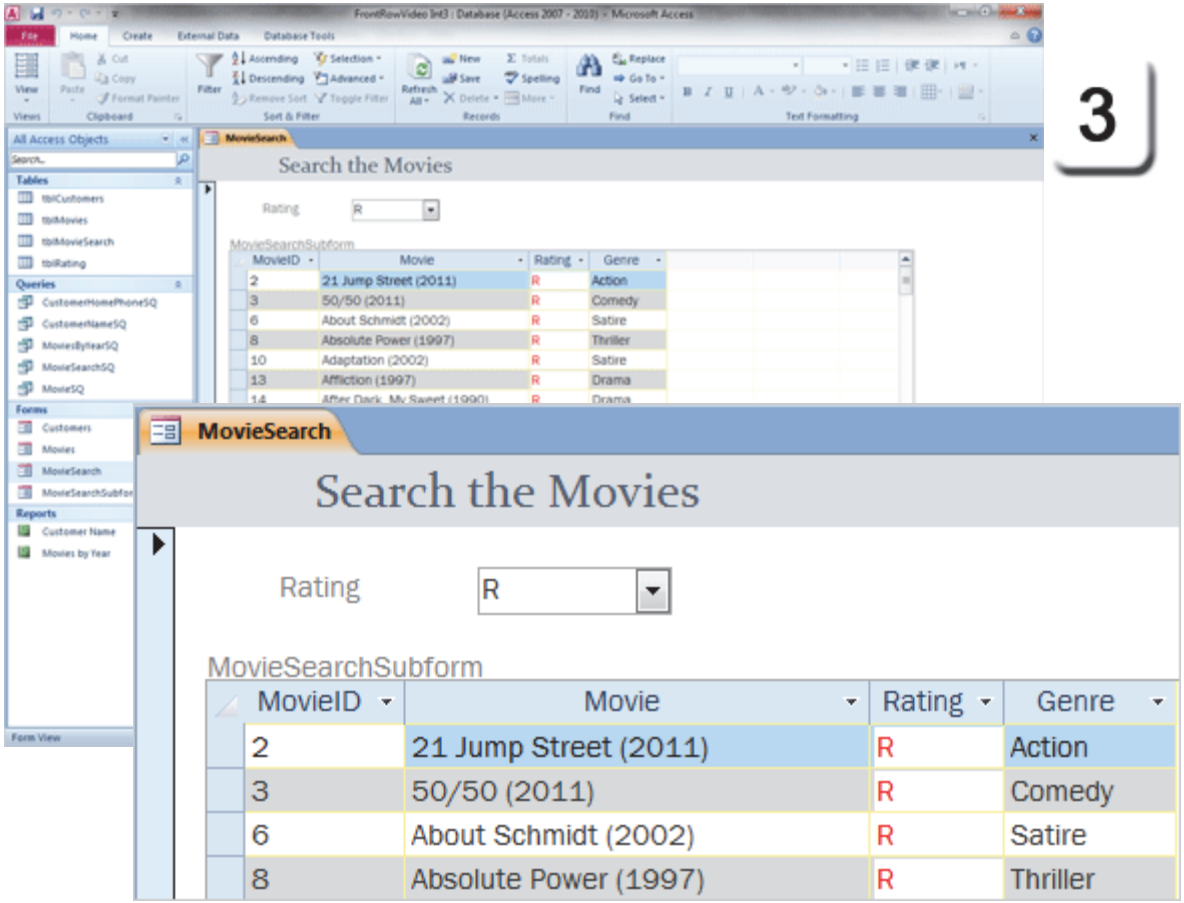
3. Try it: Select a Different Rating
Select a Rating: R

What Do You See? The Subform did NOT update automatically to match the criteria in the Rating Combo. You can **Refresh** the Records manually (by hand) to see if the Form and Subform work together.

Try This, Too: Refresh the Records
Go to **Home->Records>Refresh**.

Now, What Do You See? The movies listed in the Subform match the R Rating on the Master Form. Keep going...

Home ->Records->Refresh



Automate the Process

Users would not be happy if they had to click on Refresh each time they select something from the Rating Combo. Fortunately, all Access Objects can be programmed (some assembly required). You can add a little bit of Code to make the Subform Refresh automatically. These are called **Events**.

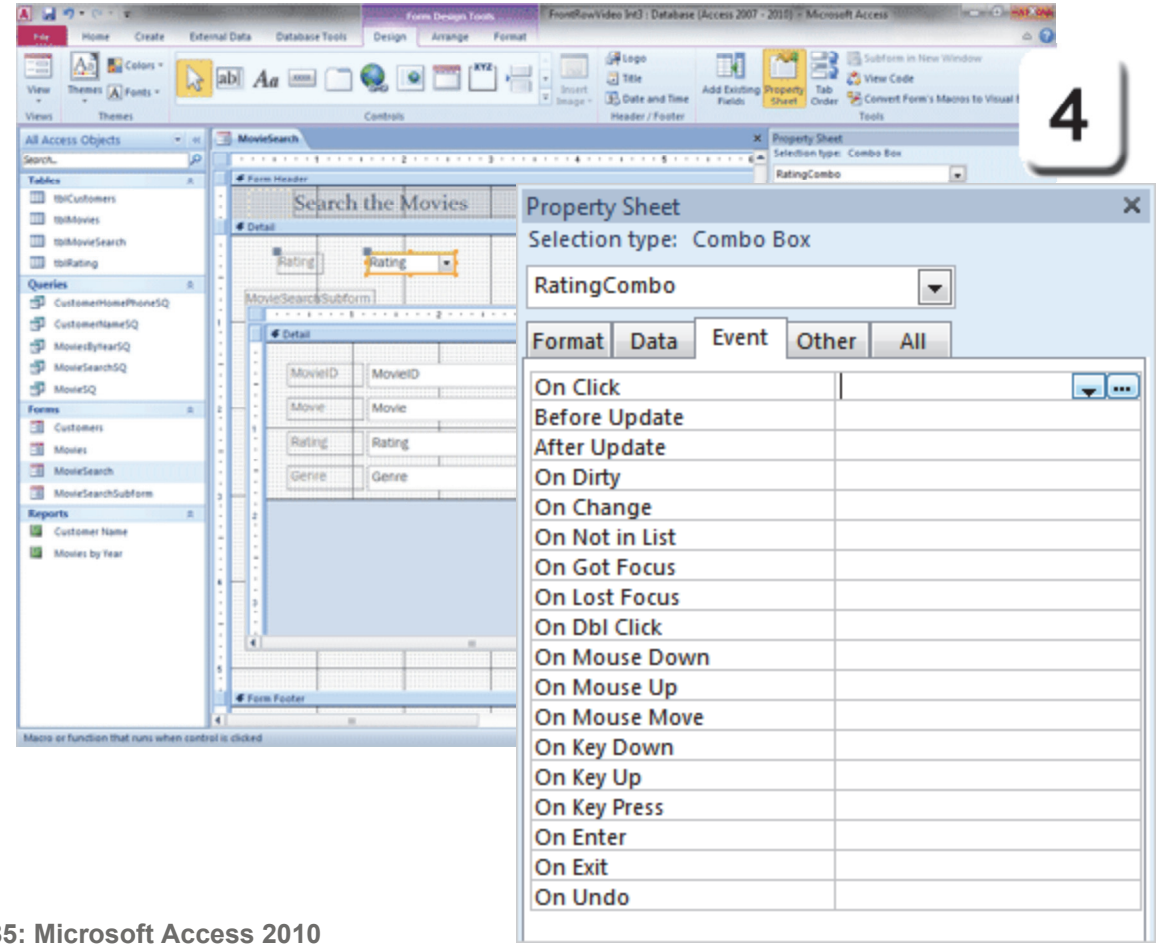
4. Try it: Find the Event Properties
Go to **Home ->Views->View->Form Design.** The Form Design Tools should be available.

Select the Rating Combo.
Go to **Property Sheet->Event.**

What Do You See? There are several options for what happens when a User clicks. The Events can occur On Click on On Double (Dbl) Click. Events can also be programmed to run Before or After a Control is Updated.

What Makes Sense? In this example, the Subform should Refresh **After Update** (not before!) Keep going...

Home ->Views->View->Form Design



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: View the Property Sheet

Create an Event

There are three ways to program an Event: Macro Builder, Expression Builder, and Code Builder, which is Visual Basic for Applications.

This first example will be a simple Macro with one line of Code: Refresh.

5. Try it: Create a Event
The MovieSearch Form is in Design View and the Rating Combo is selected.

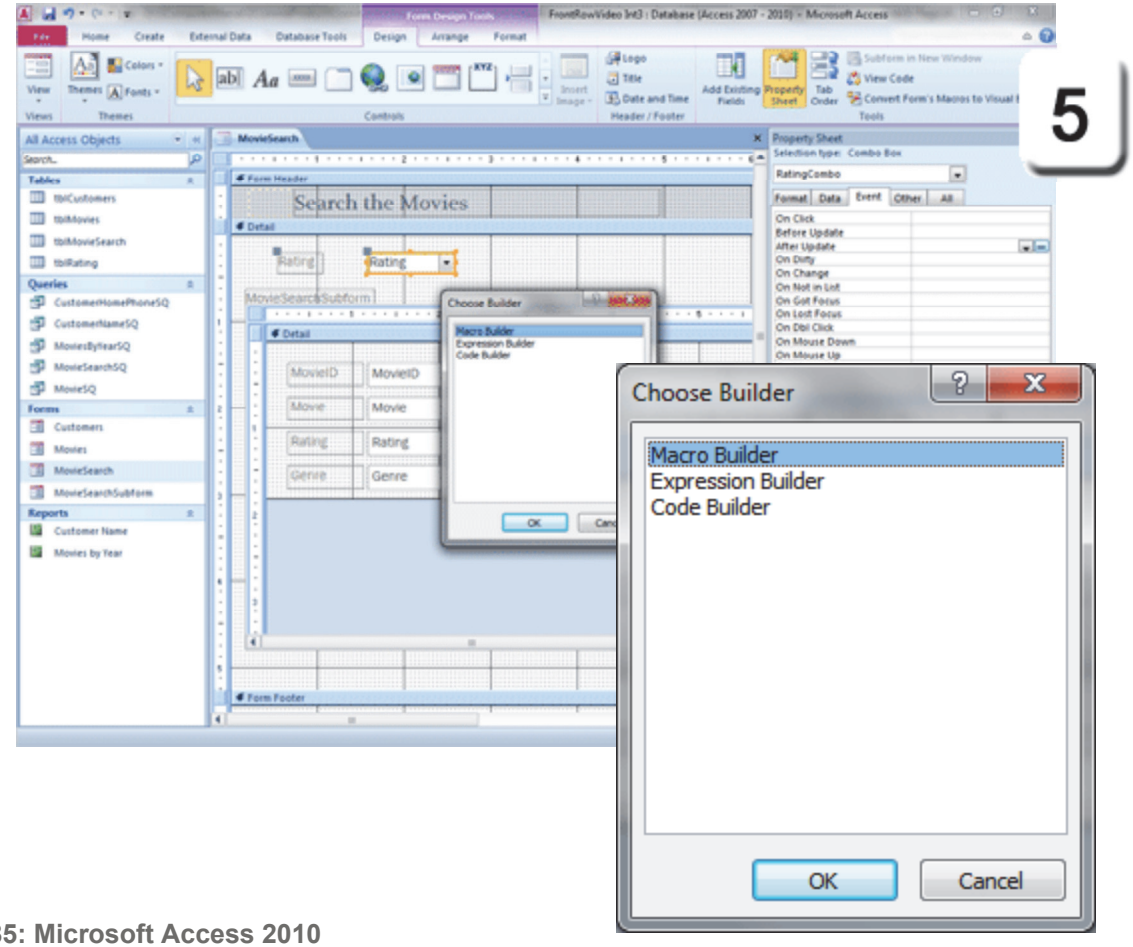
Go to **Property Sheet->Event.**
Click on **After Update**.
Click on the **3-Dot Builder**.

Before Update	
After Update	

You will be prompted to choose a builder:
Select: **Macro Builder**.

Keep going...

Form Design Tools->Design->Tools->Property Sheet



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Create an Event

Hello, Mighty Macros!

Yes, you may have heard programmers speak about Macros. Macros can record the steps that a User does again and again and automate the process.

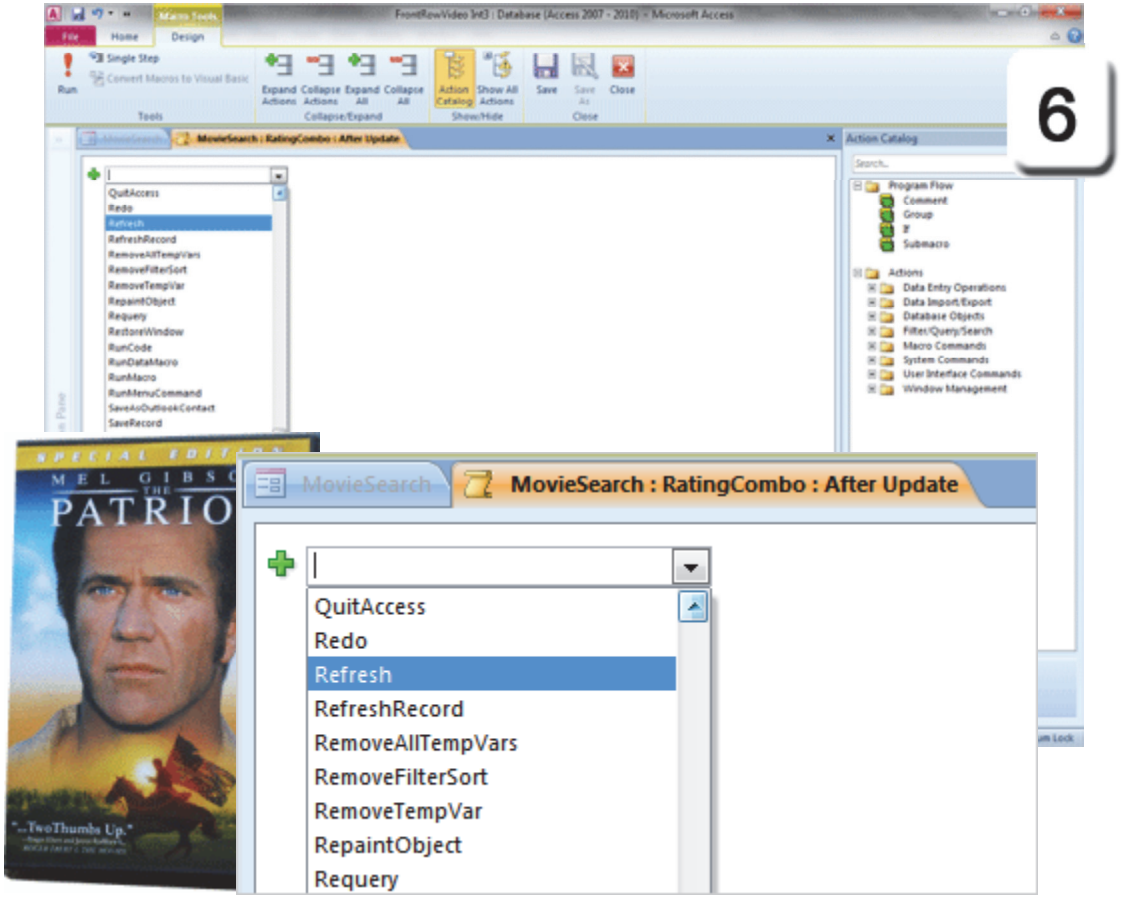
6. Try it: Add an Action
Go to the blank Action (the green plus sign)
Select an Action: **Refresh**.

Try This, Too: Save the Macro
Go to **Macro Tools->Design->Save.**

And Do This: Close the Macro Builder
Go to **Macro Tools->Design->Close->Close.**

Keep going...

Macro Tools->Design



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Create an Event

Take Two

Form Design Tools->Design->Tools->Property Sheet

Back at the Ranch

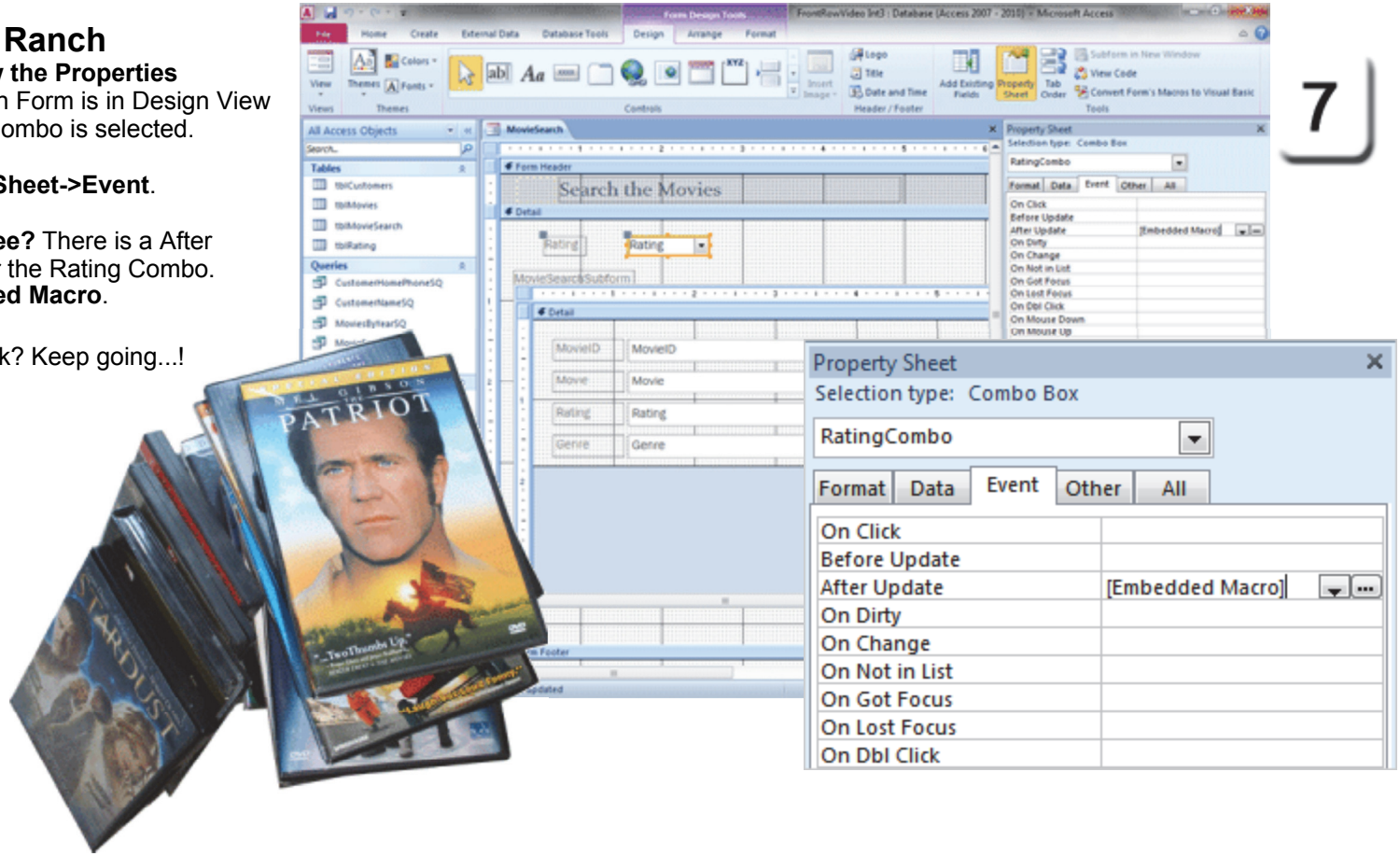
7. Try it: Review the Properties

The MovieSearch Form is in Design View and the Rating Combo is selected.

Go to **Property Sheet->Event**.

What Do You See? There is a After Update Event for the Rating Combo. It is an **Embedded Macro**.

Now, does it work? Keep going...!



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Create an Event

Test the Macro

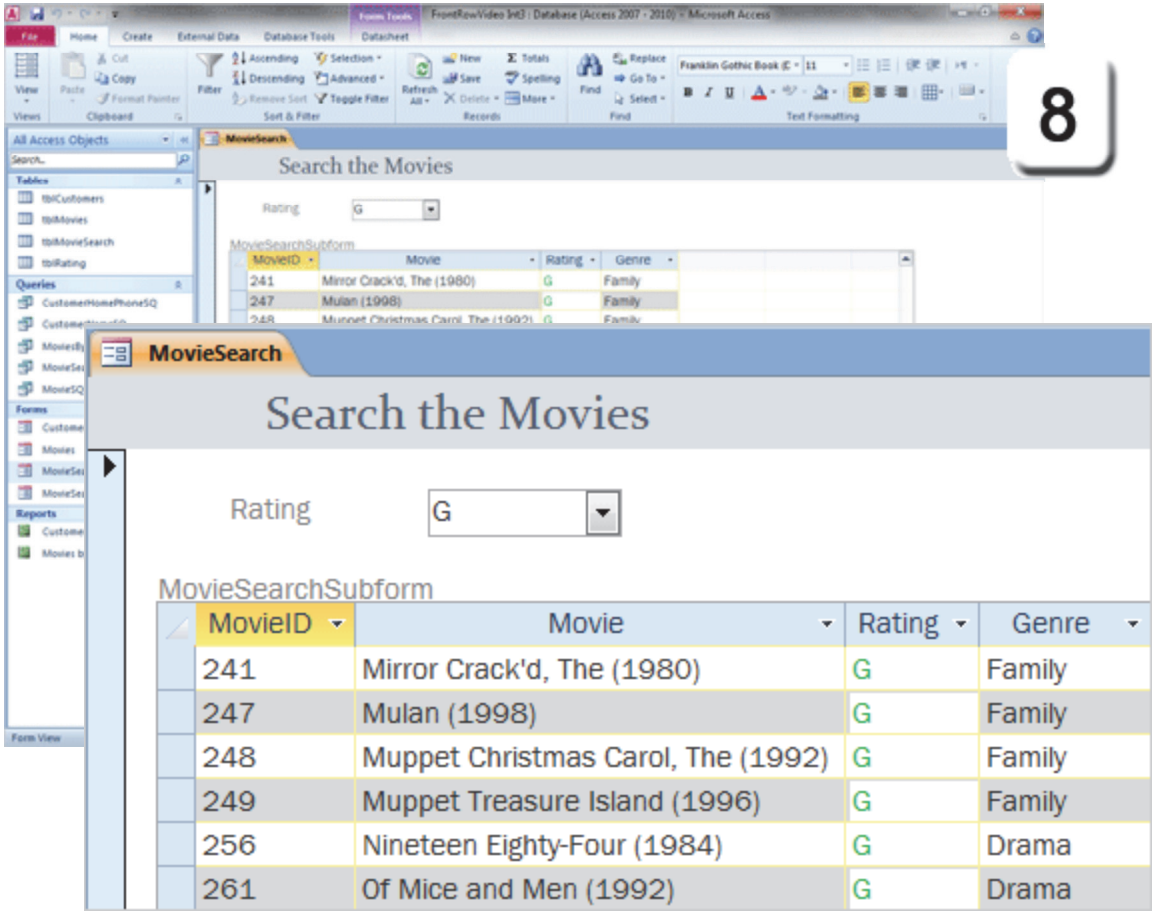
Before You Begin: Change the View
Go to **Form Design Tools->Design->Views.**
Select a **View**: Form View.

8. Try it: Test the Event
Select a Rating: G

What Do You See? Did the Form work? Did the MovieSeachSubform automatically Refresh the Records and display the movies that match the Rating Combo?

Made You Smile: It's fun when it works.

Form Design Tools->Design->Views->View



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Create an Event

Take Two

What If It Doesn't Work?

Everything is fun and the sky is blue when the programming works. What if it doesn't work? What steps should you take to troubleshoot the Form and Subform?

1. Try This: Open the Form in Design View
Open a Form: MovieSearch.
Go to **Home ->Views->View->Form Design**

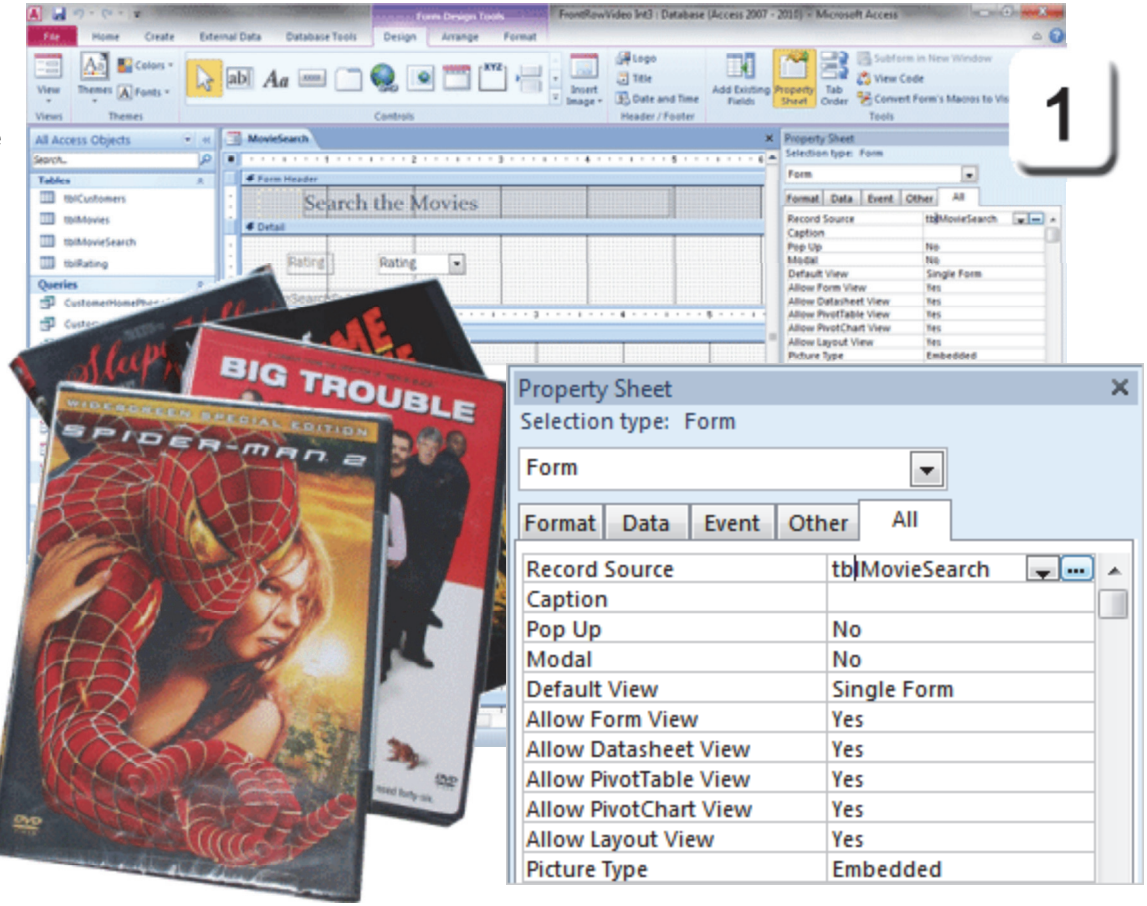
Try This, Too: Review the Form Properties
Go to **Property Sheet: All**.

Record Source: tblMovieSearch.
Default View: Single Form.

Do your **Form Properties** match this one?

Keep going...

Home ->Views->View->Form Design



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: View the Property Sheet

Take Two

Review the Combo Box

There are several places to look when you troubleshoot the Combo Box.

What Works, What Doesn't:
Can you see the Rating data?
Can you select a Rating from the list?
Does the Subform display the movies that match the Rating in the Combo Box?

2. Try it: Review the Combo Box Properties
Select the Combo Box.
Go to **Go to Property Sheet: All.**

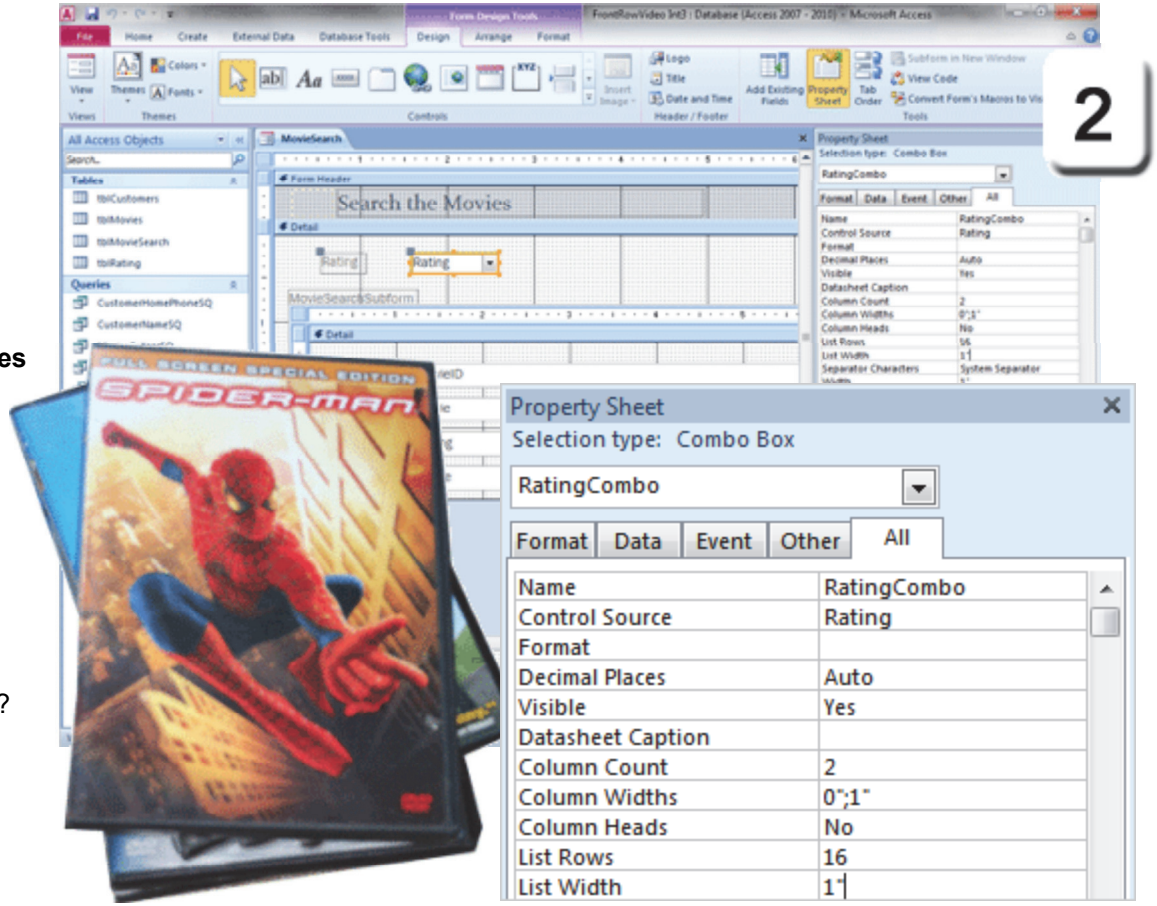
Control Source: Rating
Column Count: 2
Column Widths: 0";1"

Where Column 1 (hidden) is RatingID.
and Column 2 is Rating.

Do your **Control Properties** match this one?

Keep going...

Form Design Tools->Design->Tools->Property Sheet



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: View the Property Sheet

Take Two

Review the Subform Links

The previous pages looked at the Form and Subform Properties. We also reviewed the Properties for the Combo Box.

Even if both Forms are designed correctly, nothing will happen if the Form and Subform are not linked. There has to be a relationship between the Master and Child.

3. Try it: Review the Master and Child
The MovieSearch Form is open in Design View. The Property Sheet is available.

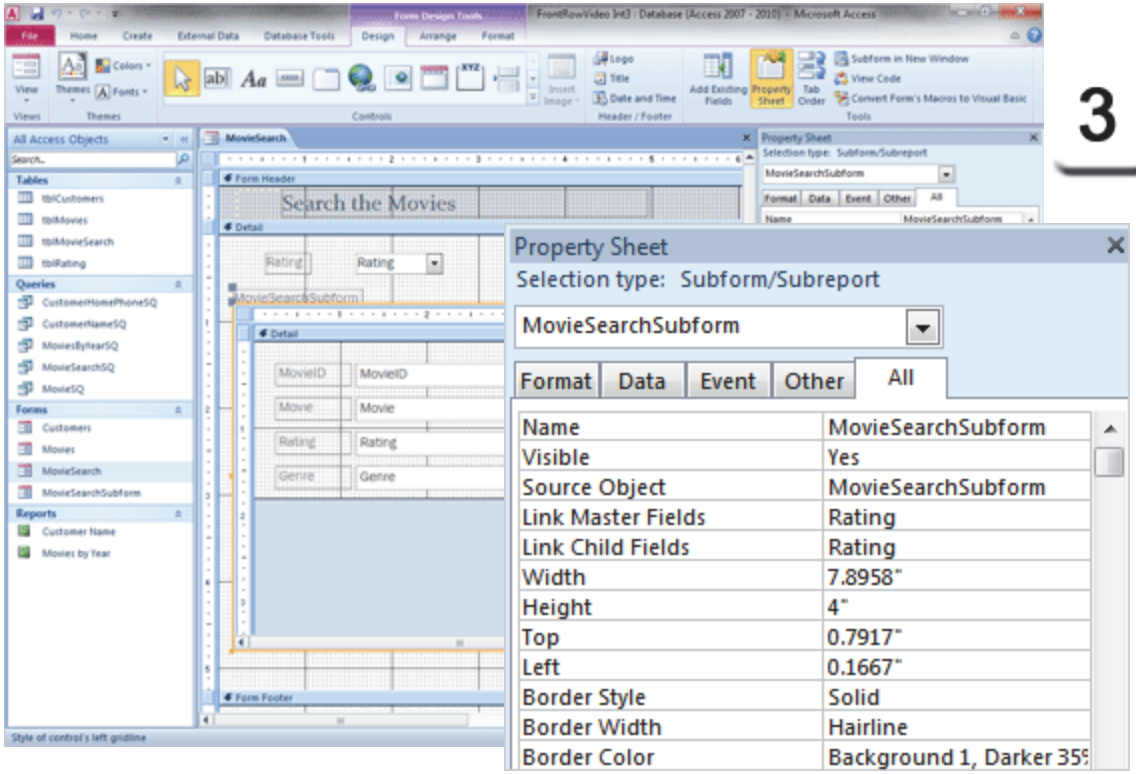
Select the Subform. There should be a yellow border around the Subform.

Go to **Property Sheet: All.**

Link Master Field: Rating.
Link Child Field: Rating.

Match, Match, Match. The Combo Box stores (Saves) the Rating as Text.

Form Design Tools->Design->Tools->Property Sheet



3

Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Add a Bound Control (Link Form and Subform)

Review the Refresh Code

If everything is programmed correctly but the Subform will not update automatically, then you need to review the Macro.

4. Try it: Review the Macro
The MovieSearch Form is open in Design View. The Property Sheet is available.

Select the Rating Combo.
Go to **Property Sheet: Event.**
There should be an Embedded Macro on the After Update Event.

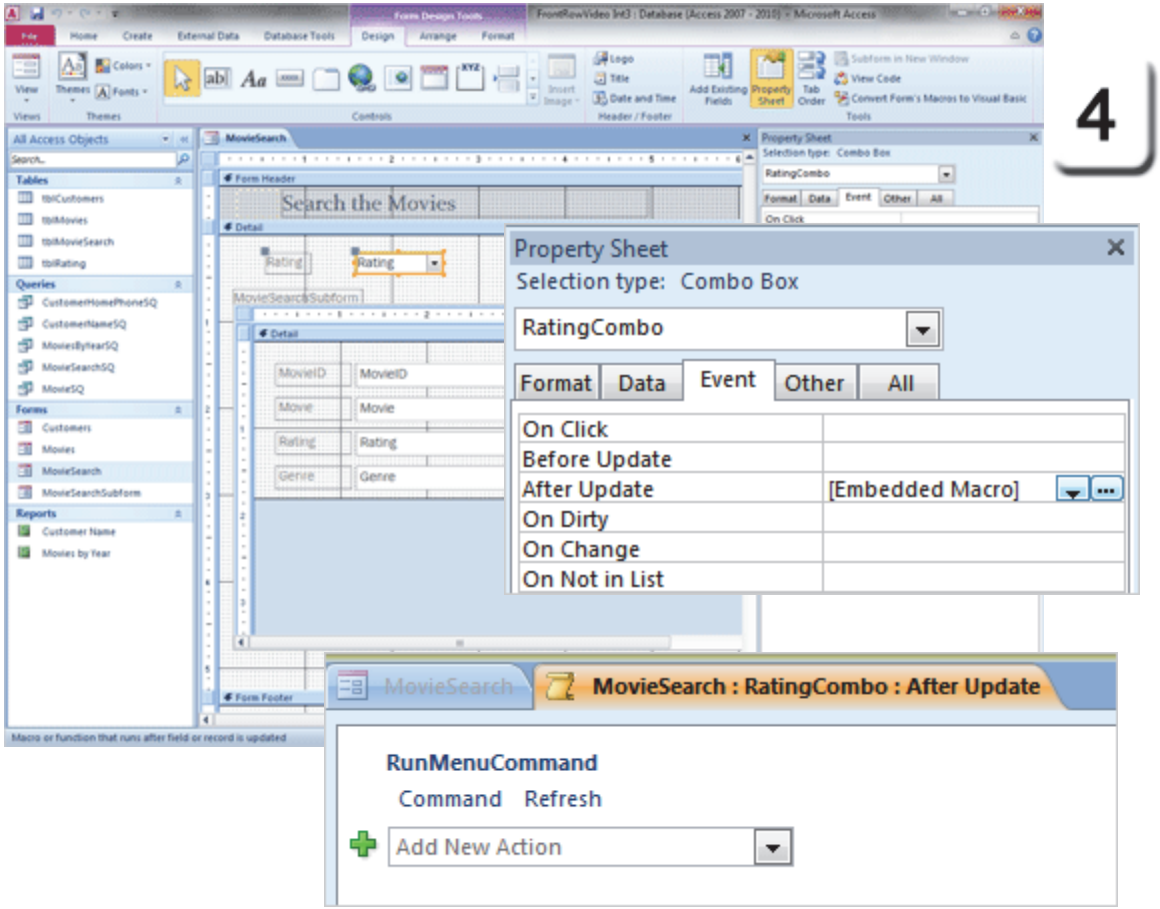
Try This, Too: View the Macro Code.
Click on **Embedded Macro.**
Click on the **3-Dot Builder.**

What Do You See? The Rating Combo: AfterUpdate Macro should open.
There is one Command: Refresh.

Does your Macro look like this one?

Click **Close**.

Form Design Tools->Design->Tools->Property Sheet



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: View Code

Finishing the Form

Functionality, first...then Formatting. If the Movie Search Form works, then finish the Form with the following options.

Before You Begin: The MovieSearch Form is open in Design View.

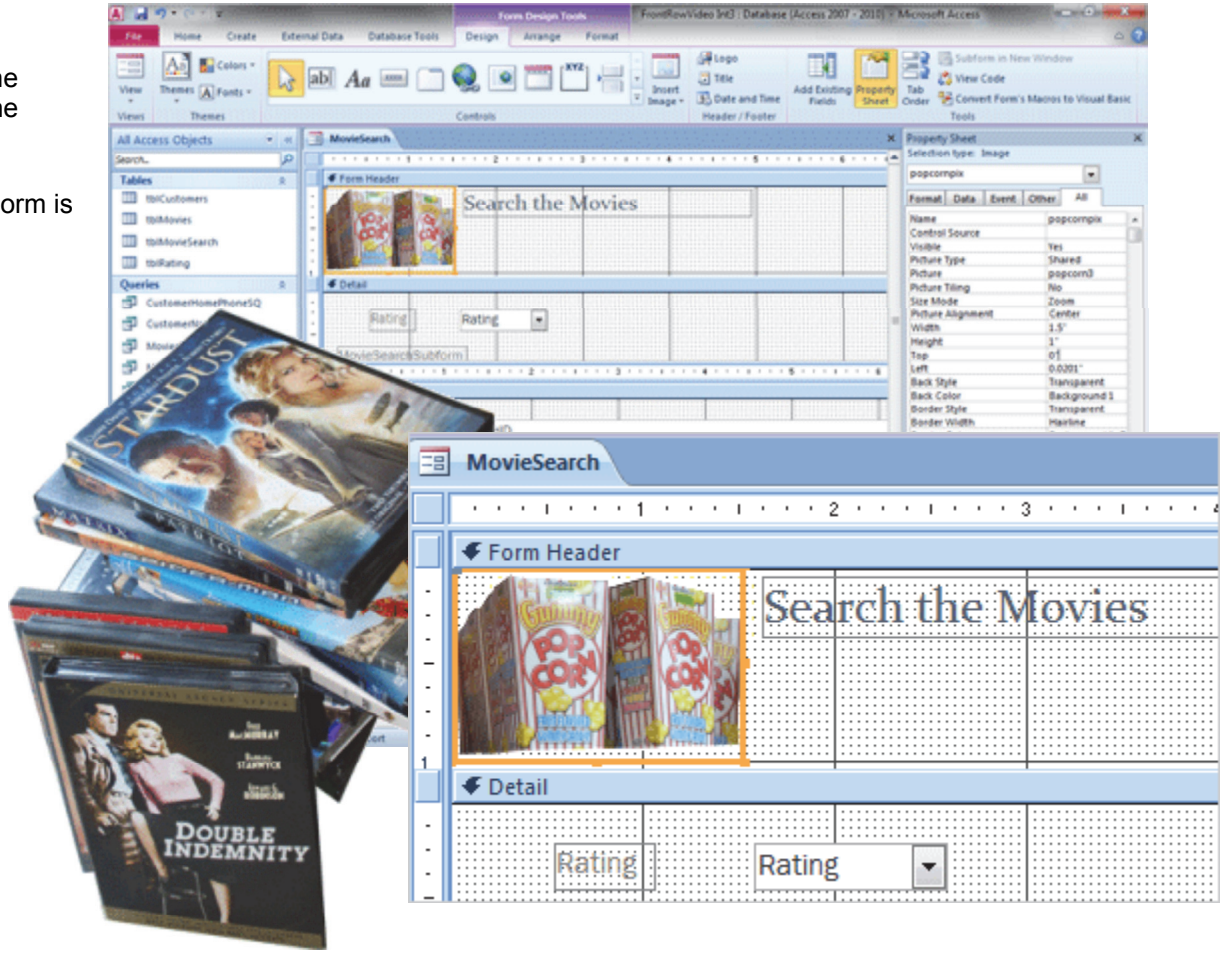
Try it: Add an Image to the Header
Go to **Form Design Tools->Design->Controls.**
Click on **Image**.
Browse to the Documents Folder.
Select an image: [popcorn1.gif]

Try This, Too: Format the Header
Select a Fill Color: White.

Do This, Now: Save the Form.
Go to **File->Save**.

Allllmost done...

Form Design Tools->Design->Controls->Image



Take Two

What Does the Form Look Like?

Try This: View the Movie Search Form

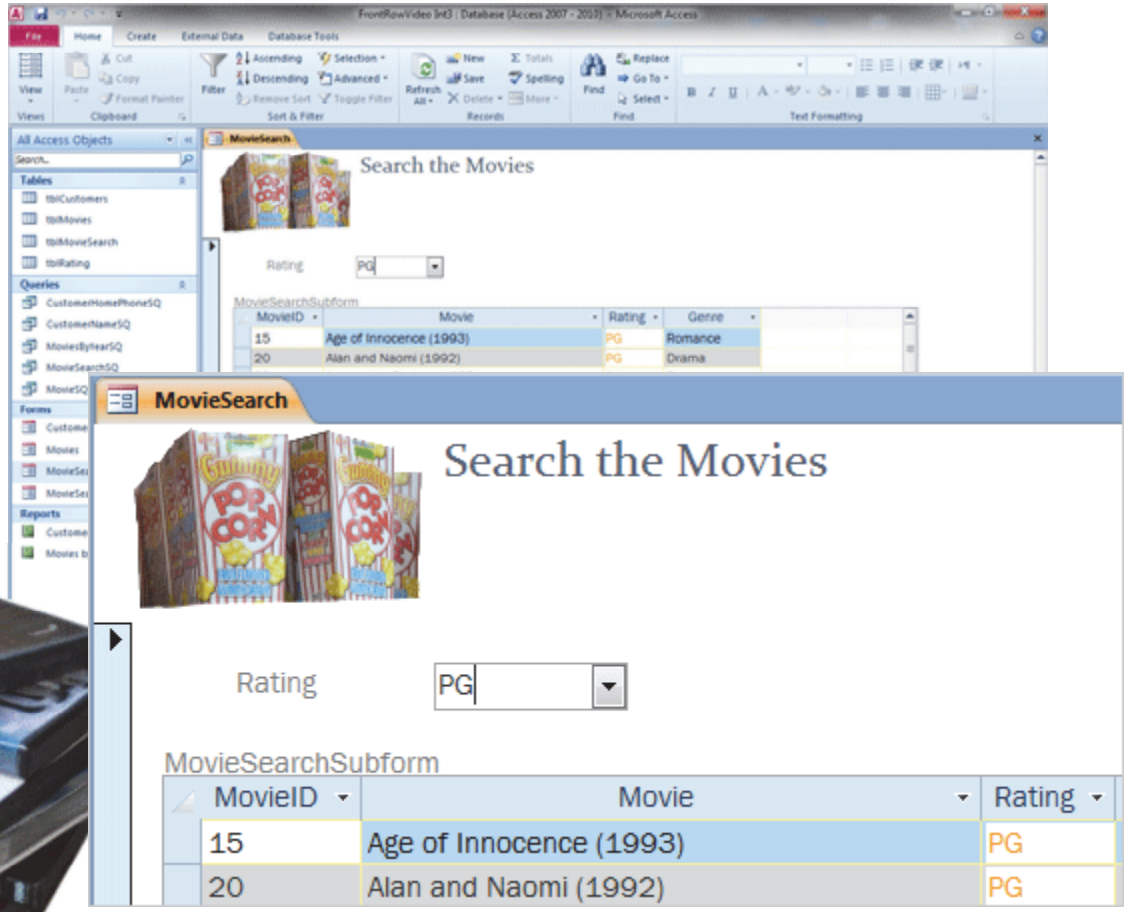
Go to **Form Design Tools->Design->Views.**
Select a **View: Form View**.

The purpose of this Form is to filter the movie list by Rating. There are many Movies in the database that have the same Rating.

Microsoft Access represents a one-to-many relationship (one Rating, many Movies) with a Form and Subform.

The key to making the Forms and Controls work is reviewing the Properties.

Form Design Tools->Design->Views->View



Take Two

Summary

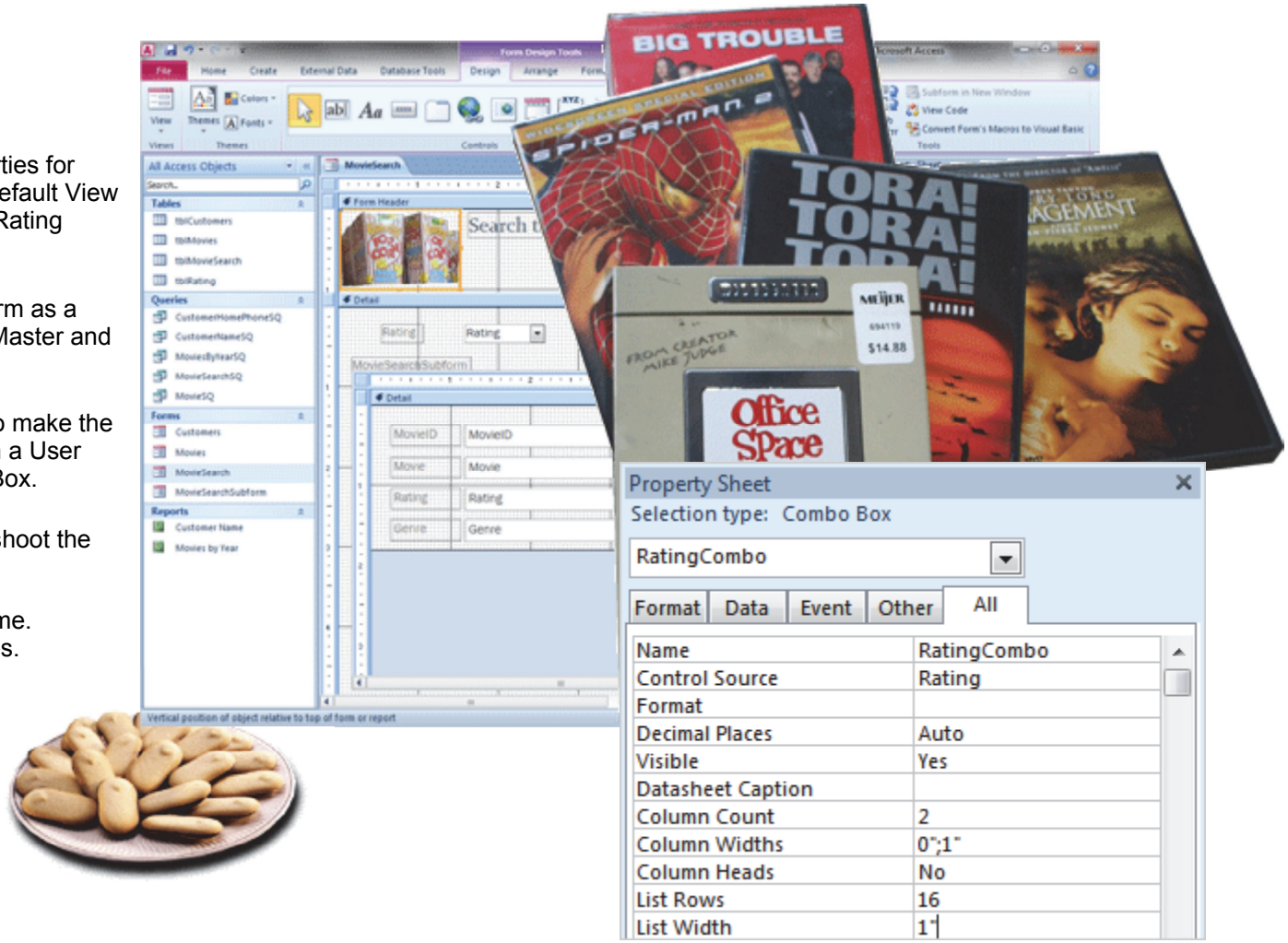
We began by reviewing the Properties for both Forms: the Record Source, Default View and Controls. Both Forms have a Rating Control, which is Text.

The Subform was added to the Form as a Control. The Forms were Linked, Master and Child, by a common Field: Rating.

We added an AfterUpdate Event to make the Forms Refresh automatically when a User selects a Rating from the Combo Box.

We used the Properties to troubleshoot the Form as well.

Allez, Allez in Free. Time to go home.
You done good. Go get two cookies.



Practice Activities

Lesson 4: Form and Subform Design, part 2

Try This: Do the following steps

1. Open the Brown Bag Lunch database you have been working on.
Or, you may download **BBL Int ver4.accdb**.

2. Open the Form Product Search and go to Design View.

3. Add a Subform to the Detail section.

Use the command: Form Design Tools->Design->Controls-> Subform/Subreport.

4. Select the ProductSearchSubform when prompted.

5. Select the option “Define my Own” for linking Master and Child Forms.

Choose the Form Field: Type and the Subform Field: Type

6. Name the Subform: Product Search Subform

7. Finish the Wizard. Go to Form View and test the Form. Do you see the Subform?

8. Go to Design View. Select the Type Combo Box and open the Property Sheet.

9. Edit the Event: After Update. Use the Macro Builder.

10. In the Macro Builder, add the Action: Refresh. Save the Macro and close the Builder.

11. Go to Form View & test the Form. Change the Type and check that the Subform refreshes.

12. Add the image Brown Bag Logo to the Header.

13. Save the Form. Save and close the database.

Test Yourself

1. Which of the following is true about creating a Form and Subform?
(Give all correct answers.)
A. The Master Form must be opened first before adding a Subform to it.
B. A Parent Form is the same as a Master Form
C. A Child Form is the same as a Subform
Tip: Intermediate Access, page 96

2. What is the command for creating a Subform on a Master Form?
A. Form Design Tools -> Controls-> Subform/ Subreport
B. Form Controls-> Add Subform
C. Form Design Tools-> Tools-> Subform Control
Tip: Intermediate Access, page 96

3. Which of the following is true about selecting fields that link the Master and SubForms?
(Give all correct answers.)
A. You can pick the fields from a list
B. You can define your own fields
C. You must make sure that the fields match
Tip: Intermediate Access, page 98

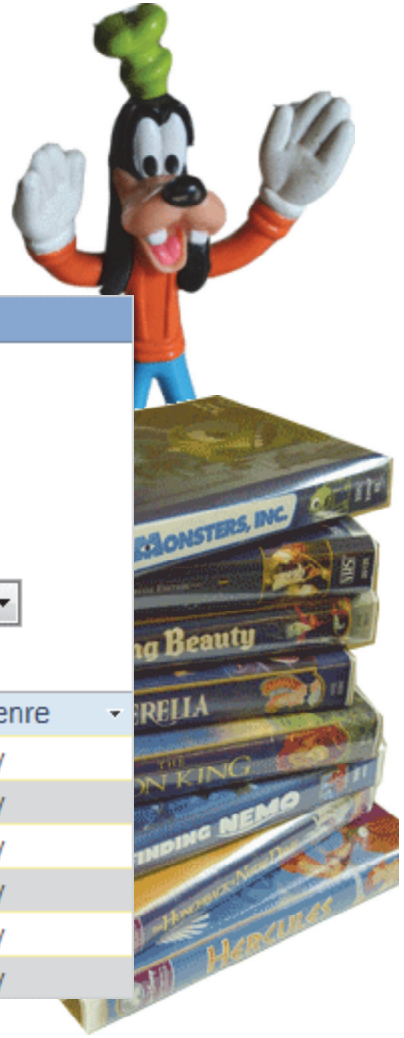
4. By default, a Subform updates automatically when the criteria in the combo box.
A. True
B. False
Tip: Intermediate Access, page 102

5. Which of the following are ways to program an Event? (Give all correct answers.)
A. Macro Builder
B. Event Builder
C. Expression Builder
D. Code Builder
Tip: Intermediate Access, page 104

Take Three

Access 2010: Representing One-to-Many

Forms and Subform Design, part 3 Synchronized Combo Boxes



Intermediate Access Objectives

In this lesson, you will learn how to:

1. Create a Select Query to filter the Records in the Subform.
2. Use the Expression Builder to write the criteria that looks up the data on a Form and synchronizes the two Combo Boxes.
3. Use the Combo Wizard to add a Drop Down Control based on the Select Query.
4. Add an Event Procedure in Visual Basic to Refresh the Records in the Subform when the Combo Box is changed.

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Lesson 5 : Synchronized Combo Boxes

1. Readings
Read Lesson 5 in the Intermediate Access guide, page 117-150.

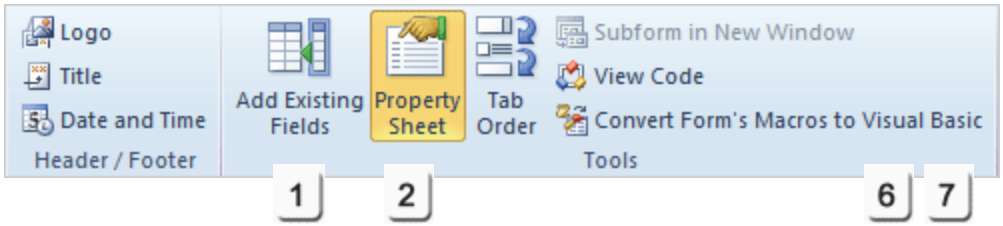
Project
A Select Query that synchronizes two Combo Boxes and filters the Subform.

Downloads
FrontRowVideo Int5.accdb
BBL Int ver5.accdb

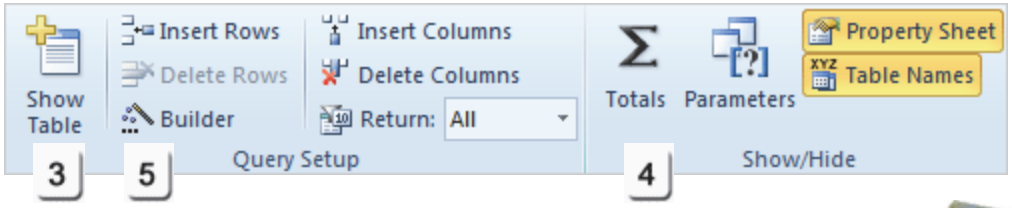
2. Practice
Do the Practice Activity on page 151.

3. Assessment
Review the Test questions on page 152.

Form Design Tools->Design Ribbon



Query Design Tools ->Design Ribbon

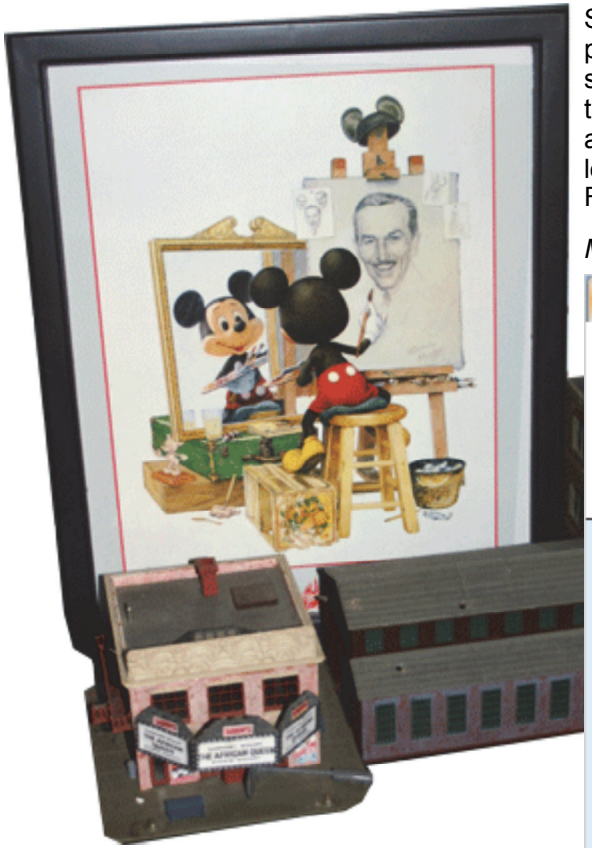


Menu Maps

From the **Form Design Tools->Design Ribbon**
1. Design->Tools->Property Sheet, page 124
2. Design->Tools->Add Existing Fields, page 125
6. Design->Controls->Combo Box, page 137
7. Design->Tools->Property Sheet->Link Master Fields, page143

From the **Query Design Tools ->Design Ribbon**
3. Design->Query Set Up->Show Table, page 128
4. Design->Show/Hide->Totals, page 131
5. Design->Query Setup->Builder, page 133

Synchronized Combo Boxes



Say someone wanted to lookup only PG13 rated movies. The Rating Combo Box that we programmed filters the MovieSearchSubform and displays all of the PG13 movies. You can add a second Combo Box that only shows the Genres for PG13 Movies. The Genre Combo would look up the Rating, PG13, and display all of the comedies that have a PG13 Rating. The two Combo Boxes are said to be synchronized because the first Combo Box sets the criteria for the second. This lesson creates the Genre Combo Box and programs it to look up the Rating on the Movie Search Form.

Microsoft Access 2010: Example of a Form with two, synchronized Combo Boxes

Take Three

What Are the Objectives?

The Movie Search Form and Subform have a Rating Control, which is Text. This lesson will add the Genre Control. First, we will confirm that both Forms have the same Field. Then, we'll use a Query to look up the Rating and synchronize the Rating and Genre Combo Boxes.

Create a Genre Table
Add data to the Genre Table

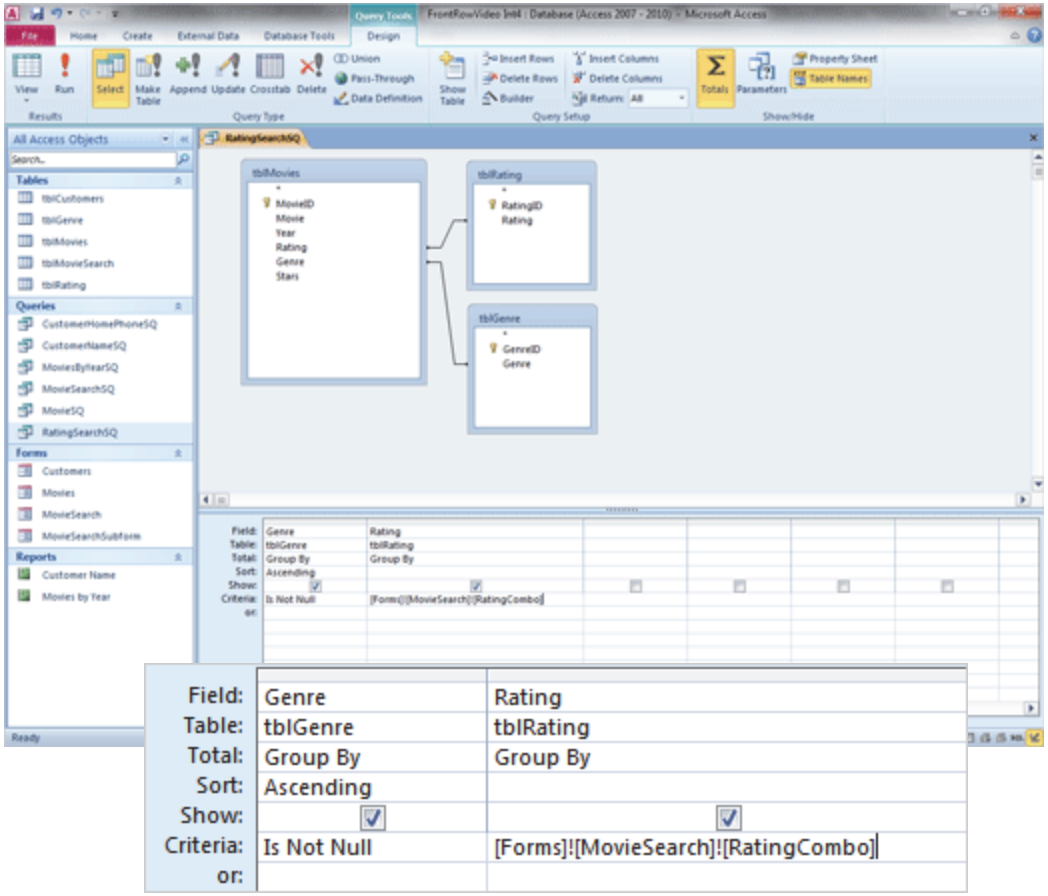
Edit the Form and Subform
Add the Genre Control to the Master Form

Use the Property Sheet to Link the Forms
Confirm the Master and Child Links
Test the Movie Search Form
Automate the Form with a bit of code (a Macro!)

Troubleshoot the Programming
Review the Form and Control Properties
Review the Master and Child Links
Review the Embedded Macro

That's the plan.

Microsoft Access 2010: Example of a Query in Design View



Take Three

Before You Begin

Before You Begin: Open the Sample Database
Go to **Start -> All Programs ->Microsoft Office**.
Click on **Microsoft Office Access 2010**.
Access will prompt you to open a database.
This lesson uses the database that was programmed in the previous lesson. You can continue with the same database if you wish.

The FrontRowVideo Int5.accdb database has:
Four Tables: tblCustomers, tblMovies, tblMovieSearch and tblRating.

Five Queries: CustomerHomePhoneSQ, CustomerNameSQ, MoviesByYearSQ, MovieSQ, and MovieSearchSQ.

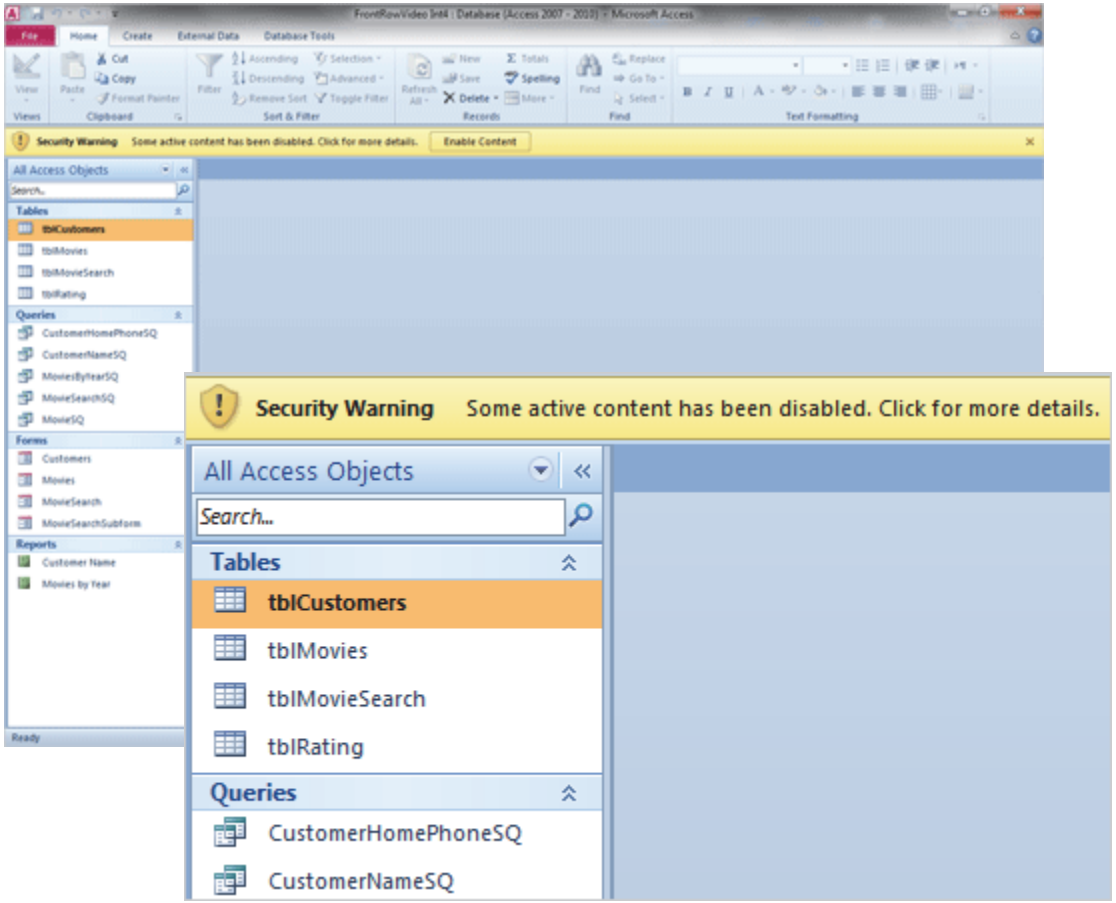
Four Forms: Customers, Movies, MovieSearch and MovieSearchSubform.

Two Reports: Movies by Year, Customer Name.

Keep going...

Memo to Self: Click **Enable Content** if you see the Security Warning.

Start -> All Programs ->Microsoft Office-> Microsoft Office Access 2010



Take Three

Create the Genre Table

In the beginning of this book we created a Rating Table to add Rating data to the Movie Table. In this lesson, we will create the Genre Table and use it to filter data in the Movie Table.

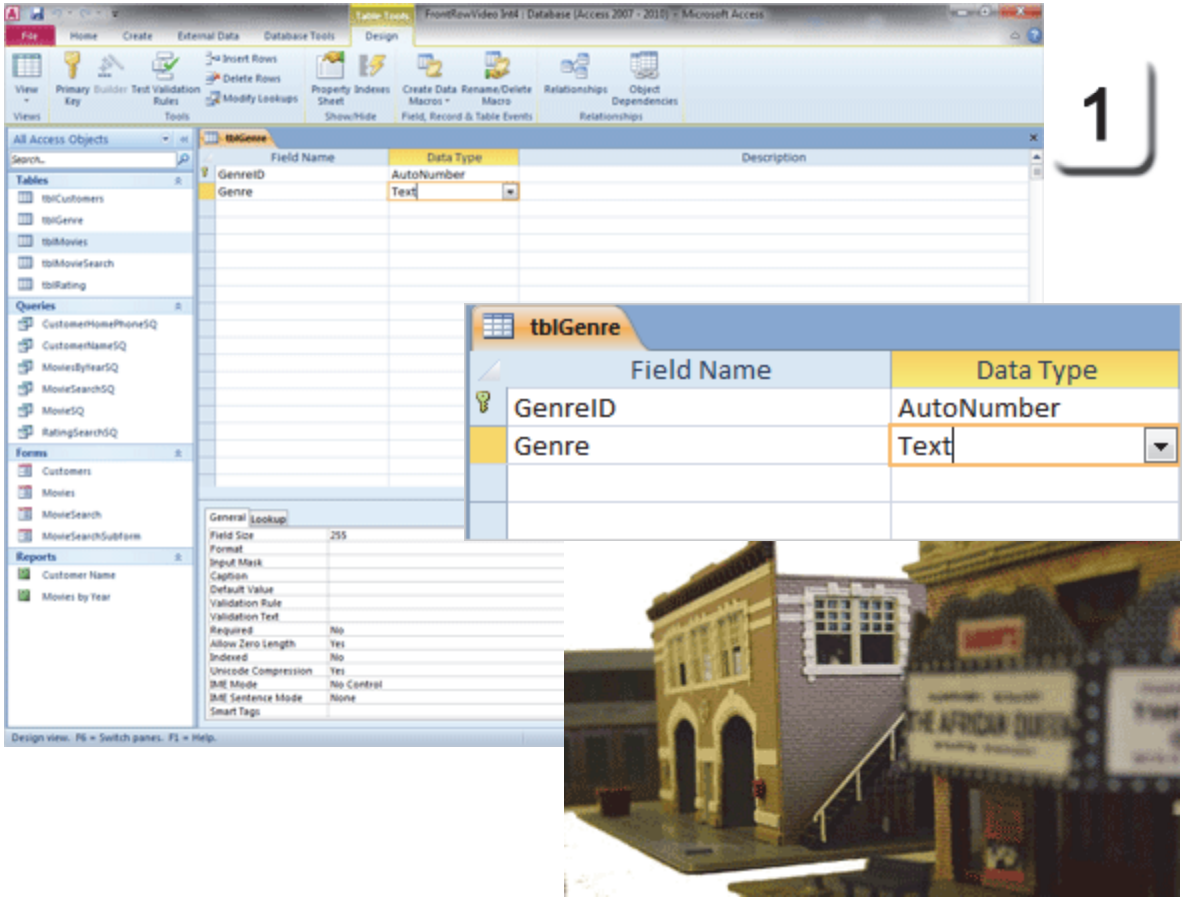
1. Try it: Create a New Table
The Database is open.
Go to **Create ->Tables->Table Design.**
Enter a Field Name: GenreID.
Data Type: AutoNumber.

GenreID is still selected.
Go to **Table Tools->Design->Tools**.
Click on **Primary Key**.

Enter a Field Name: Genre.
Data Type: Text.

Do This, Now: Save the Table
Go to **File->Save.**
Enter a Table Name: tblGenre
Click **OK**.
So far, so good. Keep going...

Create ->Tables->Table Design



Exam 77-885: Microsoft Access 2010
2. Building Tables
2.1.1. Create tables in Design View

Take Three

Add Data to the New Table

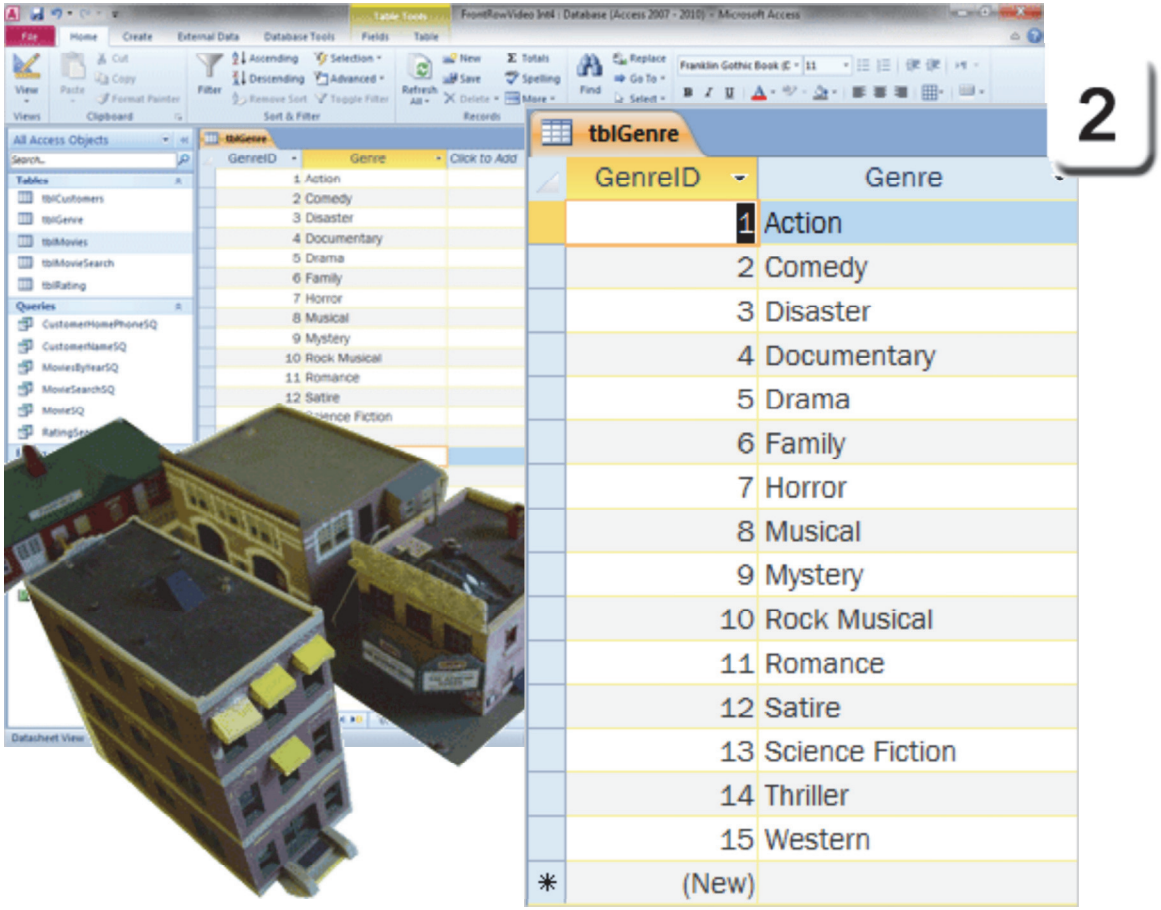
Before You Begin: Change the View
Go to **Home->Views->View**.
Select a **View: Datasheet View**.

2. Try it: Enter the Data
Add the following Genres:
Action
Comedy
Disaster
Documentary
Drama
Family
Horror
Musical
Mystery
Rock Musical
Romance
Science Fiction
Thriller
Western

What Did You See? The GenreID is an AutoNumber. It incremented automatically.

Good. **Close** tblGenre. Keep going...

Home->Views->View->Datasheet View



Exam 77-885: Microsoft Access 2010
2. Building Tables
2.1.1. Create tables in Design View

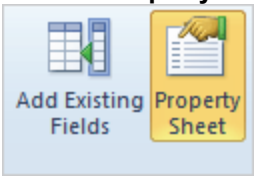
Take Three

Edit the MovieSearch Form

Let's review the MovieSearch Form Properties. Do we have what we need to add a Combo Box that looks up the Genre?

1. Try it: Open the MovieSearchForm
Go to **All Access Objects->Forms**.
Open a Form: MovieSearch.
Go to **Home ->Views->View->Design View.**
The Form Design Tools should be available.

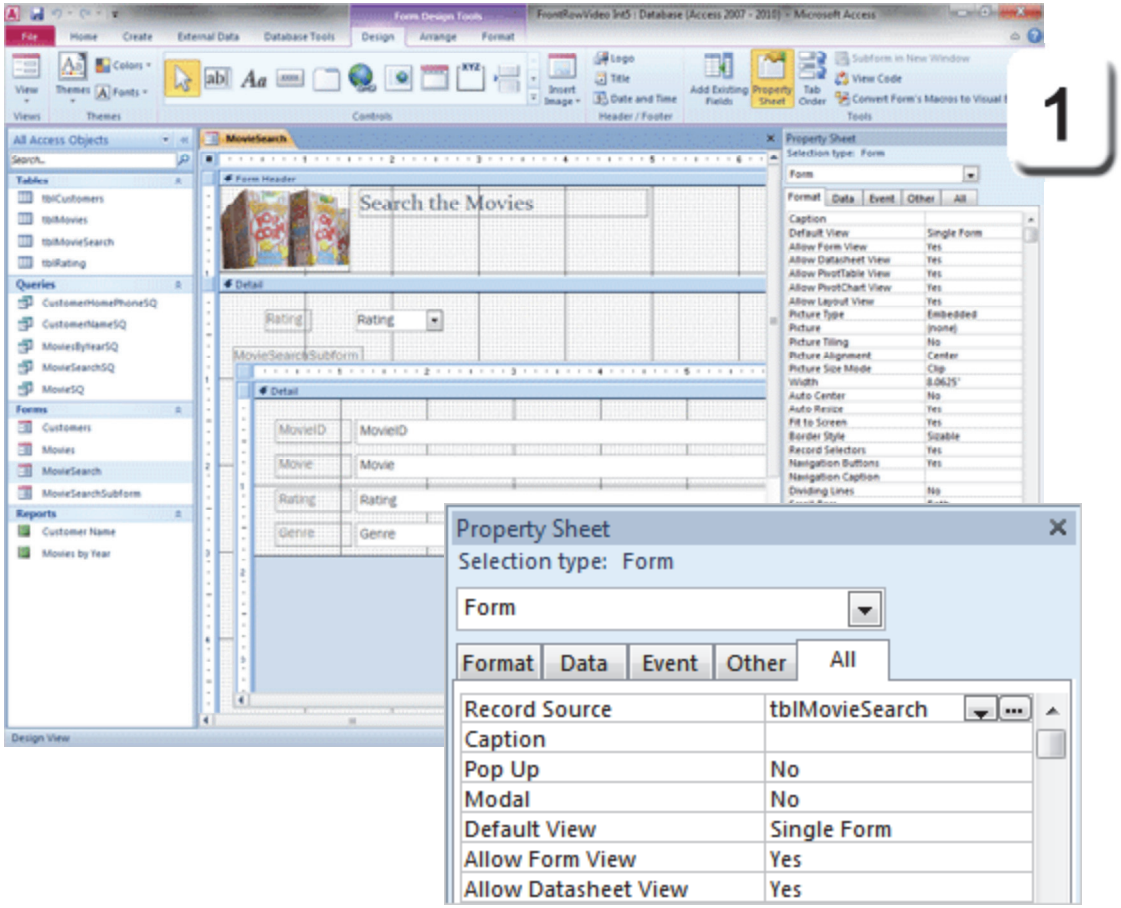
Try This, Too: Review the Form Properties
Go to **Form Design Tools->Design->Tools**.
Click on **Property Sheet**.



What Do You See? The Form is selected.
The **Record Source** is: tblMovieSearch.

Keep going...

Form Design Tools->Design->Tools->Property Sheet



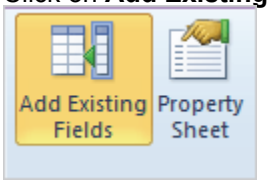
Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: View the Property Sheet

Take Three

Review the Field List

This movie search Form uses tblMovieSearch. What Fields are available in that Table?

2. Try This: Review the Field List
Go to Form Design Tools->Design->Tools.
Click on **Add Existing Fields.**

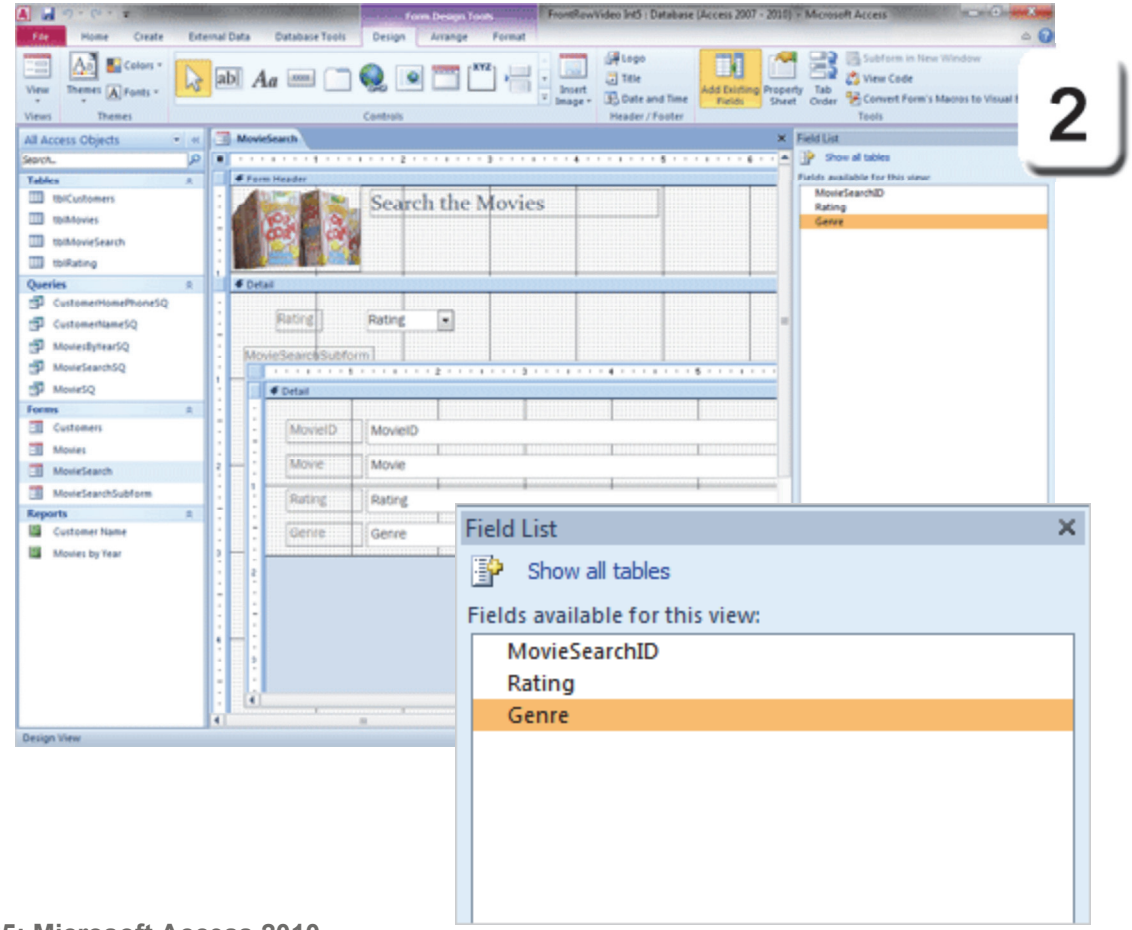


What Do You See? The Field List should open on the right side of the database. This list shows all of the Fields in the Record Source: tblMovieSearch.

Yes, there is a Field for **Genre**. Keep going...

Memo to Self: Tables and Forms cannot be opened in Design View at the same time: they are mutually exclusive. If you want to see the MovieSearch Form design, close the MovieSearch Table. If you want to review the Table, close the Form.

Form Design Tools->Design->Tools->Add Existing Fields



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Add Existing Fields

Take Three

Add an Existing Field

What happens if you drag an Existing Field to the a Form? Let's try it.

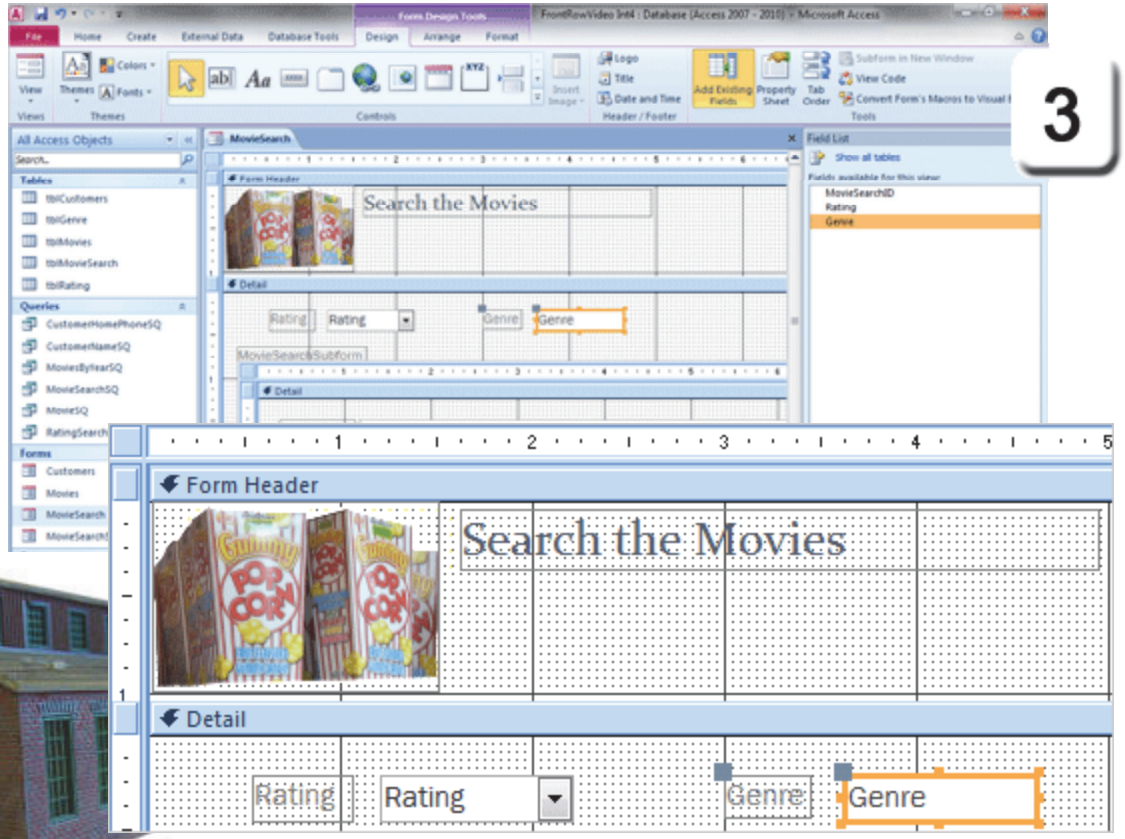
3. Try it: Add an Existing Field
Go to the **Form Field List**.
Drag the Genre Field to the Form, next to the Rating Combo Box.

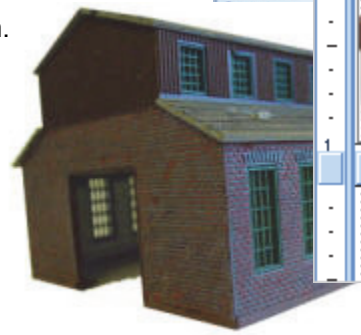
What Do You See? The Genre Control is a Text Box by default. Our goal is to create a Combo Box.

Try This, Too: Delete the Genre Control
Select a Control: Genre.
Delete it and **Save** your changes.

Close the MovieSearch Form.

Form Design Tools->Design->Tools->Add Existing Fields





Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Add Existing Fields

Take Three

Synchronized Combos

The Genre Combo will be based on a new Select Query that uses three Tables. This Query will also use the **Group By** option.

Our Query will look up the Rating that the User selected on the Movie Form with the Rating Combo Box. We will create this code with the **Expression Builder**.

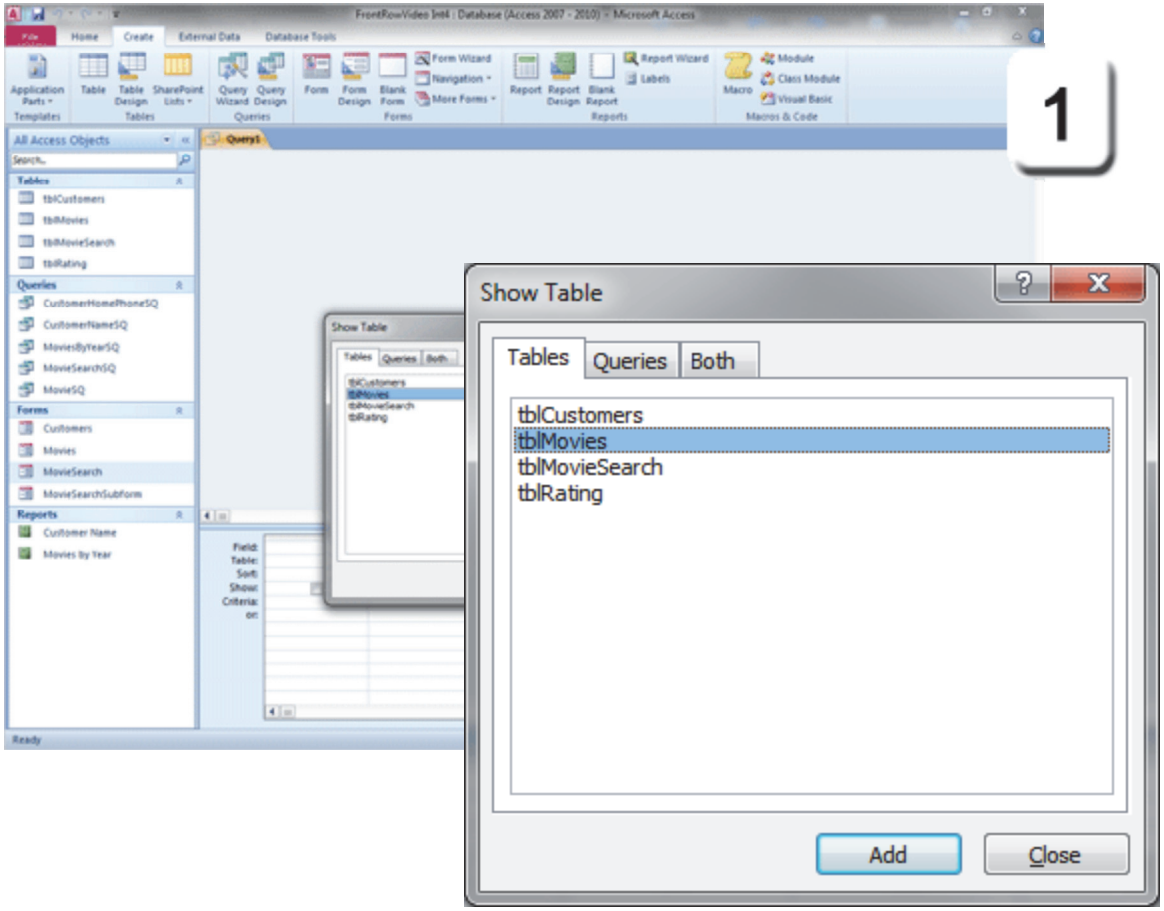
Before You Begin: Close all of the Tables, Forms or Queries.

1. Try it: Create a Select Query
Go to **Create ->Queries-> Query Design.**

What Do You See? A blank query will open. The **Show Table** window will prompt you to choose a Table or Query.
Select a Table: tblMovies. Click **Add**.
Select a second Table: tblRating. Click **Add.**
Select a third Table: tblGenre. Click **Add.**
Click **Close**.

Keep going...

Create->Queries->Query Design



Exam 77-885: Microsoft Access 2010
4. Creating and Managing Queries
4.2. Manage source tables and relationships: Use the Show Table Command

Take Three

Join the Tables

When you **join** Tables you create a relationship between one table and another. The join is created by matching Fields with the same Data Type: Text with Text, or Numbers with Numbers.

In this example, we will join tblMovies to the Genre and the Rating.

2. Try it: Join the Tables
Select a Field from tblMovies: Rating.
Drag that Field to the Rating Field in tblRating.

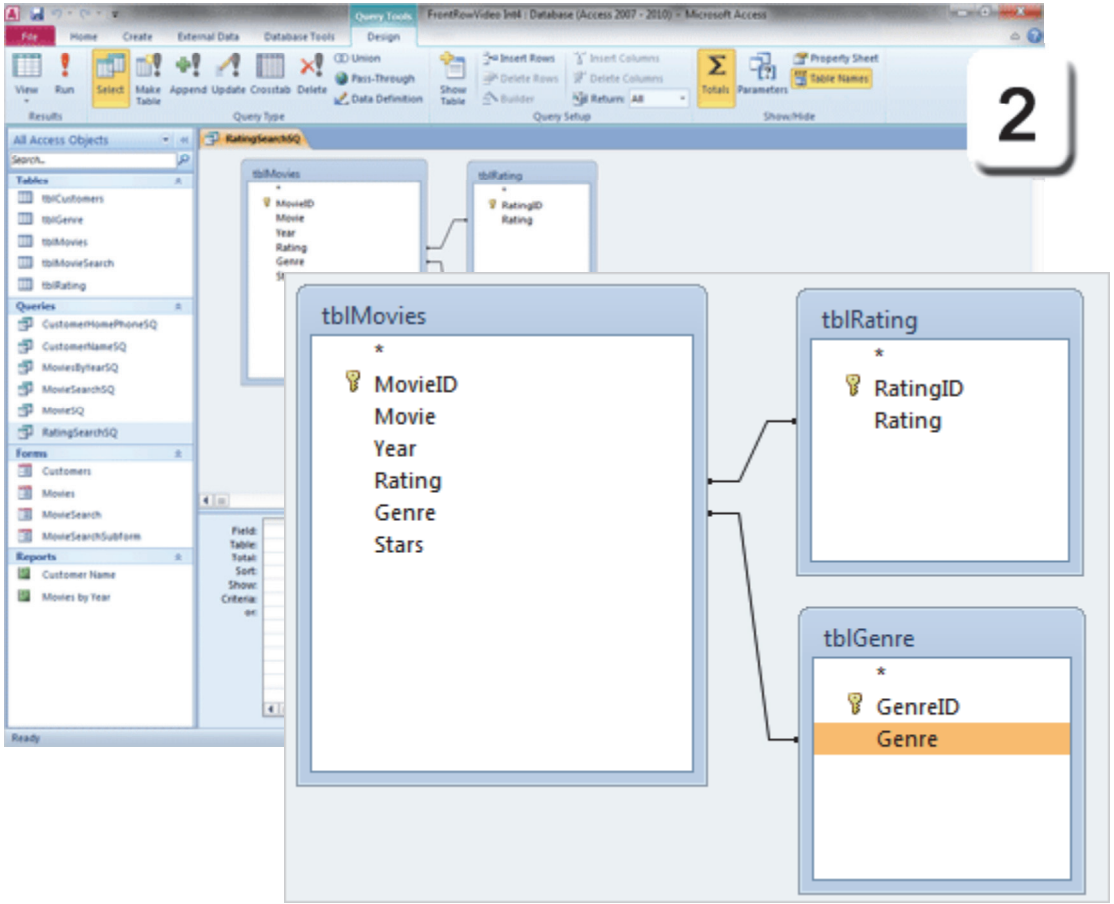
What Do You See? The Join is represented by a black line from Rating in tblMovies to Rating in tblRating.

Try This, Too: Join the Tables
Select a Field from tblMovies: Genre.
Drag that Field to the Genre Field in tblGenre.

What Do You See, Now? There should be another Join from Genre in tblMovies to Genre in tblGenre.

Keep going...

Query Design Tools ->Design



Exam 77-885: Microsoft Access 2010
4. Creating and Managing Queries
4.2. Manage source tables and relationships: Create Ad Hoc Relations

Take Three

Add Fields to the Query

3. Try it: Add Fields to the Query

Double click to add the following Fields:
From tblGenre: Genre.
From tblRating: Rating.
From tblMovies: Movie.

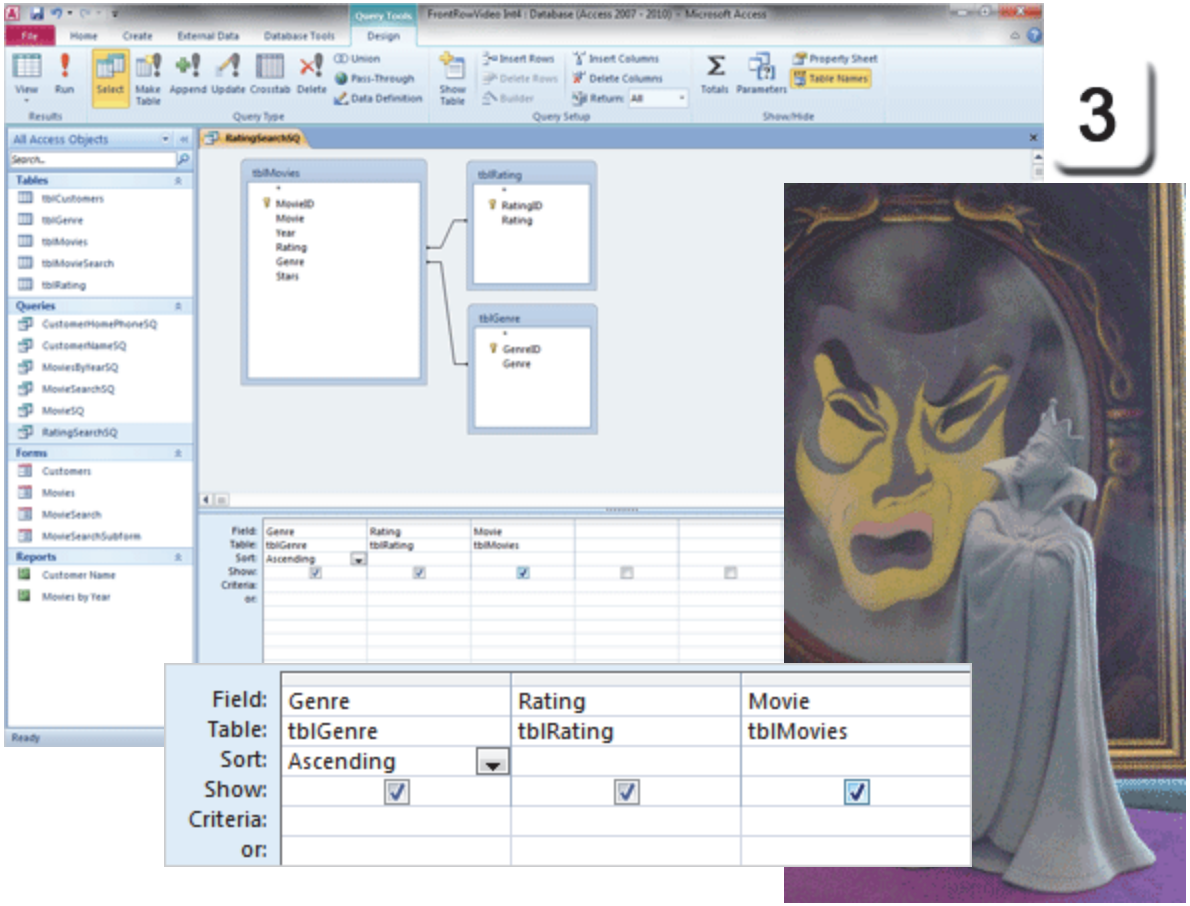
Sort the Genre: Ascending.

Do This, Too: Save the Query
Go to **File->Save**.
Enter the Query Name: RatingSearchSQ.

RatingSearch because we are looking for the Rating that was selected on the Search Form. **SQ** because this is a Select Query.

Click **OK**. Keep going.

Query Design Tools ->Design



Exam 77-885: Microsoft Access 2010
4. Creating and Managing Queries
4.1. Construct queries: Create a Select Query

Take Three

Run the Query

3. Try it: Run the Query

Go to **Query Tools ->Design->Results->Run.**

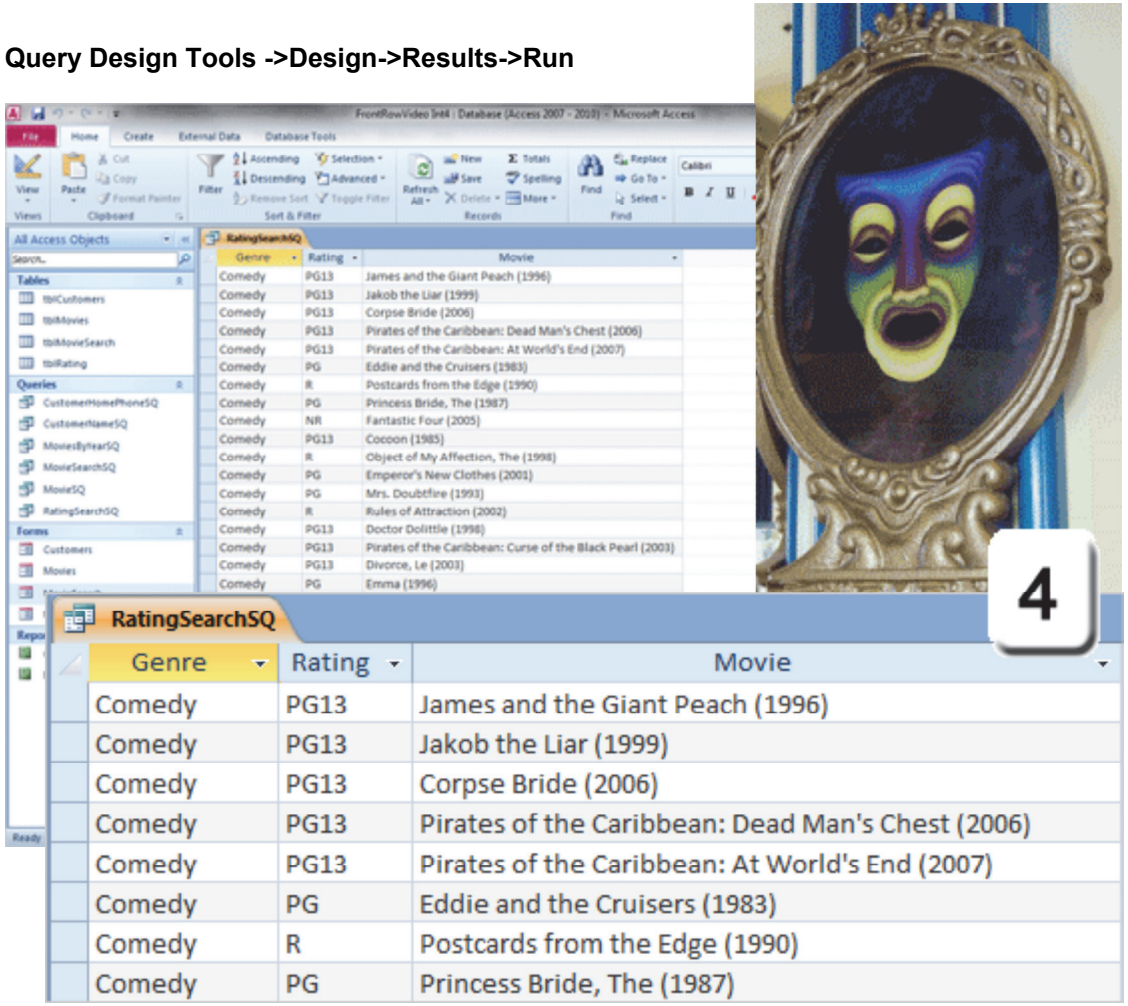
What Do You See? How many records do you see? There are 401 movies in tblMovies. This is a many-to-many relationship. Many movies have a PG13 Rating. Many comedies are PG13.

What Else Do You See? The RatingSearchSQ Query also returned many movies that did not have a Rating.

What Do You Think? The purpose of this Select Query is to create a little list of Genres in a Combo Box. Right now, this Combo Box would show lots of repeats: many G, PG, PG13, R's on the drop down list.

In the following pages we will combine the Ratings with Totals so that the Combo Box will show only one G, one PG, etc on the drop down list. We will also filter out movies that don't have a Rating. So, let's keep going...

Query Design Tools ->Design->Results->Run



Exam 77-885: Microsoft Access 2010
4. Creating and Managing Queries
4.1. Construct queries: Create a Select Query

Take Three

Group By Totals

This option will combine the repeated Ratings.

Before You Begin: Return to Design View.
Go to **Home->Views->View->Design View**.

Still Before You Begin: Edit the Query
Delete the Movie Field.
There will be only two fields: Genre and Rating.

5. Try it: Edit the Select Query
Go to **Query Tools ->Design->Show/Hide.**
Click on **Totals.**

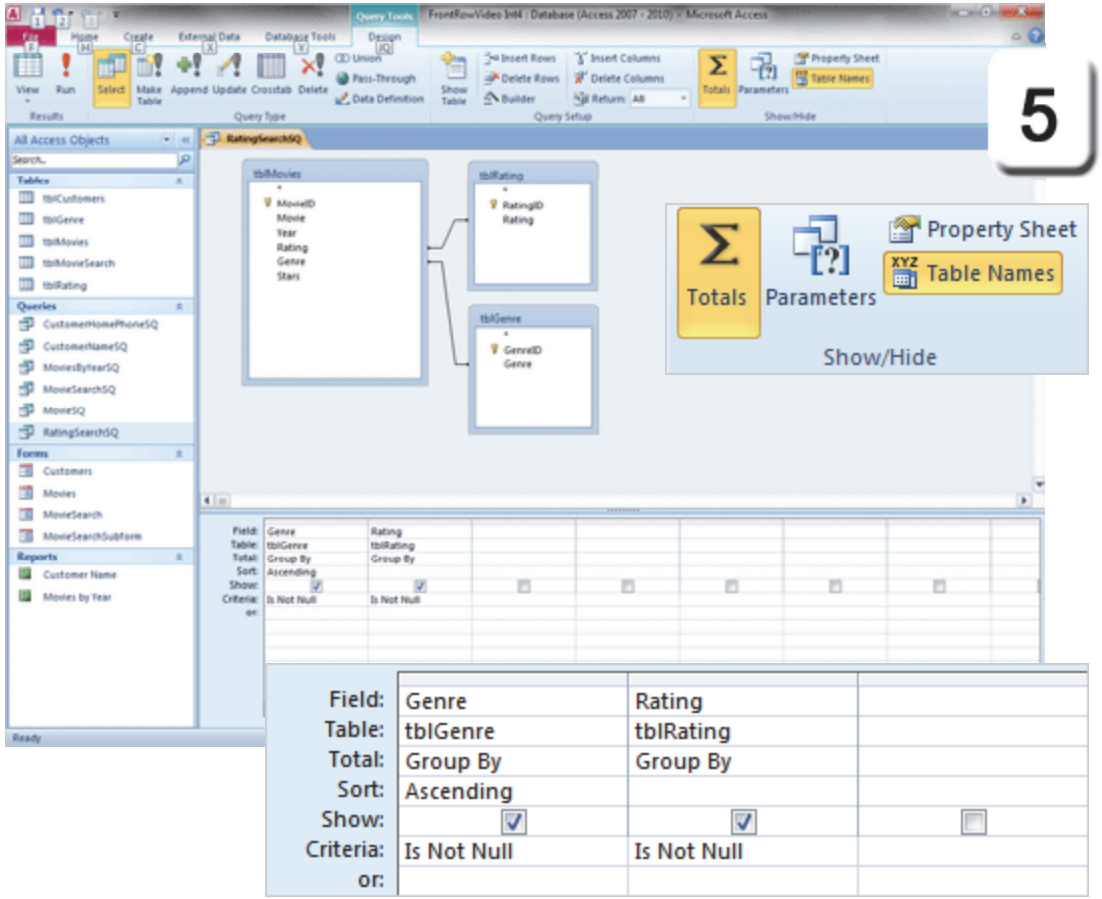
What Do You See? When you click on **Totals** the Query grid will show the **Total** Row.
The default is **Group By.**

Try This, Too: Add Criteria
Type the Rating Criteria: Is Not Null.
Type the Genre Criteria: Is Not Null.

This will return the movies that do have (Is Not Null) have a Rating or Genre in tblMovies.

Keep going...

Query Tools ->Design->Show/Hide->Totals



Exam 77-885: Microsoft Access 2010
4. Creating and Managing Queries
4.3. Manipulate fields: Use Group By

Take Three

Run the Query, Again

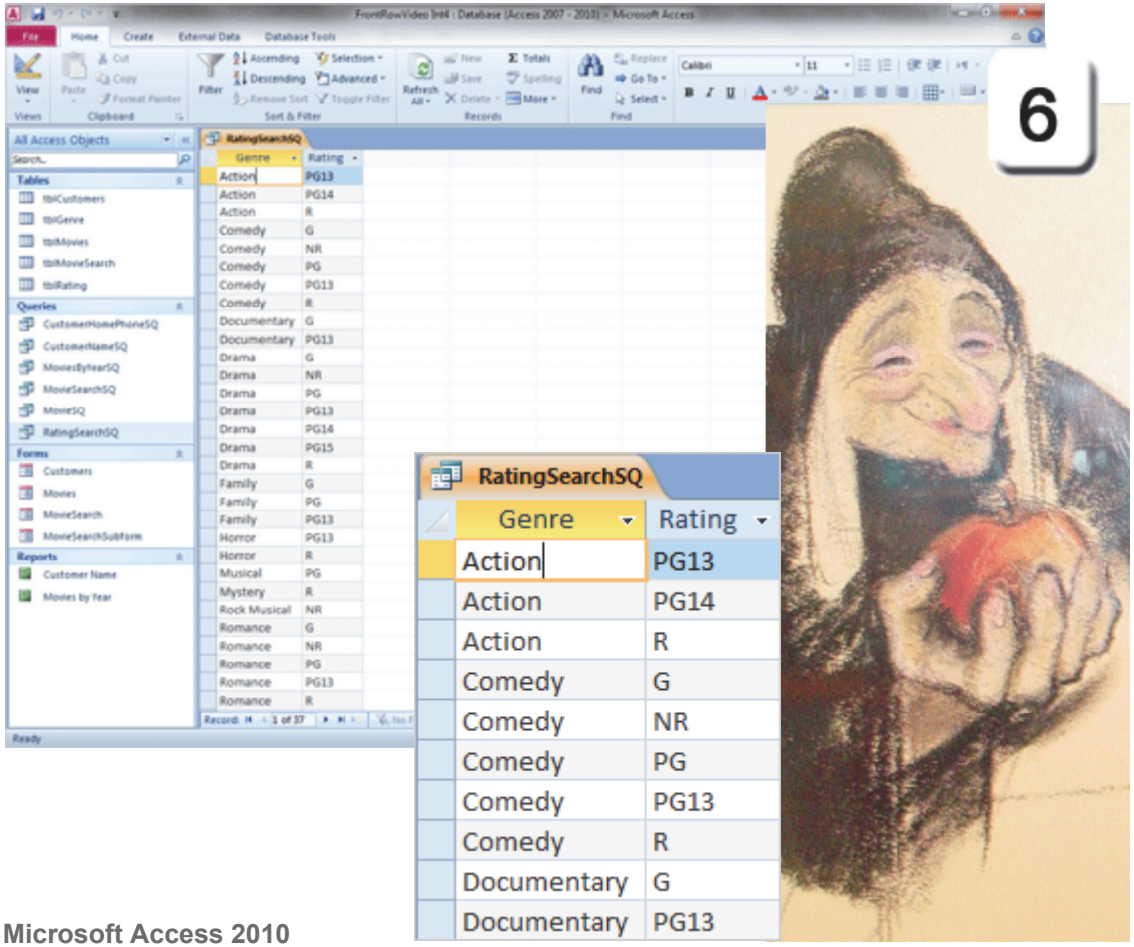
6. Try it: Run the Query
Go to **Query Tools ->Design->Results->Run.**

What Do You See? How many records do you see? Now, there are 37 Records, not 401. Each Genre has Ratings. There are no duplicates.

Try This, Too: Return to Design View.
Go to **Home->Views->View->Design View.**

Keep going..

Query Design Tools ->Design->Results->Run



Exam 77-885: Microsoft Access 2010
4. Creating and Managing Queries
4.1. Construct queries: Create a Select Query

Take Three

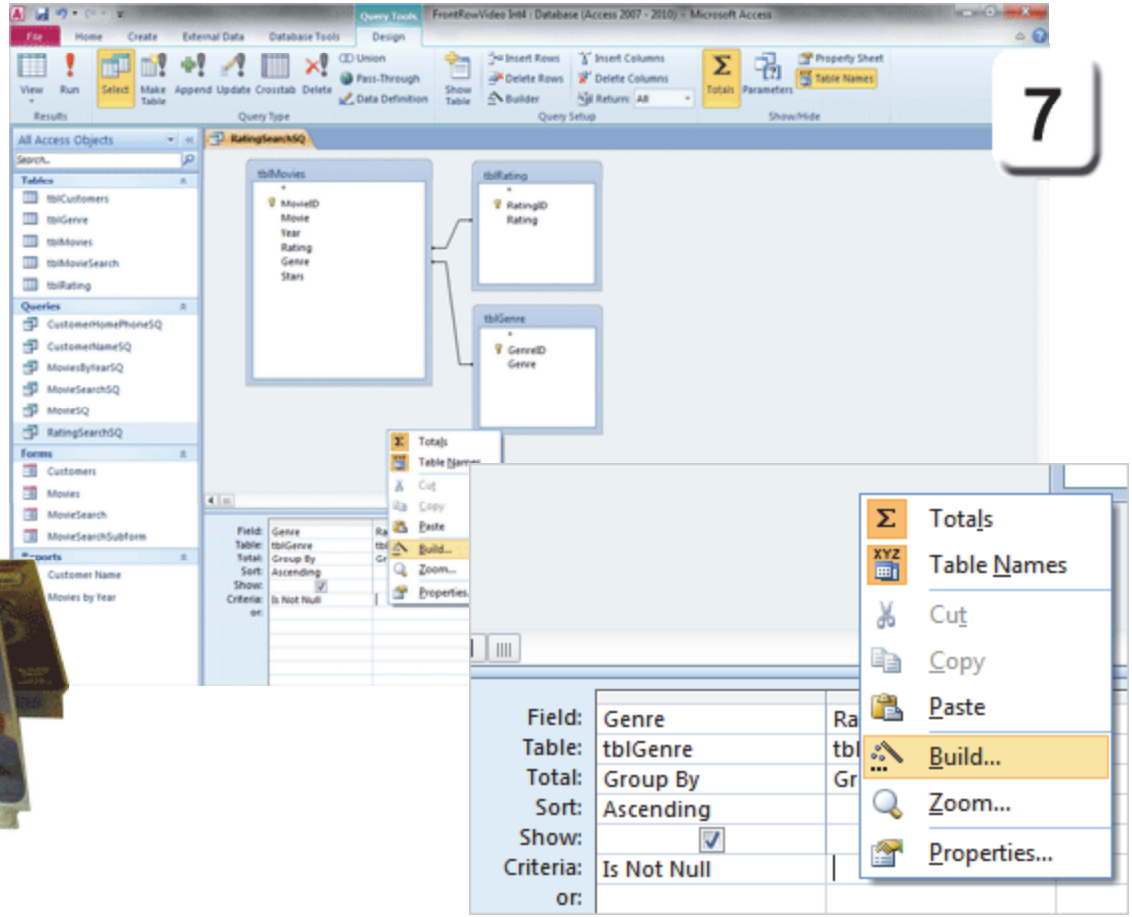
Link the Query to the Form

A Query can look up a Field on a Form and use that data to select records that match.

We'll use the **Expression Builder** to select the Rating on the MovieSearchForm and add it to the Rating Criteria in RatingSearchSQ.

7. Try it: Find the Expression Builder
RatingSearchSQ is open in Design View.
Go to the Rating Field.
Delete the Criteria: Is Not Null.
Right-click the Criteria.
Select an Option: **Build**.
Keep going...

Query Design Tools ->Design->Query Setup->Builder



Exam 77-885: Microsoft Access 2010
4. Creating and Managing Queries
4.3. Manipulate fields: Use the Expression Builder

Take Three

Hello, Expression Builder

8. Try it: Review the Expression Builder

At the top of the Expression Builder is the box where the code will be written.

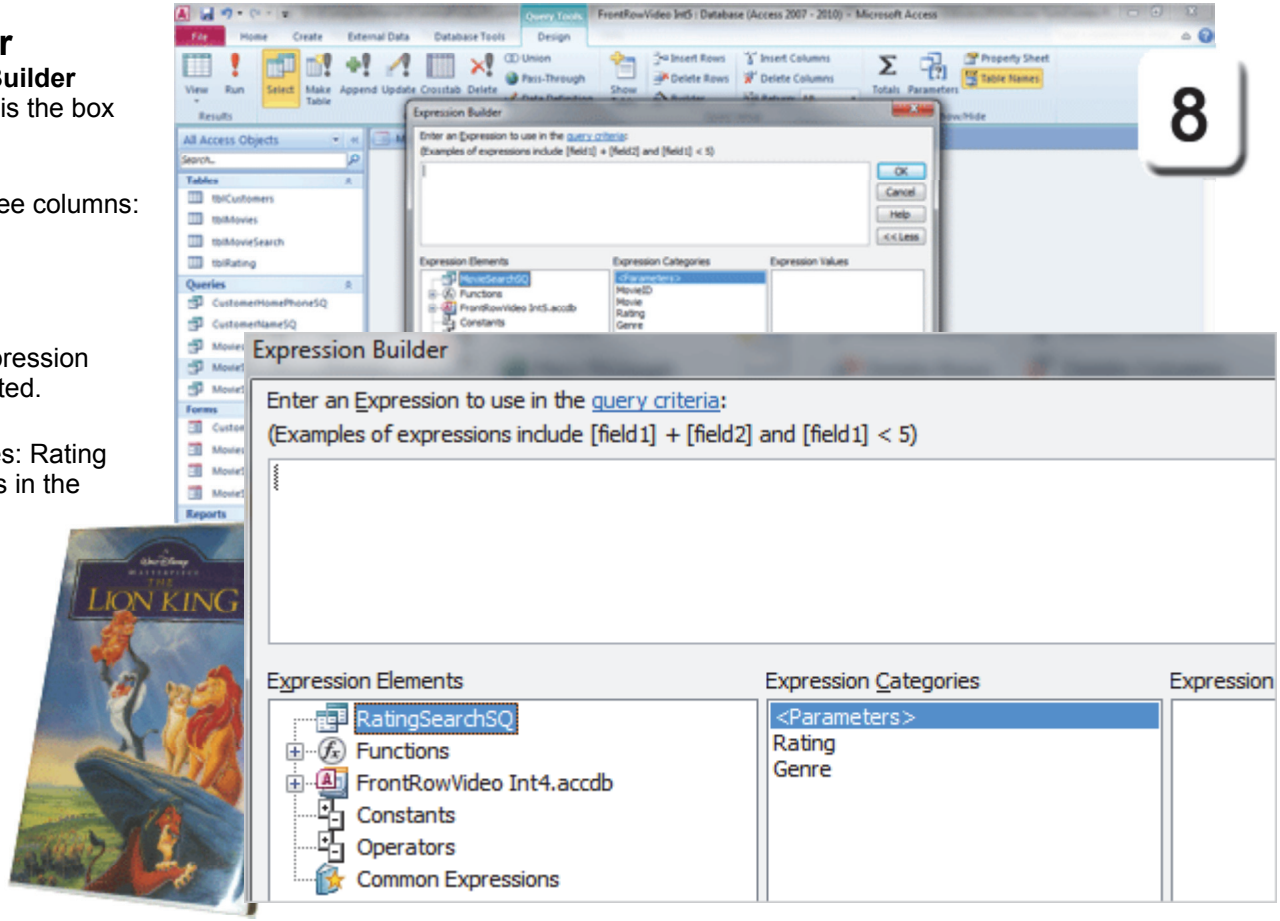
The Expression Builder also has three columns:
Expression Elements
Expression Categories
Expression Values.

What Do You See? Look in the Expression Elements. RatingSearchSQ is selected.

There are two Expression Categories: Rating and Genre. These are the two Fields in the RatingSearchSQ Query.

Keep going...

Query Design Tools ->Design->Query Setup->Builder



Exam 77-885: Microsoft Access 2010
4. Creating and Managing Queries
4.3. Manipulate fields: Use the Expression Builder

Take Three

Use the Expression Builder

9. Try it: Select an Expression Category
Go to the Expression Elements.
Double Click the database: FrontRowVideo Int4.accb.
Double Click: Forms.
Double Click: All Forms.
Select a Form: MovieSearch.

What Do You See? The Expression Categories list all of the Fields that are available on the MovieSearch Form including the Popcorn Logo.

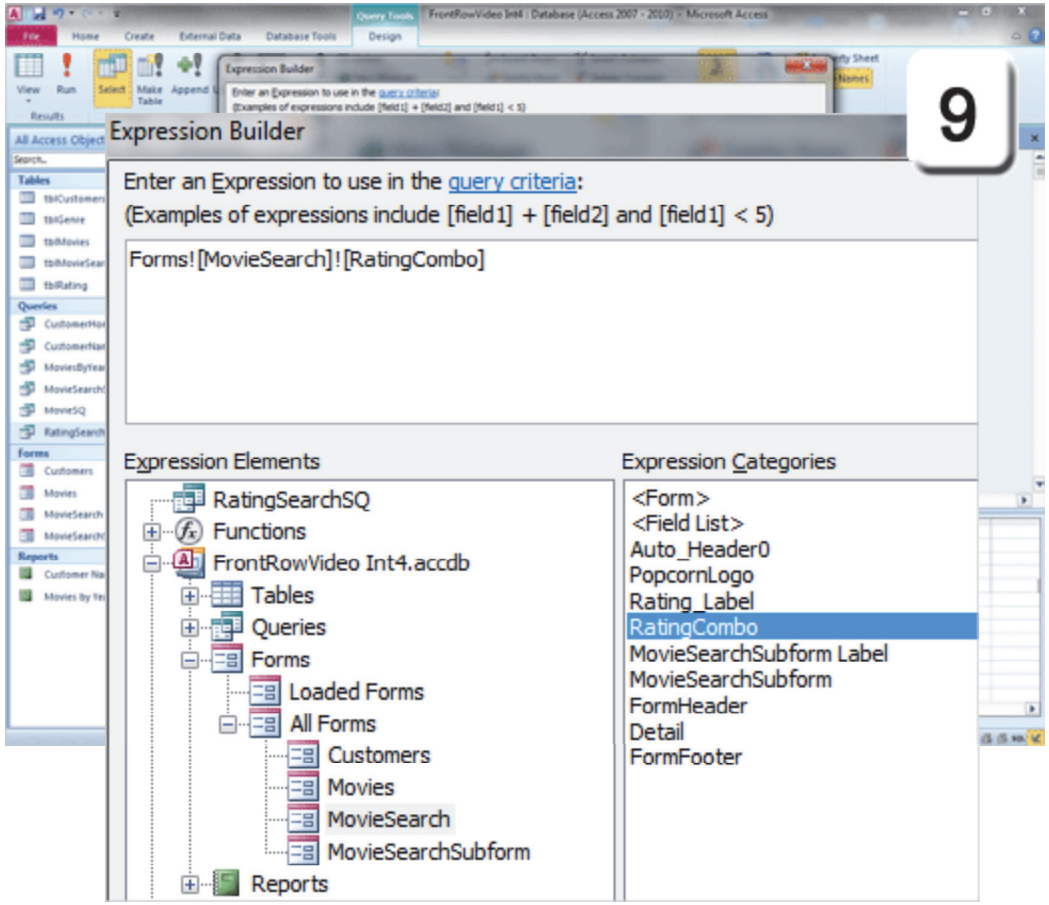
Try This, Too: Select an Expression Category
Double Click: RatingCombo.

Now, What Do You See? The Expression Builder will write the qualified name:
Forms![MovieSearch]![RatingCombo]

Where **Forms** is the Access Object,
[MovieSearch] is the name of the Form,
[RatingCombo] is the name of the Control.

Click **OK** to close the Expression Builder and return to the RatingSearchSQ Query.
Keep going...

Query Design Tools ->Design->Query Setup->Builder



Exam 77-885: Microsoft Access 2010
4. Creating and Managing Queries
4.3. Manipulate fields: Use the Expression Builder

Take Three

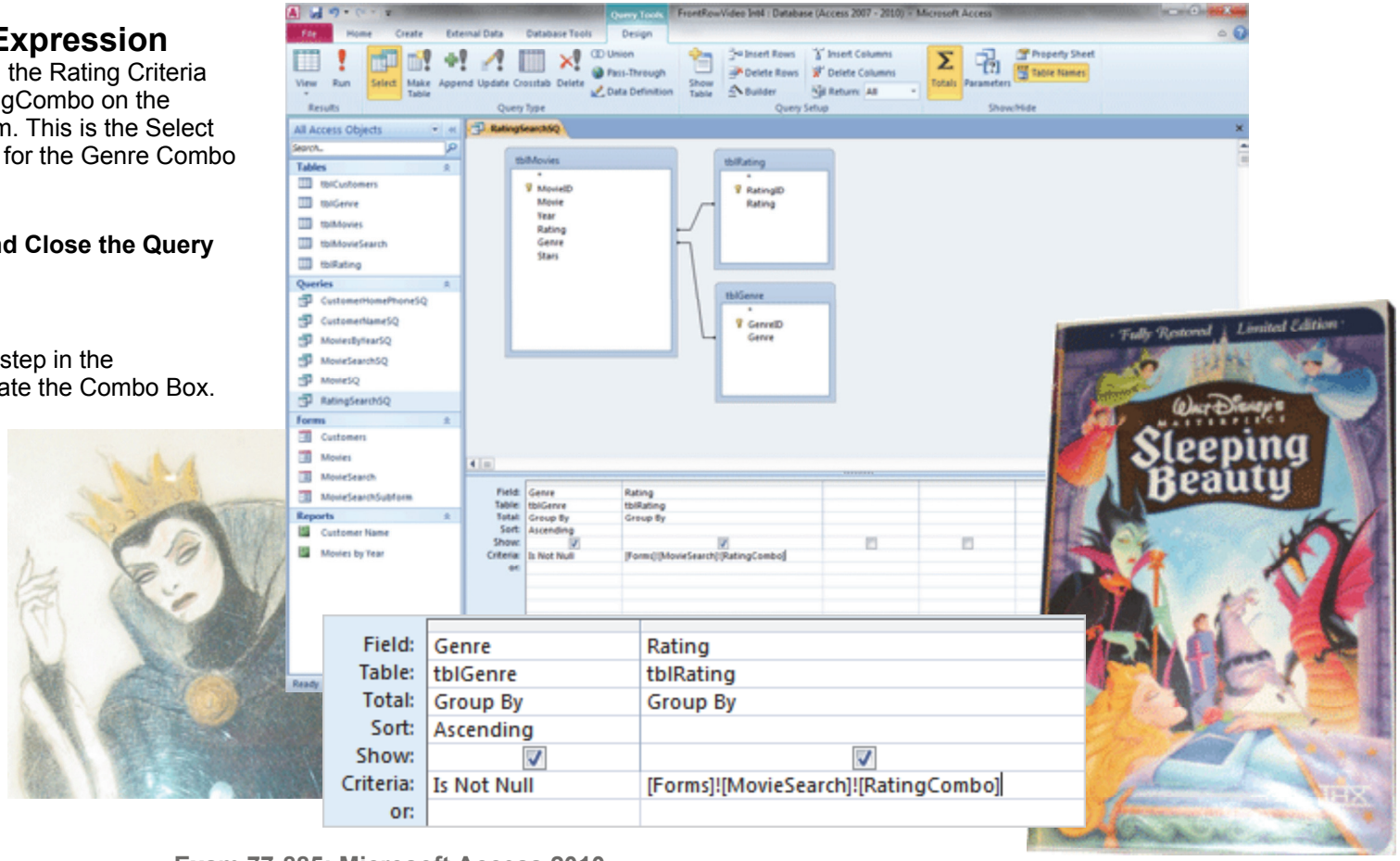
Review the Expression

The Expression in the Rating Criteria looks up the RatingCombo on the MovieSearch Form. This is the Select Query we will use for the Genre Combo Box.

Do This: Save and Close the Query
Go to **File->Save**.
Close the Query.

Go on to the next step in the programming: create the Combo Box.

Query Design Tools ->Design



Exam 77-885: Microsoft Access 2010
4. Creating and Managing Queries
4.3. Manipulate fields: Use the Expression Builder

Take Three

Form Design Tools->Design->Controls->Combo Box

Create the Genre Combo

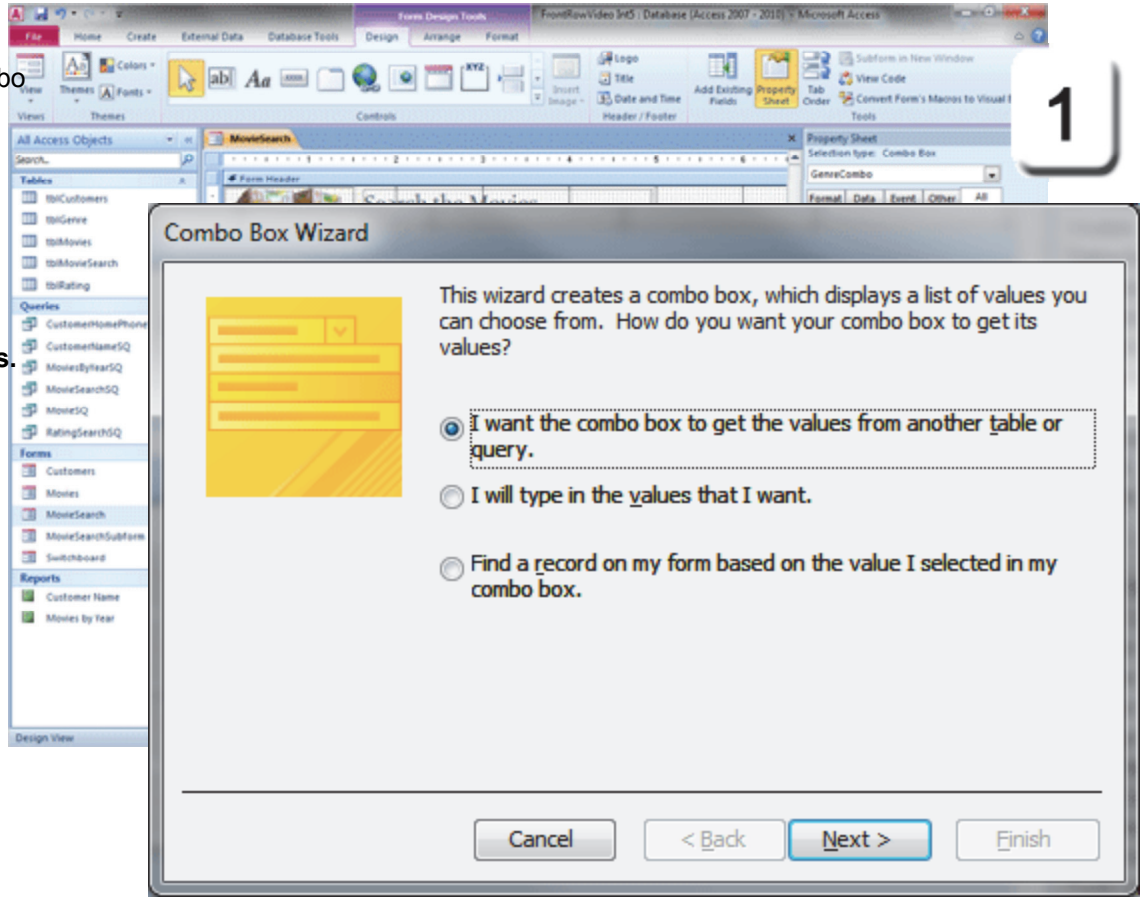
The following pages will walk through the Combo Wizard and review the choices.

Before You Begin: Open a Form
Go to **All Access Objects.**
Select a **Form**: MovieSearch
Go to **Home->Views-View->Design View.**

1. Try it: Create a Combo Box Control
Go to **Form Design Tools->Design->Controls.**
Click once on **Combo Box.**
Then click on the **Detail** section of the MovieSearch Form by the Rating Combo Box.
The **Combo Box Wizard** should begin.

Try This, Now: Choose a Method
Select: I want the combo box to get the values from another table or query.

Click **Next**. Keep going...



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Add a Drop Down (Combo) Control

Take Three

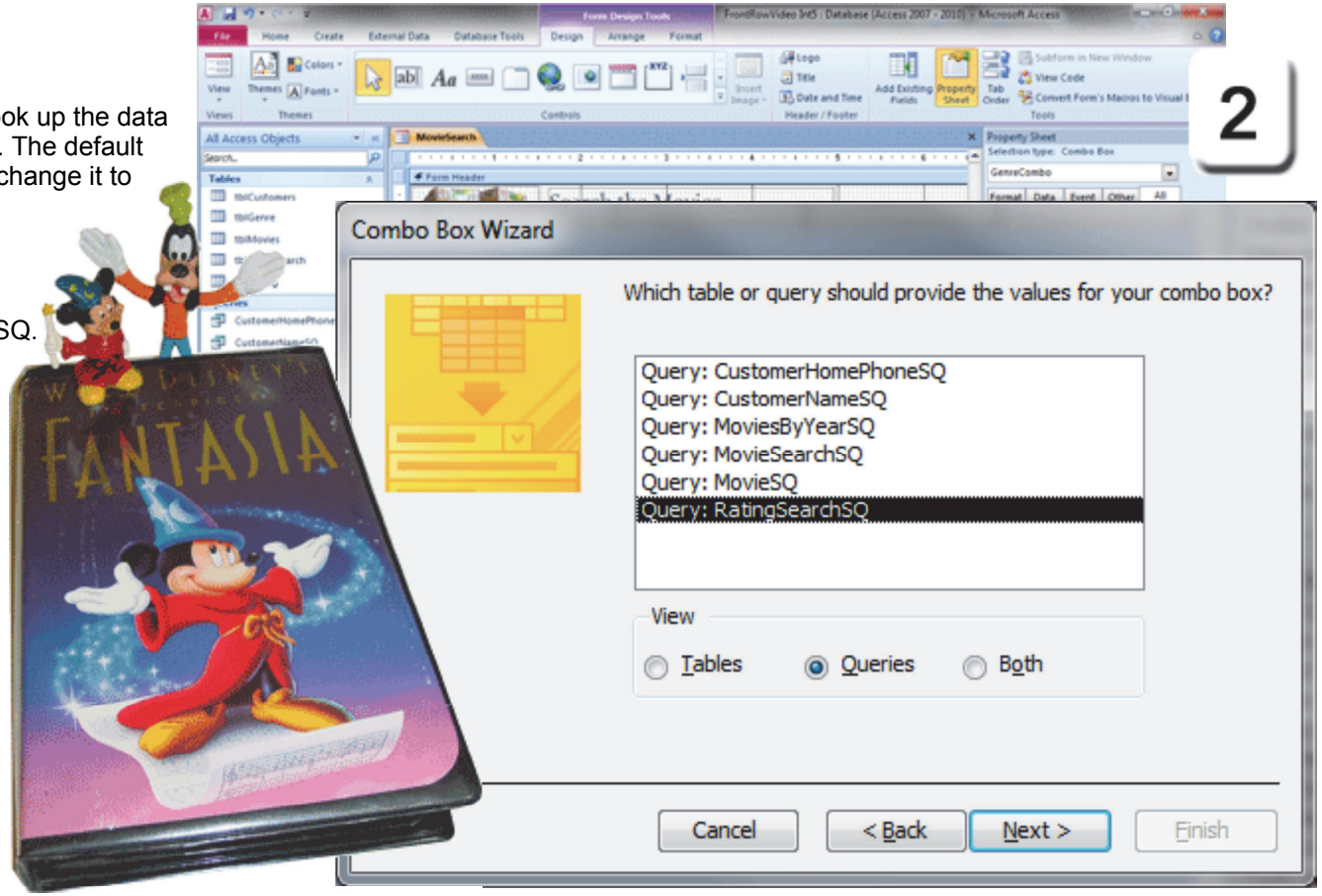
Form Design Tools->Design->Controls->Combo Box

Combo Box Wizard: Select a Query

The Combo Box Wizard can look up the data from either a Table or a Query. The default view is Tables so you have to change it to Queries, first.

2. Try it: Select a Query
Click on **Queries**.
Select a Query: RatingSearchSQ.

Click **Next**. Keep going...



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Add a Drop Down (Combo) Control

Take Three

Form Design Tools->Design->Controls->Combo Box

Combo Box Wizard: Fields

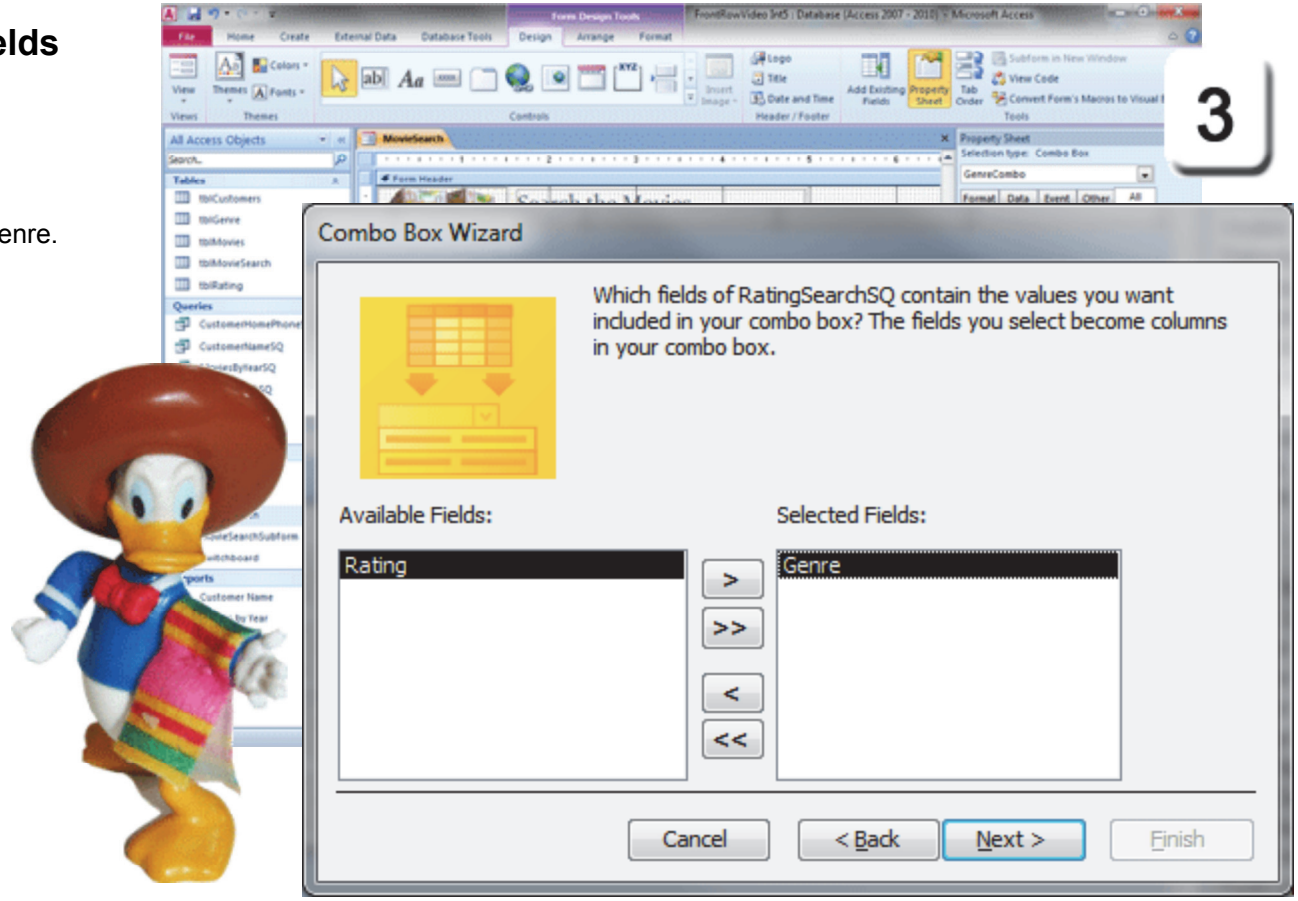
3. Try it: Select the Fields
There are two Fields in tblGenre:
Genre (text)
Rating (text)

Use the arrow to select a Field: Genre.

Click **Next**.

Try This, Too: Edit the Sorting
Select a Field to Sort: Genre.

Click **Next**, again. Keep going...



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Add a Drop Down (Combo) Control

Take Three

Form Design Tools->Design->Controls->Combo Box

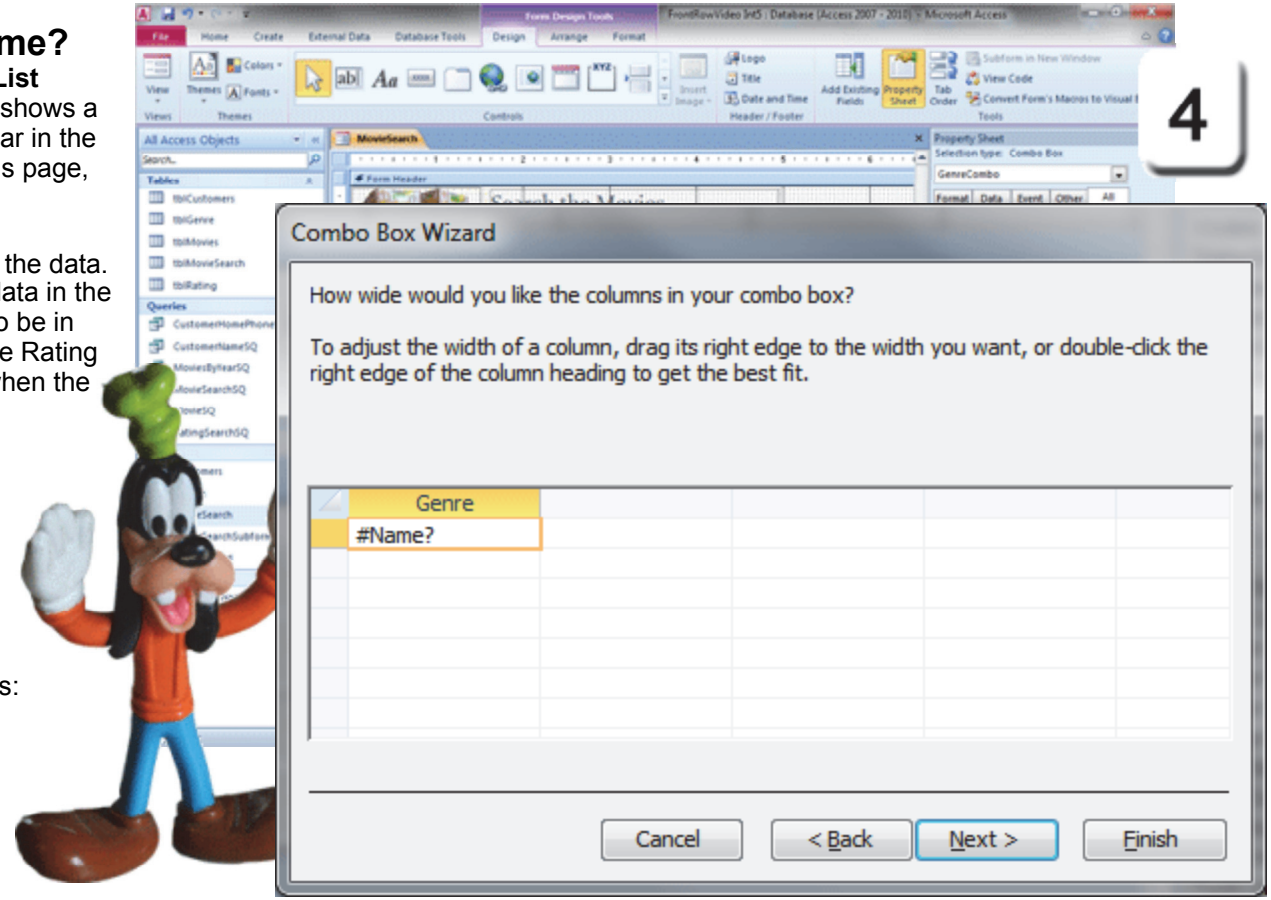
Combo Box Wizard: #Name?

4. Try it: Preview the Drop Down List

This step in the Combo Box Wizard shows a preview of the data as it would appear in the drop down list. In the example on this page, the preview shows only #Name?.

#Name? means Access cannot find the data. The RatingSearchSQ looks up the data in the MovieSearch Form. That form has to be in Design View while we working on the Rating Combo. The data will be available when the Form is in Form View.

Click **Next**. Keep going...!



As Goofy always said in the cartoons: "Somthin wrong here?"

Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Add a Drop Down (Combo) Control

Take Three

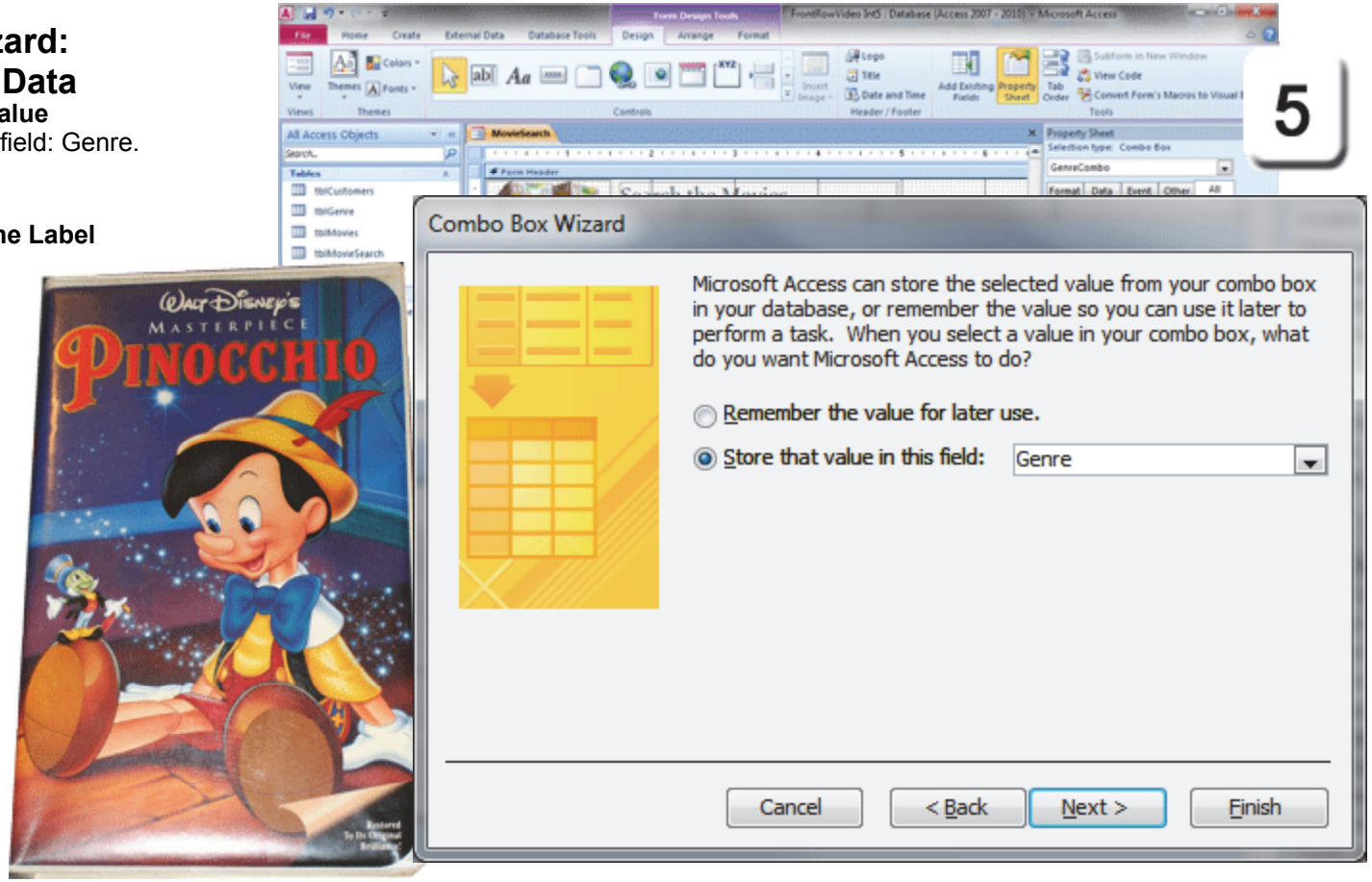
Combo Box Wizard: Save the Genre Data

5. Try it: Store That Value
Store that value in this field: Genre.
Click **Next**.

Do This, Too: Enter the Label
Type the Label: Genre.

Click **Finish**.

Form Design Tools->Design->Controls->Combo Box



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Add a Drop Down (Combo) Control

Take Three

Review the Properties

6. Try it: Review the Properties
Select the Genre Combo Box.
Go to **Form Design Tools->Design->Tools.**
Click on **Property Sheet.**

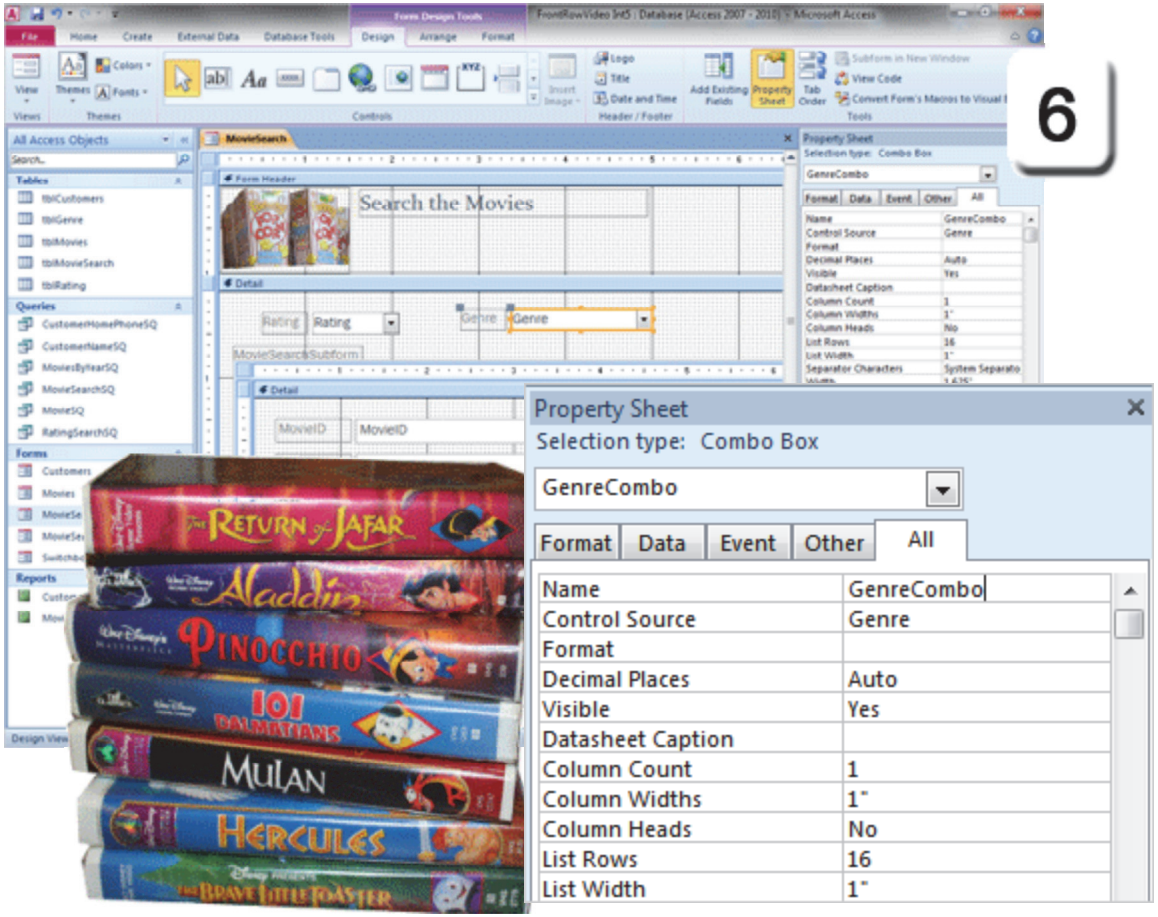
Try This, Too: Edit the Properties
Enter the Name: GenreCombo

What Do You See? The Properties include:
Control Source: Genre
Column Count: 1
Column Width: 1"

That should work. This is a good time to save.

Do This, Now: Save Your Programming
Go to **File->Save**.

Form Design Tools->Design->Tools->Property Sheet



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: View the Property Sheet

Take Three

Link the Form and Subform

The MovieSearch Form is already linked to the Subform by Rating. Now, we need to link the Forms by Genre as well. Here are the steps.

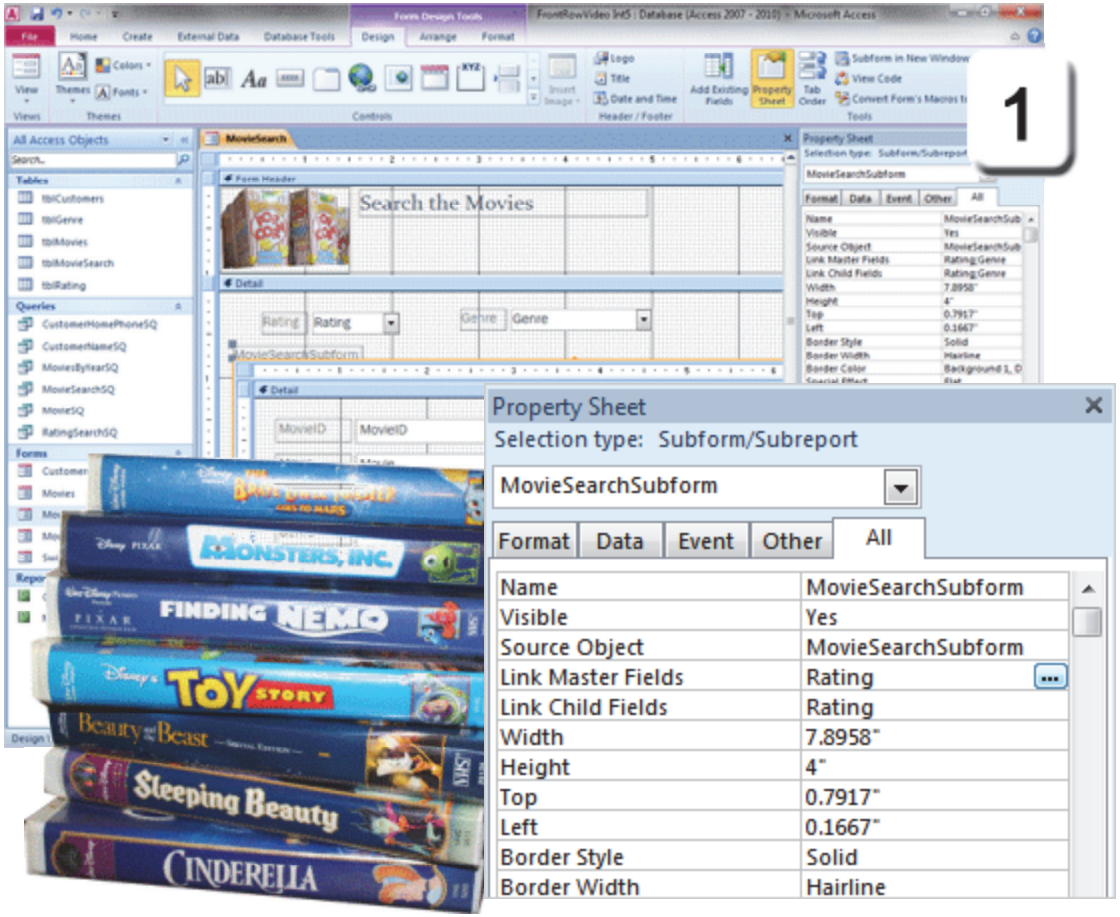
1. Try it: Select the Subform
Select the Subform. There should be a yellow border around it and the Property Sheet should indicate that a Subform/Subreport is selected.

Try This, Too: Review the Subform Properties
The Subform Properties include:
Name: MovieSearchSubform
Link Master: Rating.
Link Child: Rating.

Click on Rating. The **3-dot Builder** should be available, now.

Click on the 3-dot Builder. Keep going...

Form Design Tools->Design->Tools->Property Sheet



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: View the Property Sheet

Take Three

Form Design Tools->Design->Tools->Property Sheet

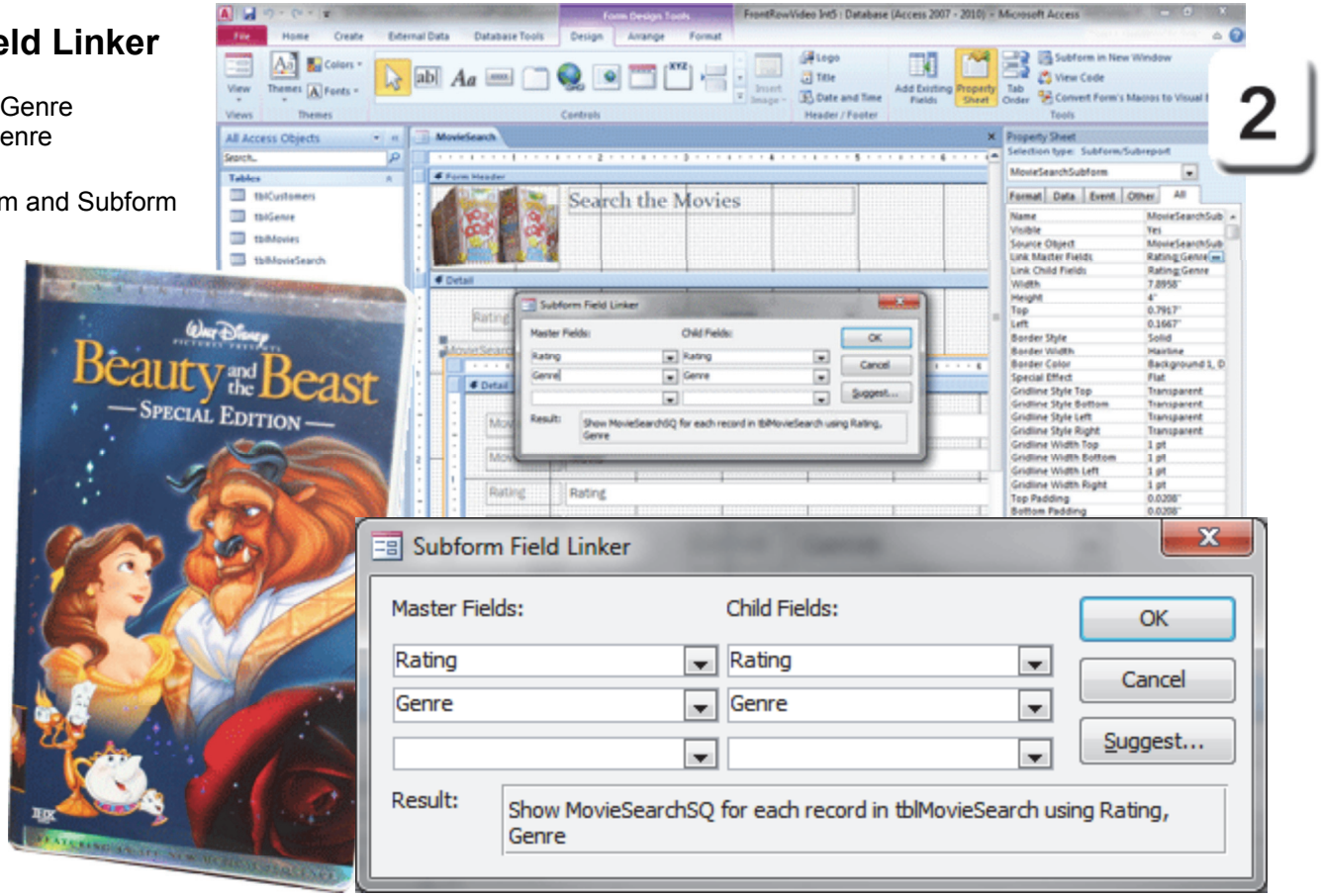
Use the Subform Field Linker

2. Try it: Add Another Field

Select another Master Field: Genre
Select another Child Field: Genre

What Do You See? The Form and Subform are linked by two text Fields:
Rating matches Rating
Genre matches Genre

Click **OK**. Keep going...



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Use the Property Sheet to Link the Subform

Take Three

Master and Child Links

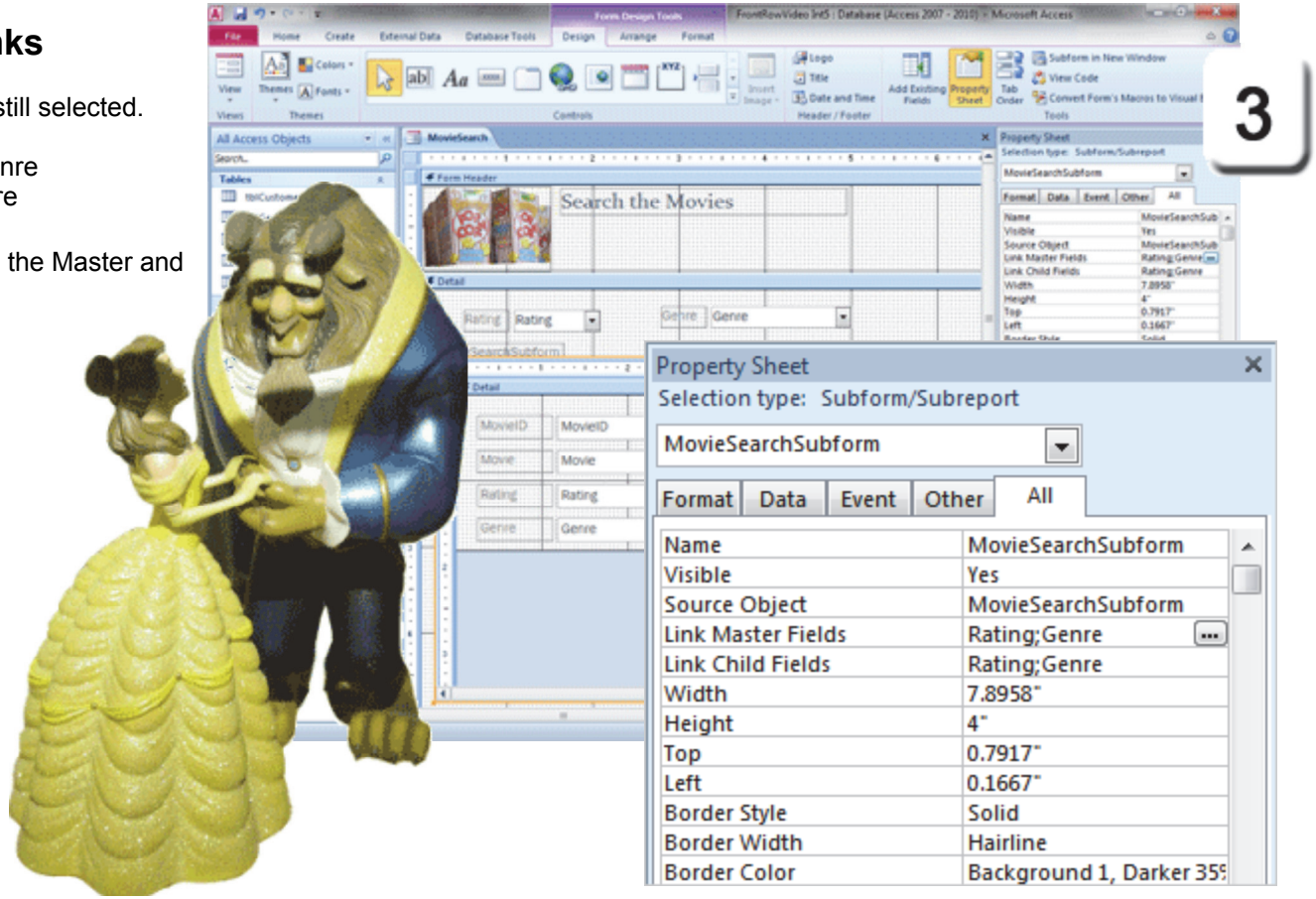
3. Try it: Review the Links

The MovieSearchSubform is still selected.
Review the Properties:
Link Master Fields: Rating;Genre
Link Child Fields: Rating;Genre

There are two Fields that Link the Master and the Child Form.

Keep going...

Form Design Tools->Design->Tools->Property Sheet



Exam 77-885: Microsoft Access 2010
2. Building Tables
2.1.1. Create tables in Design View

Take Three

Add an After Update Event

You can also use the Property Sheet to add an **After Update Event** to automatically Refresh the records in the Subform when a User selects a Genre from the Combo Box.

The Rating Combo has an Embedded Macro as an After Update Event. The Genre Combo will have an Event Procedure in Visual Basic.

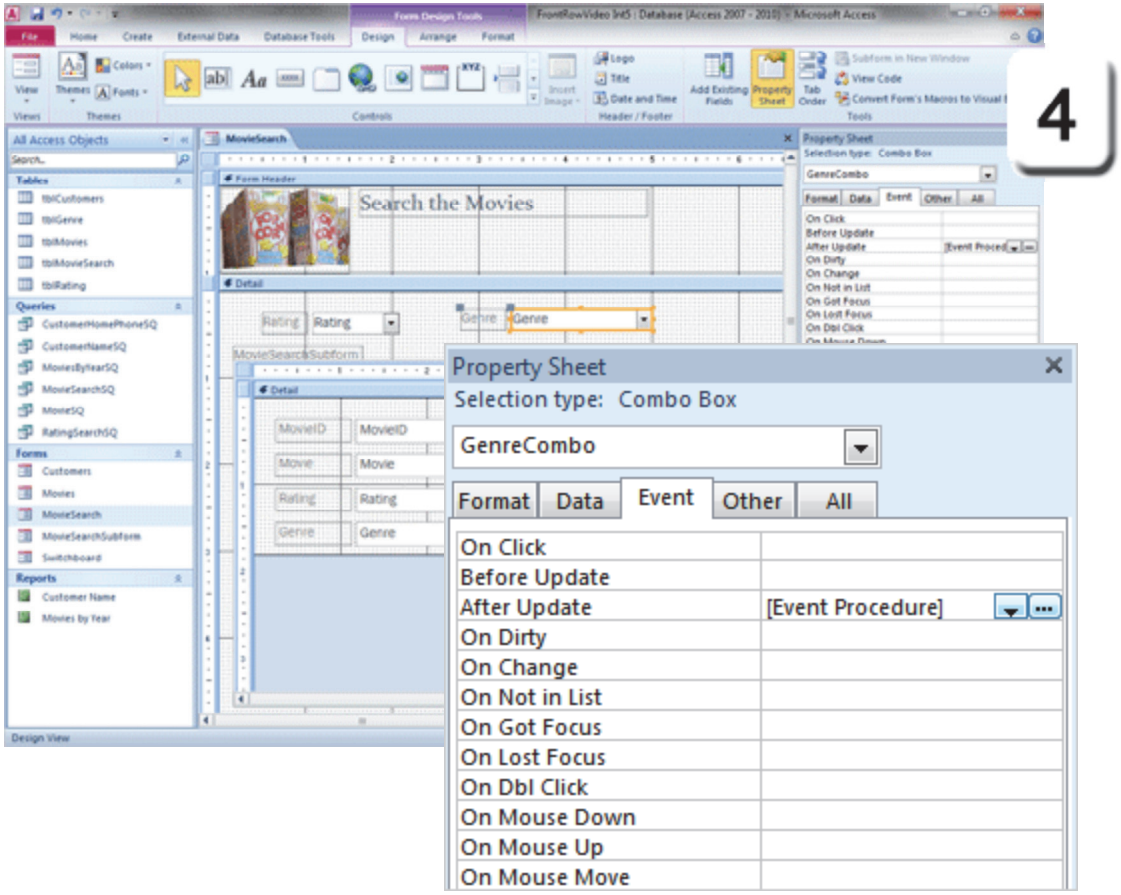
This example will be a simple introduction to the programming behind Microsoft Access. We will explore Microsoft Visual Basic for Applications (VBA) more in the next lesson.

4. Try it: Add an After Update Event
Select the Genre Combo Box Control.
Go to **Property Sheet->Event**.
Click on **After Update**.
Select: **Event Procedure**.

Click on the **3-Dot Builder**.

Keep going, please.

Form Design Tools->Design->Tools->Property Sheet



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: View Code

Hello, Microsoft Visual Basic!

Clicking on the 3-Dot Builder should open a new program: Microsoft Visual Basic for Applications. VBA is a programming language.

5. Try it: Review the Code

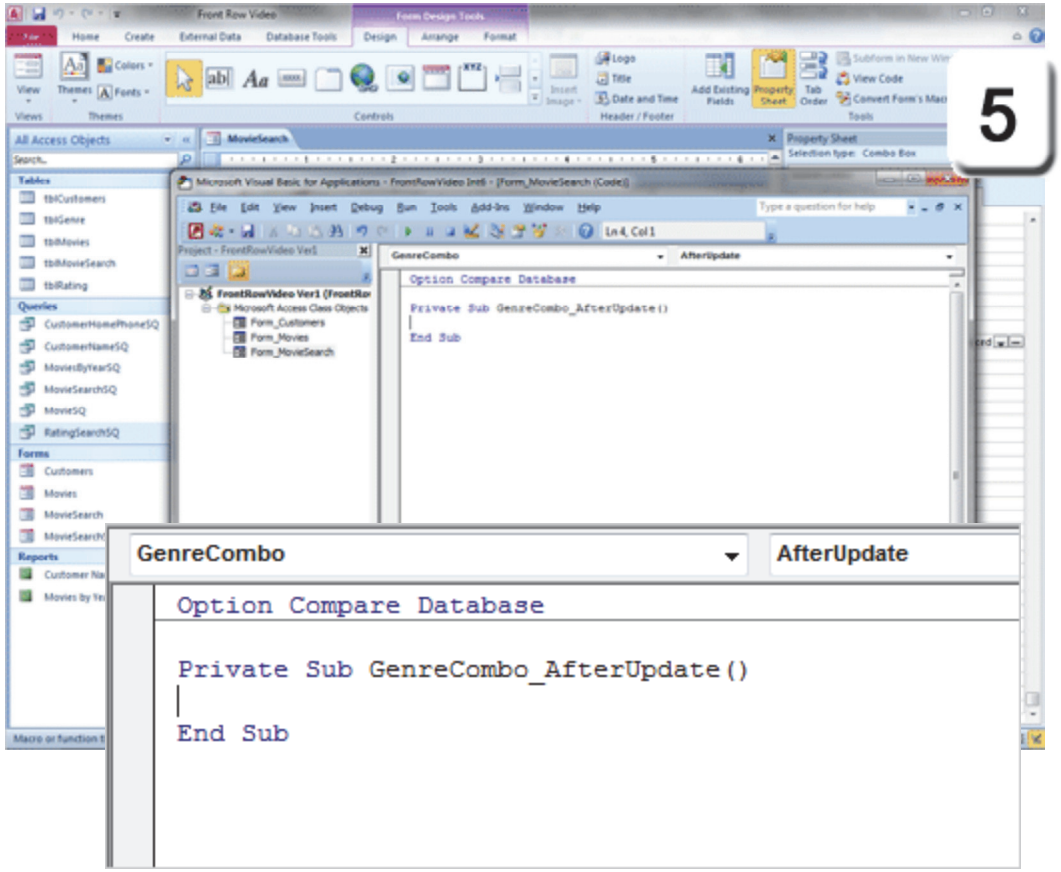
The Visual Basic editor lists the objects on the left side and the code on the right in the big pane.

Form_MovieSearch is selected.
There is an AfterUpdate Event for the GenreCombo.

The code begins with: Private Sub, where Sub means Subroutine.

The code ends with: End Sub.

Keep going...



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: View Code

Edit the Code

The command to Refresh the Records is the same in Visual Basic as it is in the Macro that we added to the Rating Combo.

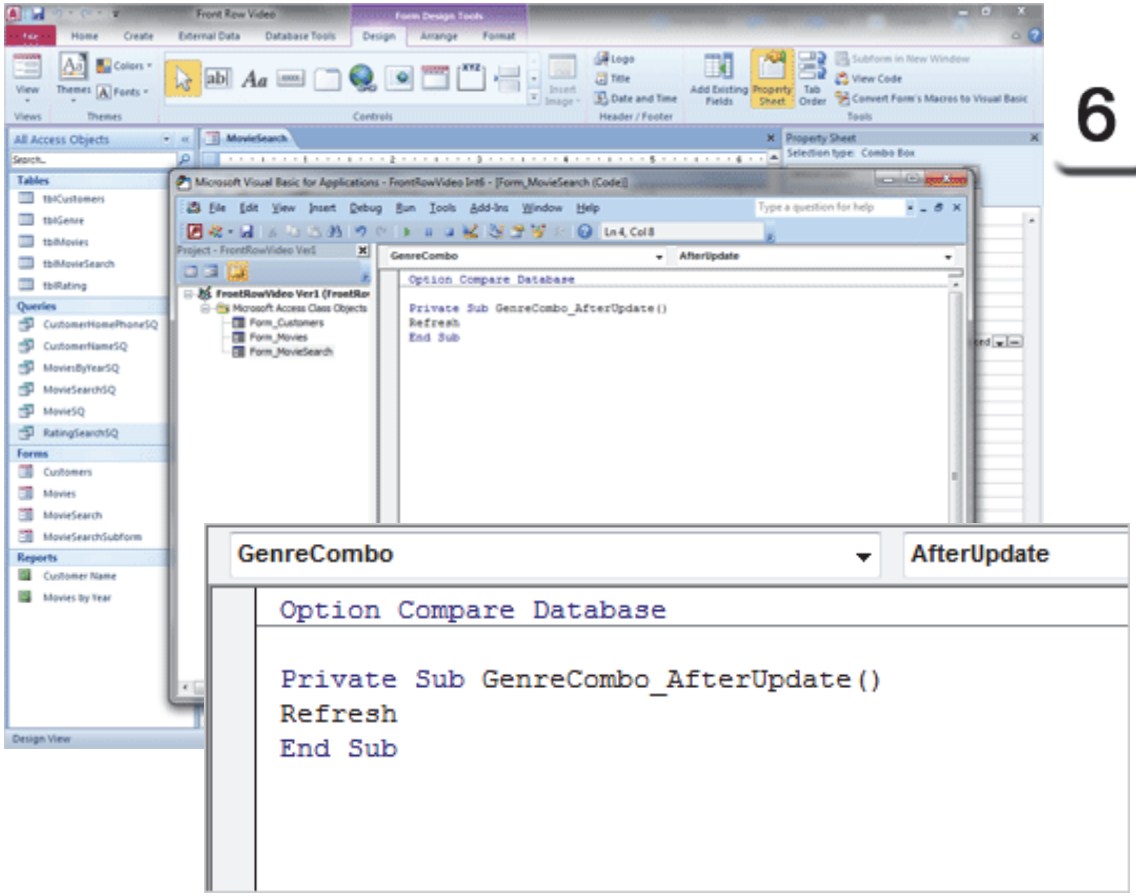
6. Try it: Edit the Code
Type: Refresh

Do This, Now: Save the Programming
Go to **File->Save**.

That's it. Now you are a *real* programmer.

Close the VBA Window. You should return to your Mighty Access database.

Keep going...



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: View Code

Take Three

Test the Form

Well, does it work? The only way you will know is to enter data into the Form as any User would: in Form View.

Before You Begin: Change the View
Go to **Form Design Tools->View.**
Select a **View: Form View.**

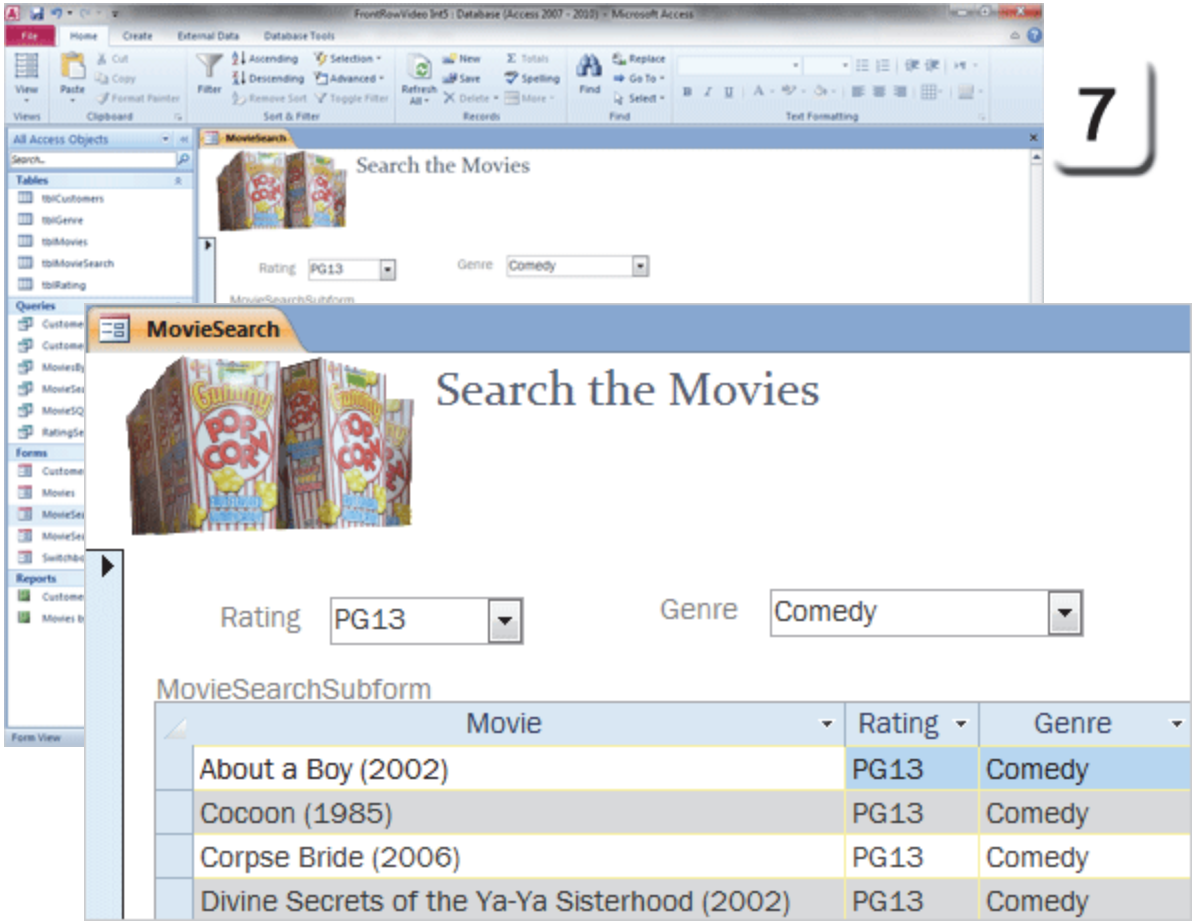
7. Try it: Test the Form
Select a Rating: PG13
Select a Genre: Comedy.

What Do You See? The two Combo Boxes filter the movie list.

What Else Do You See? The movies in the Subform automatically update whenever a Rating or Genre is selected.

Well done!

Form Design Tools->Views->View->Form View



Take Three

Cool Combo Boxes

This lesson created a Genre Combo Box that looks up the Rating on the MovieSearch Form. The two Combo Boxes are **synchronized** because the first one sets the criteria for the second. We also added a little bit of code to Refresh the movies in the Subform automatically after the Rating or Genre change.

Well, I'd say you done good. For this one, you can get the whole row of cookies if you wish.

Field:	Genre	Rating
Table:	tblGenre	tblRating
Total:	Group By	Group By
Sort:	Ascending	
Show:	☑	☑
Criteria:	Is Not Null	[Forms]![MovieSearch]![RatingCombo]
or:		

Practice Activities

Lesson 5: Form and Subform Design, part 3

Try This: Do the following steps

1. Open the Brown Bag Lunch database you have been working on.

Or, you may download **BBL Int ver5.accdb**.

2. Create a new Table. Add the following fields and data types:
SpecialtyID, AutoNumber
Specialty, Text
Make SpecialtyID the Primary Key.

3. Save the Table as tblSpecialty.

4. Go to Datasheet View and add the following to the Specialty column:
Gluten Free, Vegetarian, Low-Fat.
Save and close tblSpecialty.

5. Using the Query Design command, create a new Query.

Using the Show Table dialogue box, add the following Tables: tblProducts, tblType, and tblSpecialty. Close the Show Table dialogue box.

6. Join the Tables. Select field Type from tblProducts and drag it field Type in tblType. Then, select the Specialty Field in tblProducts and drag it to the Specialty field in tblSpecialty.

7. In the QBE grid, add the following fields to the Query:
from tblSpecialty: Specialty
from tblType: Type
from tblProduct: Item

8. Sort the Specialty Field in Ascending order

9. Save the Query as TypeSearchSQ. Run the Query to test it.

10. Return to Design View. Delete the Field: Item

11. Use the Show/Hide Totals command. Keep the setting “Group By”

12. Add the Criteria “Is Not Null” for the Specialty Field.

13. In the Criteria for the Type Field, right click and select Build. Select the current Database, the Form: Product Search, and the Control: Type Combo. Double Click the TypeCombo to add it to the Expression.

Save and close the Query.

14. Open the Product Search Form in Design View. Add a new Combo Box in the Detail section of the Form.

15. In the Combo Box Wizard, choose to get the values from TypeSearchSQ. Add the available Field: Specialty. Sort by Specialty in Ascending order.

16. Store the value in the Specialty Field.

17. Add the Label Specialty and Finish the Wizard.

16. Review the Property Sheet and rename the Combo Box as SpecialtyCombo. Save the Form.

17. Select the Subform. In the Property Sheet, edit the option for Link Master Field. Add a second field: Specialty to link.

18. Select the Specialty Combo Box. Add an event: After Update. Select an Event Procedure, then use the 3-Dot Builder to edit the Event.

19. Using the Visual Basic editor, add the code Refresh. Save and close the Macro.

20. Return to Form View and test the form. Change the Type to Snacks. Select an option in the Specialty box. Change the Type to Sandwich and select Gluten Free. What do you see?

21. Save the database.

Test Yourself

1. You can have a Table and a Form both open in Design View at the same time.
A. True
B. False
Tip: Intermediate Access, page 125

2. A Query can use more than one Table for Data.
A. True
B. False
Tip: Intermediate Access, page 127

3. Which of the following is true?
(Give all correct answers.)
A. Joining Tables creates a relationship between them
B. Joining Tables is done by matching fields on different Tables that have the same data type
Tip: Intermediate Access, page 128

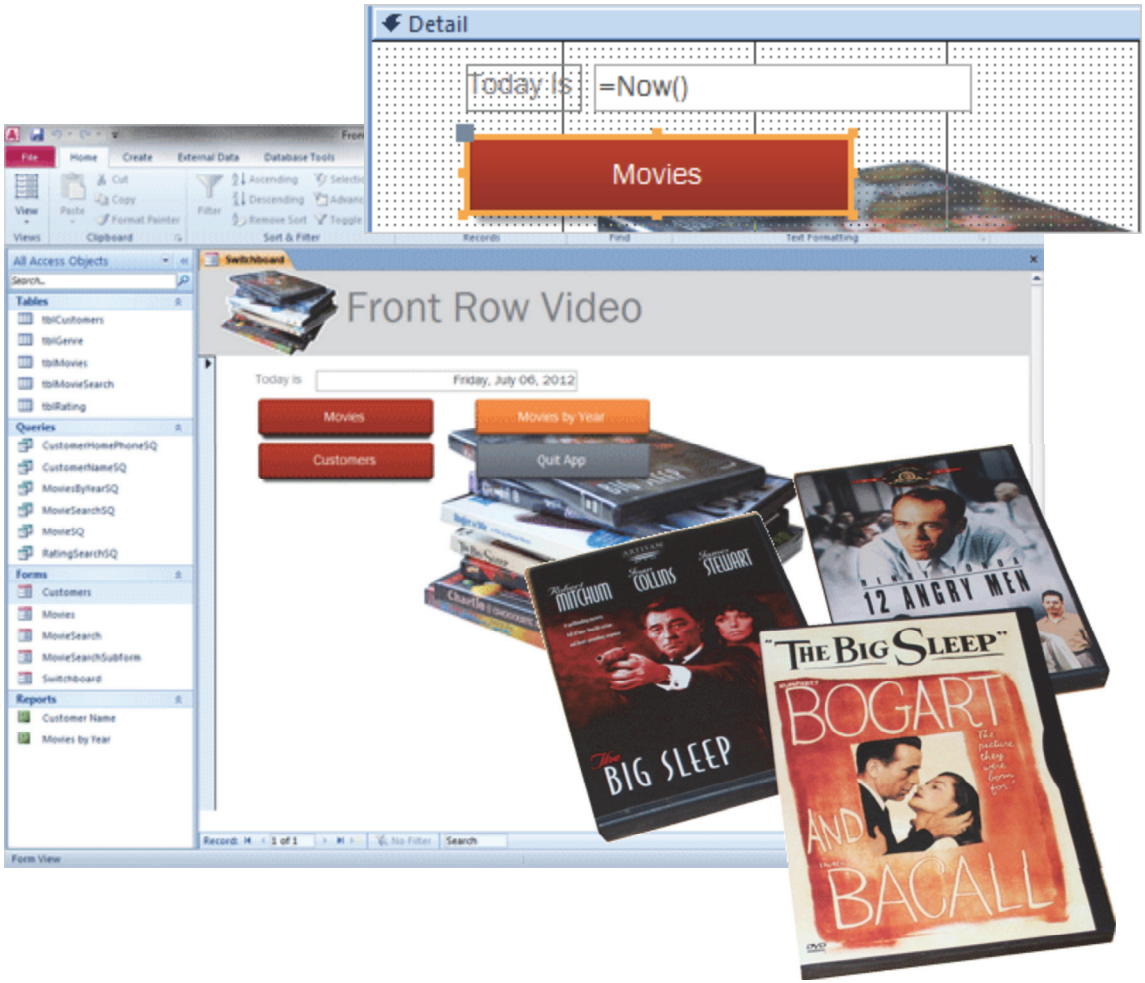
4. Which of the following are columns in the Expression Builder?
(Give all correct answers.)
A. Expression Elements
B. Expression Categories
C. Expression Values
Tip: Intermediate Access, page 134

5. A Form and Subform can be linked by two Fields.
A. True
B. False
Tip: Intermediate Access, page 145

Take One

Access 2010: Designing for Users

Meet the Stars



Intermediate Access Objectives

In this lesson, you will learn how to:

1. Create a Blank Form and edit it in Design View to include a Logo, Background Image and Text Box.
2. Use the Command Button Wizard to create a Embedded Macro that opens another Form.
3. Edit the Embedded Macro and test the code.
4. Apply Quick Styles to the Controls in a Form
5. Convert the Macros to Visual Basic.

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Lesson 6 : Meet the Stars

1. Readings
Read Lesson 6 in the Beginning Access guide, page 153-186.

Project
Create a switchboard: an Unbound Form with Command Buttons that open Forms.

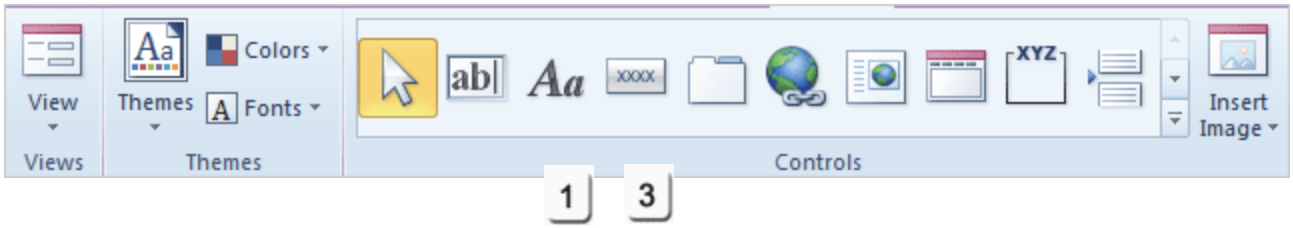
Downloads
FrontRowVideo Int6.accdb
popcorn1.gif, popcorn2.gif, popcorn3.gif, popcorn4.gif, movies1.gif.

BBL Int ver6.accdb
BB Customers Logo.jpg
Brown Bag Logo.jpg
Lunch1.gif, Lunch2.gif, Lunch3.gif, Lunch4.gif

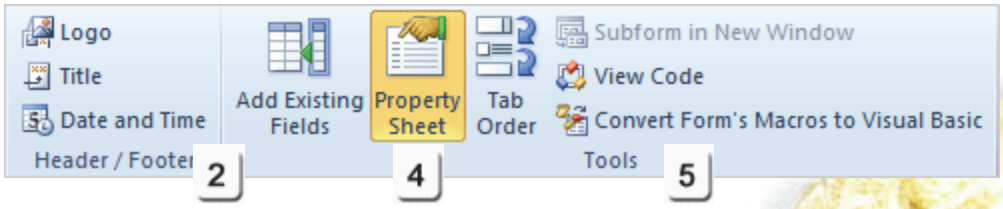
2. Practice
Do the Practice Activity on page 187.

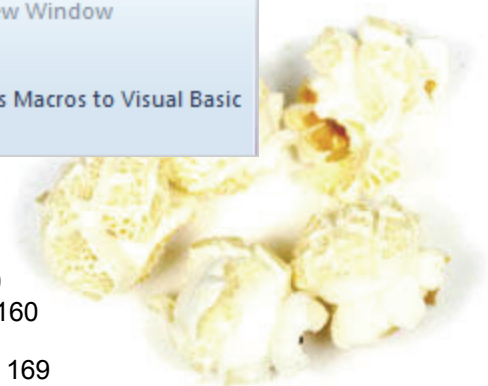
3. Assessment
Review the Test questions on page 188.

Form Design Tools->Design Ribbon



Form Design Tools->Design Ribbon



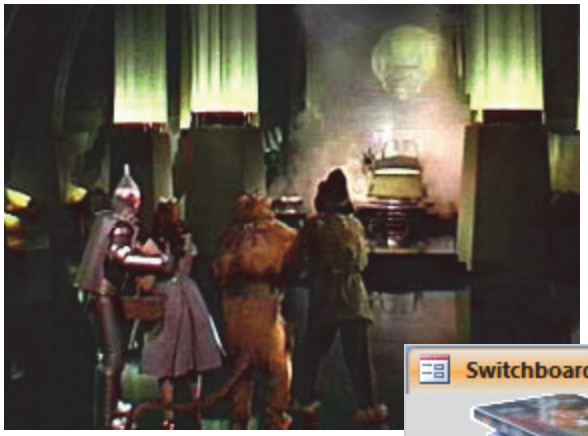


Menu Maps

From the **Form Design Tools**->**Design Ribbon**
1. Form Design Tools ->Design->Controls->Textbox, page 159
2. Form Design Tools ->Design->Header Footer->Logo, page 160
3. Form Design Tools ->Design->Controls->Button, page 163
4. Form Design Tools ->Design->Tools->Property Sheet, page 169
5. Form Design Tools ->Design->Tools->Convert Form's Macros to Visual Basic, page 181

From the **Form Design Tools->Format Ribbon**
1. Form Design Tools ->Format ->Font, page 161
2. Form Design Tools ->Format ->Background Image, page 162
3. Form Design Tools ->Format->Control Formatting->Quick Styles, page 170

"Pay No Attention to the Man Behind the Curtain!"



A commercial database never reveals the Form, Table, and Query designs. That would be like putting on a play and letting the audience see the backstage scaffolding, ropes and ladders. It simply isn't done. Allowing Users to edit the data directly in a Table is also a security risk.

Good databases open with an option menu, or **switchboard**. Some menus are simple: a list of tasks. Others use the option menu to help the users navigate. In this lesson, we will create a switchboard and learn some simple programming. In the next lesson, we will hide the database window and program what the User sees when the database opens.

Example of a Switchboard Form in Microsoft Office Access 2010

Take One

What Are the Objectives?

A **Switchboard** is a Form with **Command Buttons**. This Form does not need a Table or a Record Source because it is not editing any data. So, it is considered **Unbound**. The Switchboard is simply a menu or map of what is in the database.

A Command Button is a Shape that responds to an Event. One example is the On Click Event. When a User clicks a button a Form or Report will open.

Create an Unbound Form
Add Labels and Logos

Add Command Buttons
To open two Forms: Movies, Customers.
To open one Report: Movies by Year

Add Buttons to Return to the Switchboard
From the Movies and Customers Form.

That's the scope of this lesson.

Example of a Switchboard Form in Microsoft Office Access 2010

Take One

Before You Begin

Before You Begin: Open the Sample Database
Go to **Start -> All Programs ->Microsoft Office.** Click on **Microsoft Office Access 2010**.

Access will prompt you to open a database. This lesson uses the database that was programmed in the previous lesson. You can continue with the same database if you wish.

The **FrontRowVideo Int6.accdb** database has: Five Tables: tblCustomers, tblGenre, tblMovies, tblMovieSearch and tblRating.

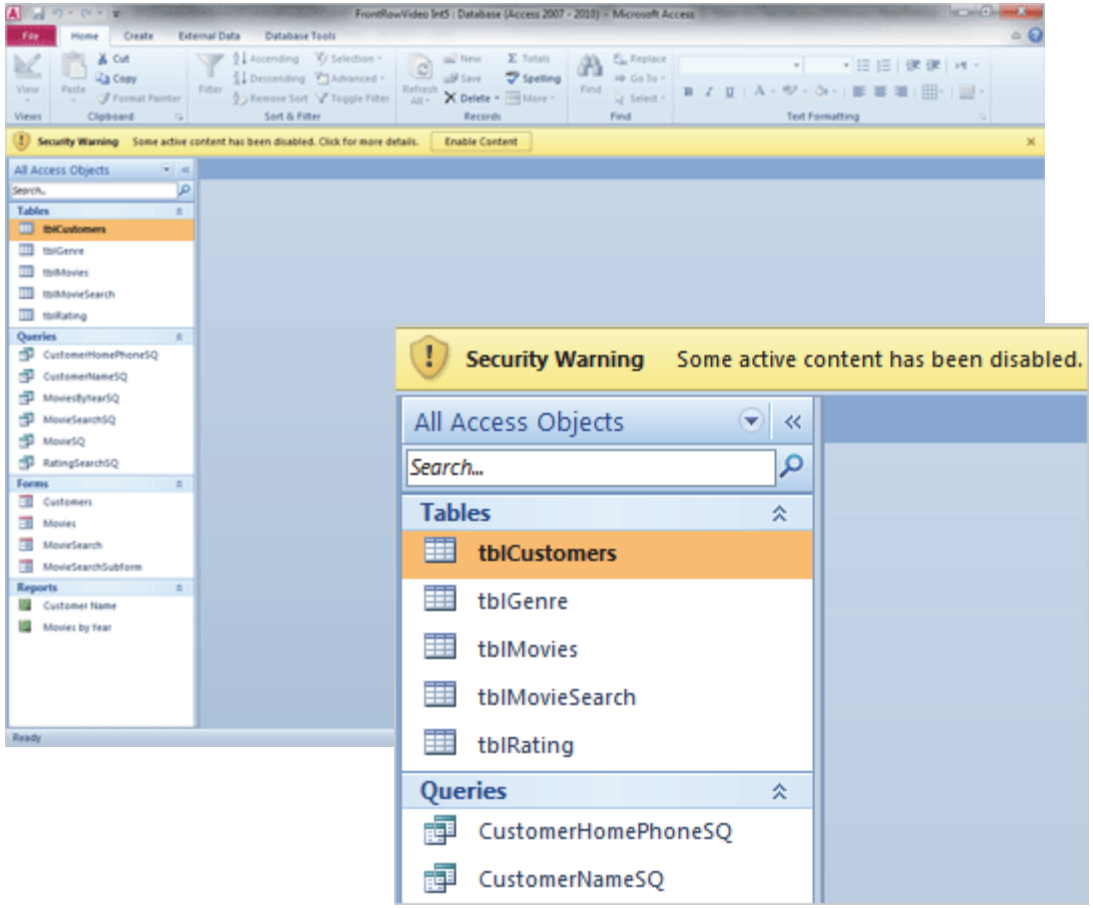
Six Queries: CustomerHomePhoneSQ, CustomerNameSQ, MoviesByYearSQ, MovieSQ,, MovieSearchSQ and RatingSearchSQ.

Four Forms: Customers, Movies, MovieSearch and MovieSearchSubform.

Two Reports: Movies by Year, Customer Name. Keep going...

Memo to Self: Click **Enable Content** if you see the Security Warning.

Start -> All Programs ->Microsoft Office-> Microsoft Office Access 2010



Take One

Create a New, Blank Form

The Switchboard Form does not save any data, so it does not have a Table or Query for the Record Source.

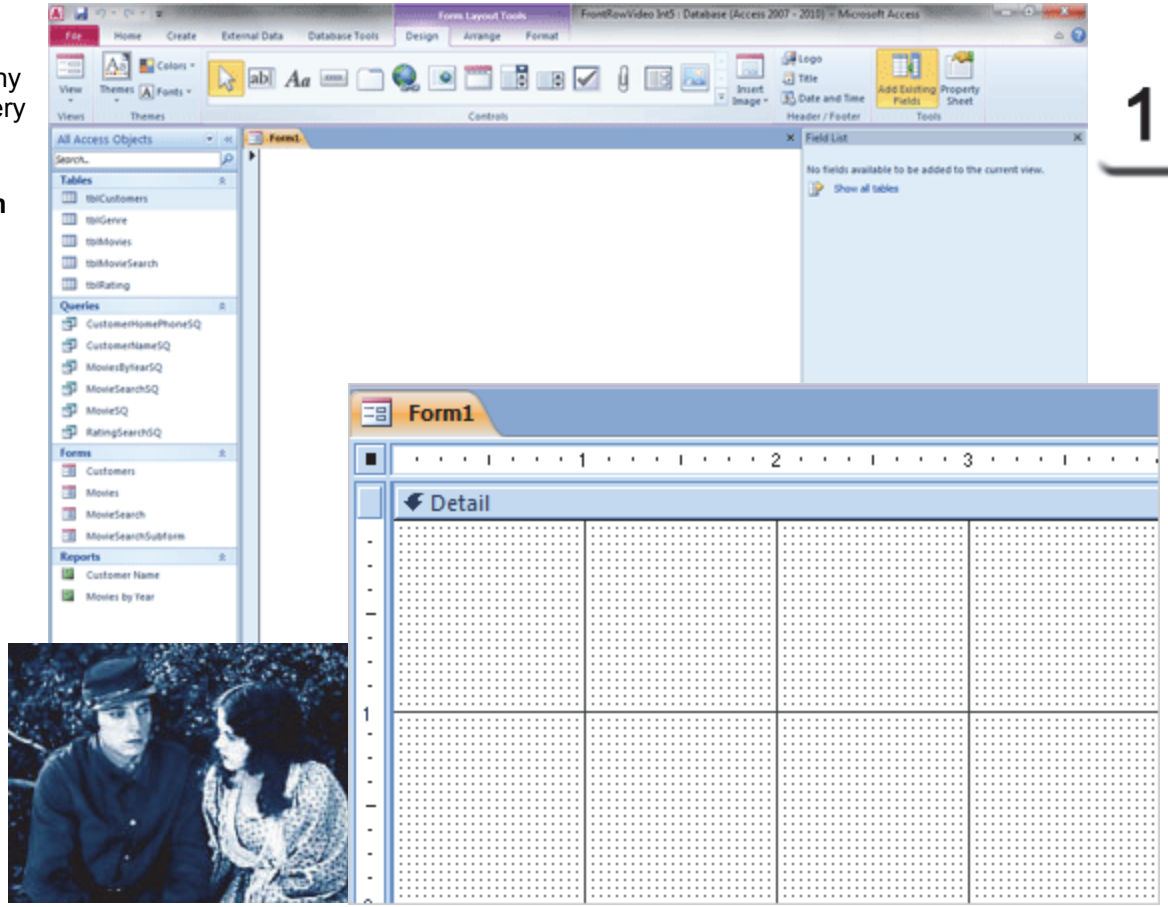
1. Try This: Create a New, Blank Form
Go to **Create->Forms->Blank Form**

What Do You See? A new, blank Form should open in Form View.

Try This, Too: Change the View
Go to **Home->Views**.
Select a **View: Design View**.

Keep going...

Create->Forms->Blank Form



1

Exam 77-885: Microsoft Access 2010
3. Building Forms
3.1. Create forms: Create a Blank Form

Take One

Switchboard: Add a Textbox

2. Try it: Add a Textbox
Go to **Form Design Tools ->Design->Controls.**
Select a **Control: Textbox.**
Click on the **Form Detail**.

What Do You See? There should be a new, unbound Textbox on the Form.

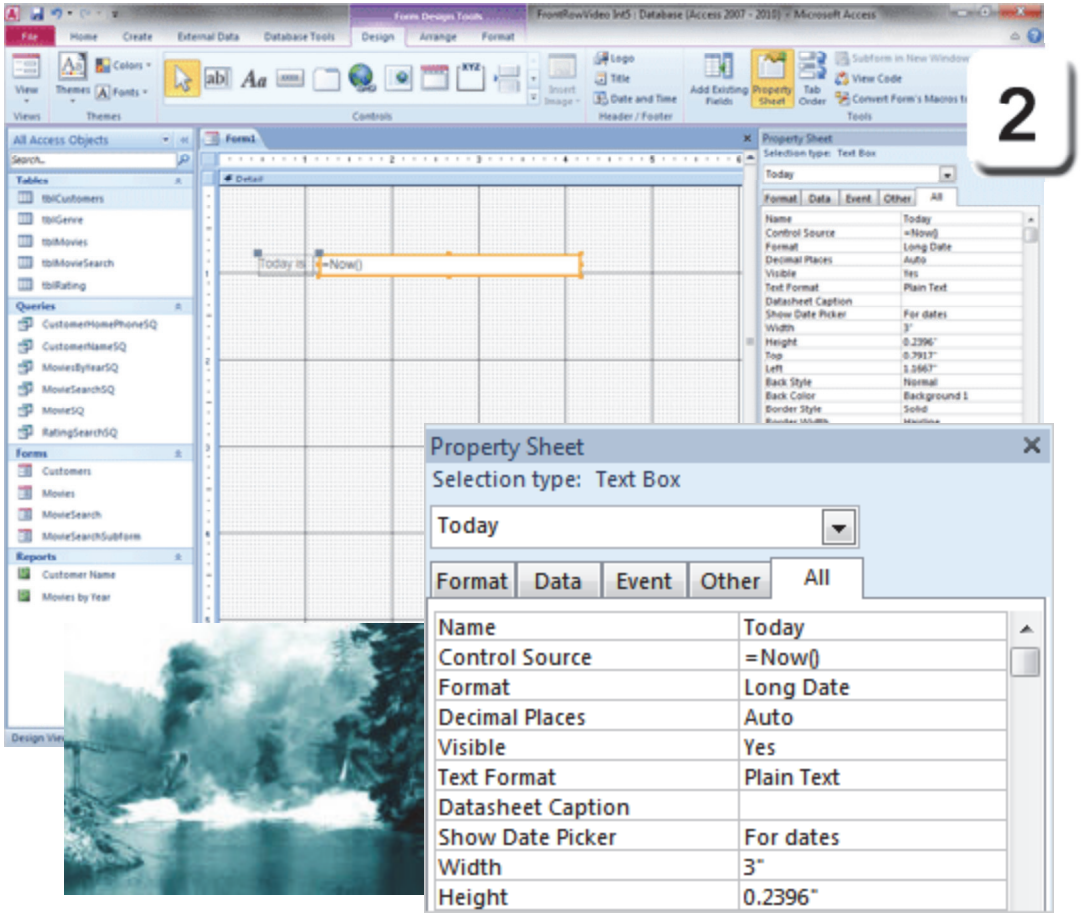
Try This, Too: Edit the Textbox Properties
Select the Textbox.
Go to **Form Design Tools ->Design.**
Go to **Tools->Property Sheet.**

Edit the Textbox Properties:
Name: Today
Control Source: =Now()
Format: Long Date
Width: 3"

Edit the Label Properties:
Select the Label.
Edit the Caption: Today is

Keep going...

Form Design Tools ->Design->Controls->Textbox



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Add a Textbox

Take One

Switchboard: Add a Logo

3. Try it: Add a Logo
Go to **Form Design Tools ->Design.**
Go to **Header Footer->Logo**.

You will be prompted to Browse for an image.
Go to the Documents folder.
Select an image: movies1.gif

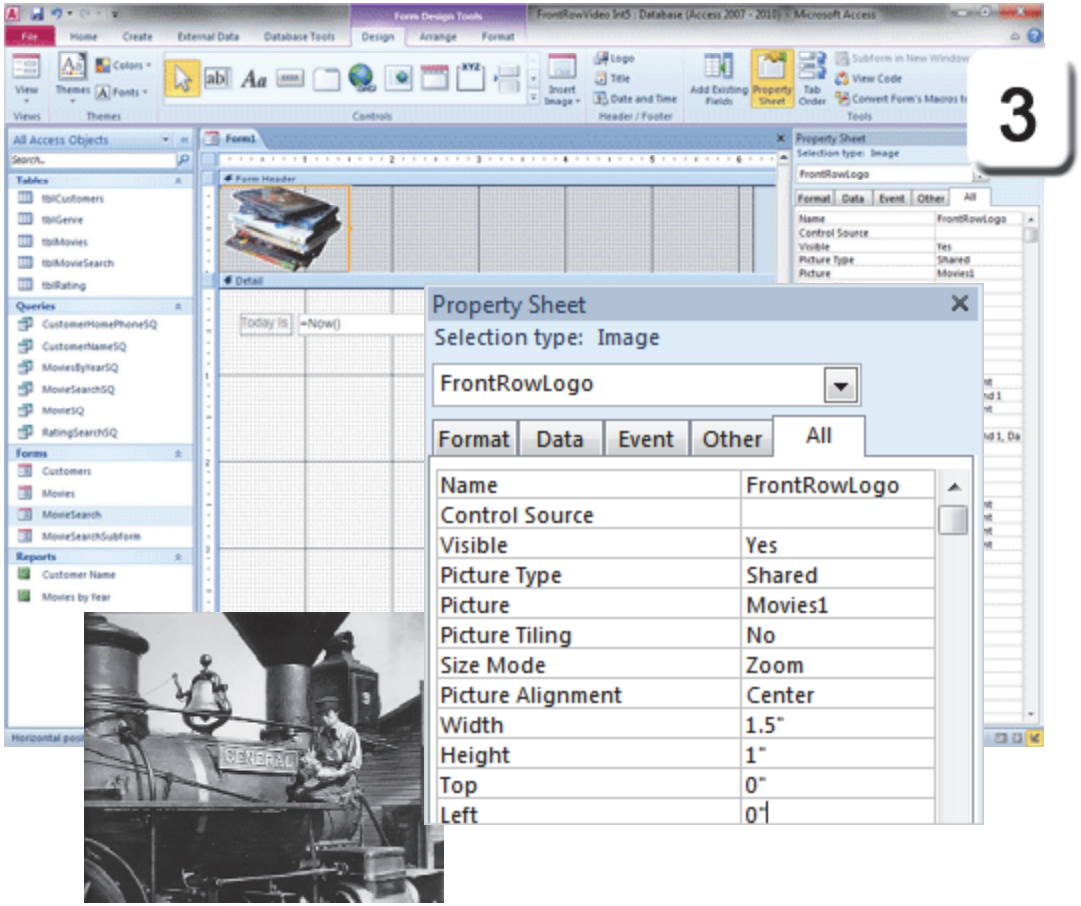
What Do You See? There should be a new logo image in the Form Header.

Try This, Too: Edit the Textbox Properties
Select the movie image.

Edit the Image Properties:
Name: FrontRowLogo
Size Mode: Zoom
Picture Alignment: Center
Width: 1.5"
Height: 1"
Top: 0"
Left: 0"

Keep going...

Form Design Tools ->Design->Header Footer->Logo



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.1. Create forms: Add a Logo

Take One

Switchboard: Add a Label

4. Try it: Add a Label

Go to **Form Design Tools ->Design->Controls.**
Select a **Control: Label.**
Click on the Form Header.
Type: Front Row Vide

What Do You See? There should be a new Label on the Form Header.

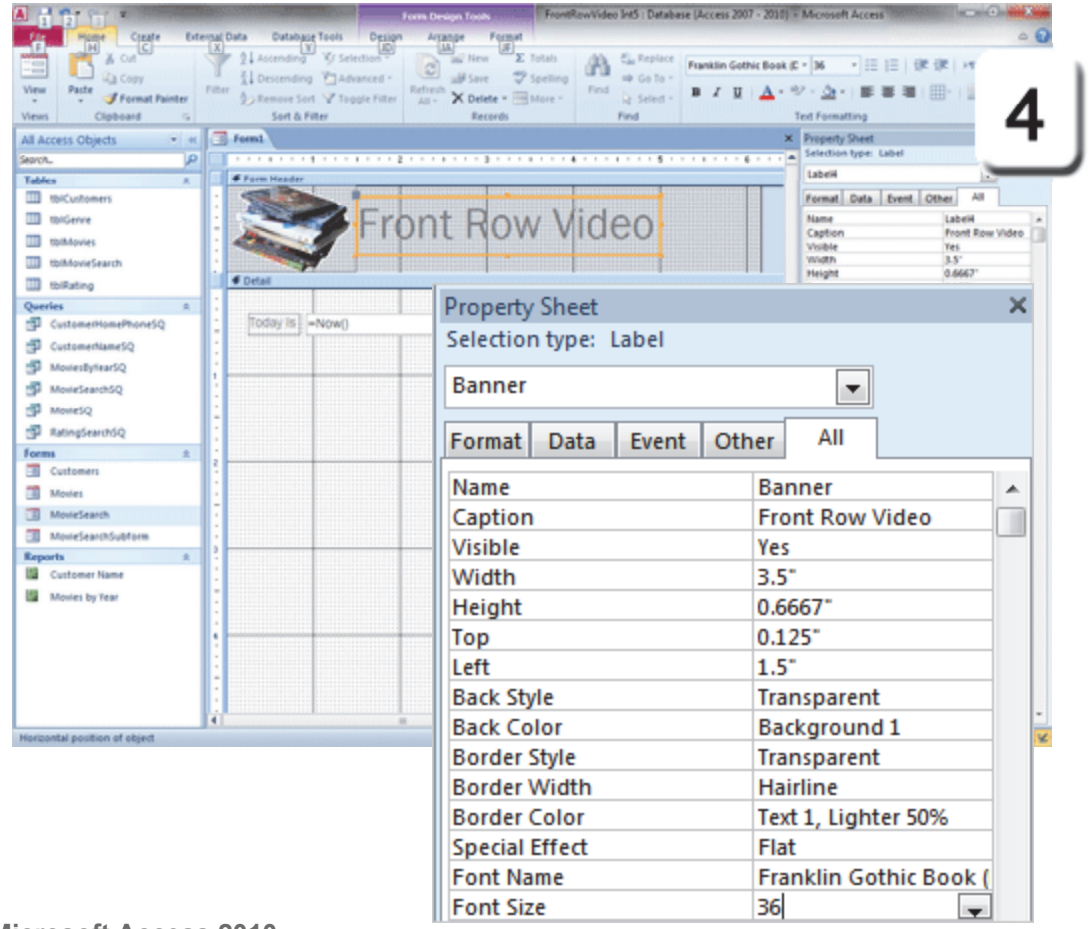
Try This, Too: Edit the Label Properties

The Label is still selected.
Go to **Form Design Tools ->Design->Tools.**
Click on **Property Sheet** and edit the following:
Name: Banner
Caption: Front Row Video
Width: 3.5"
Height: 0.6667"
Top: 0.125"
Left: 1.5"
Font Size: 36

What Else Do You See? You can format the Label Font color, size and alignment with the Format Ribbon or the Property Sheet if you wish.

Keep going...

Form Design Tools ->Design->Tools->Property Sheet



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.1. Create forms: Format a Label

Take One

Apply Background Image

5. Try it: Apply Background Image
Go to **Form Design Tools ->Format.**
Click on **Background Image.**

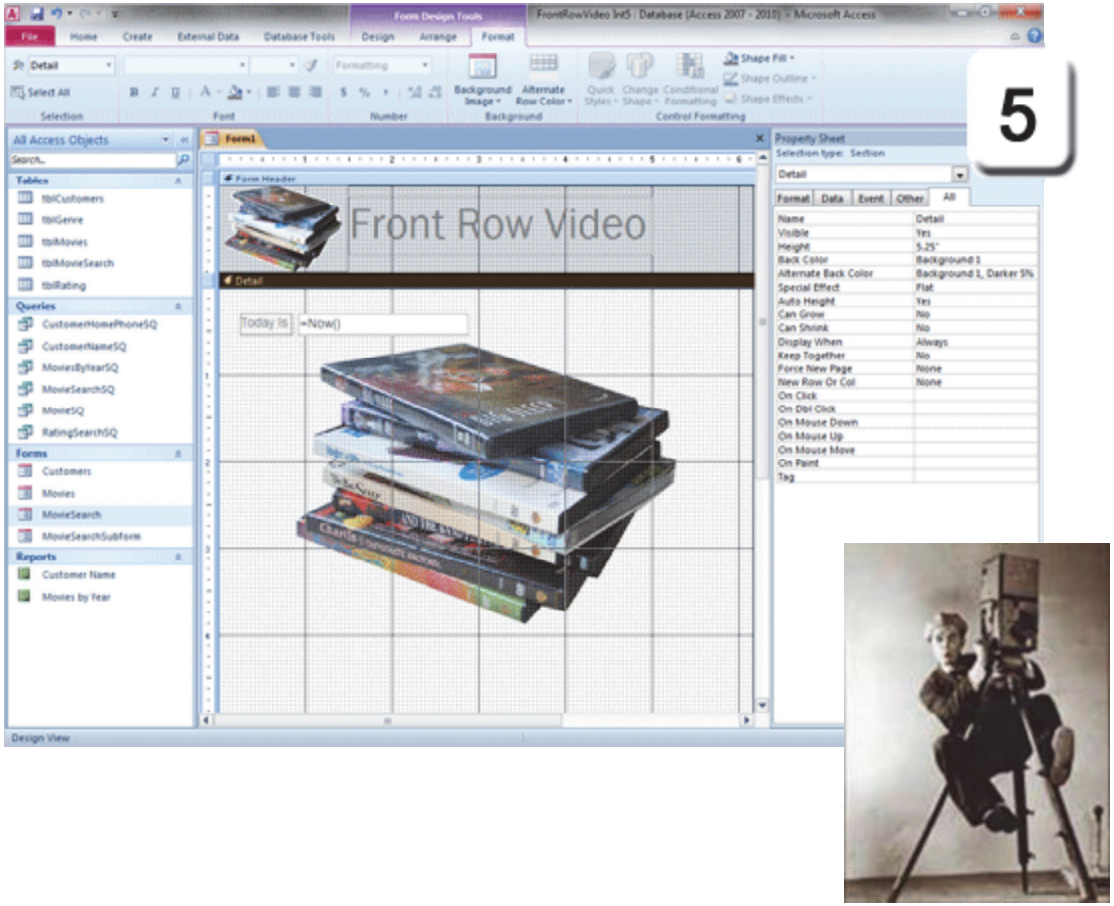
You will be prompted to Browse for an image.
Go to the Documents folder.
Select an image: movies1.gif
Click **OK**.

What Do You See? There should be a picture of movies in the background of the Form Detail.

Do This, Now: Save the Form
Go to **File->Save**.
Enter the name: **Switchboard.**

So far, so good.

Form Design Tools ->Format ->Background Image



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.4. Apply Form Format options: Apply Background Image

Take One

Add a Command Button

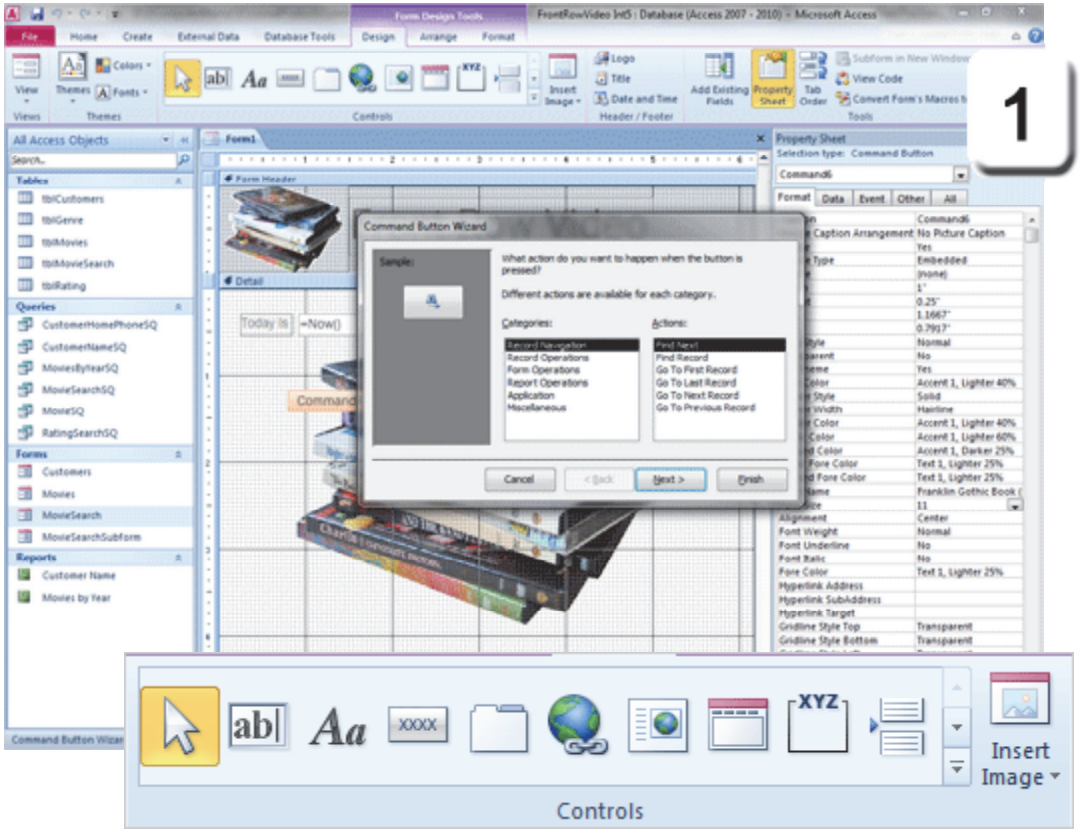
A **Command Button** does an action: something opens, calculates or prints when you click the button. Our first button will open the Movies Form.

1. Try it: Add a Command Button
Go to **Form Design Tools ->Design->Controls.**
Select a **Control: Button.**
Click on the **Form Detail.**

What Do You See? The **Command Button Wizard** should begin.

Keep going..., the show's just gettin' good.

Form Design Tools ->Design->Controls->Button



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.1. Create forms: Create Navigation Forms

Take One

Form Design Tools ->Design->Controls->Button

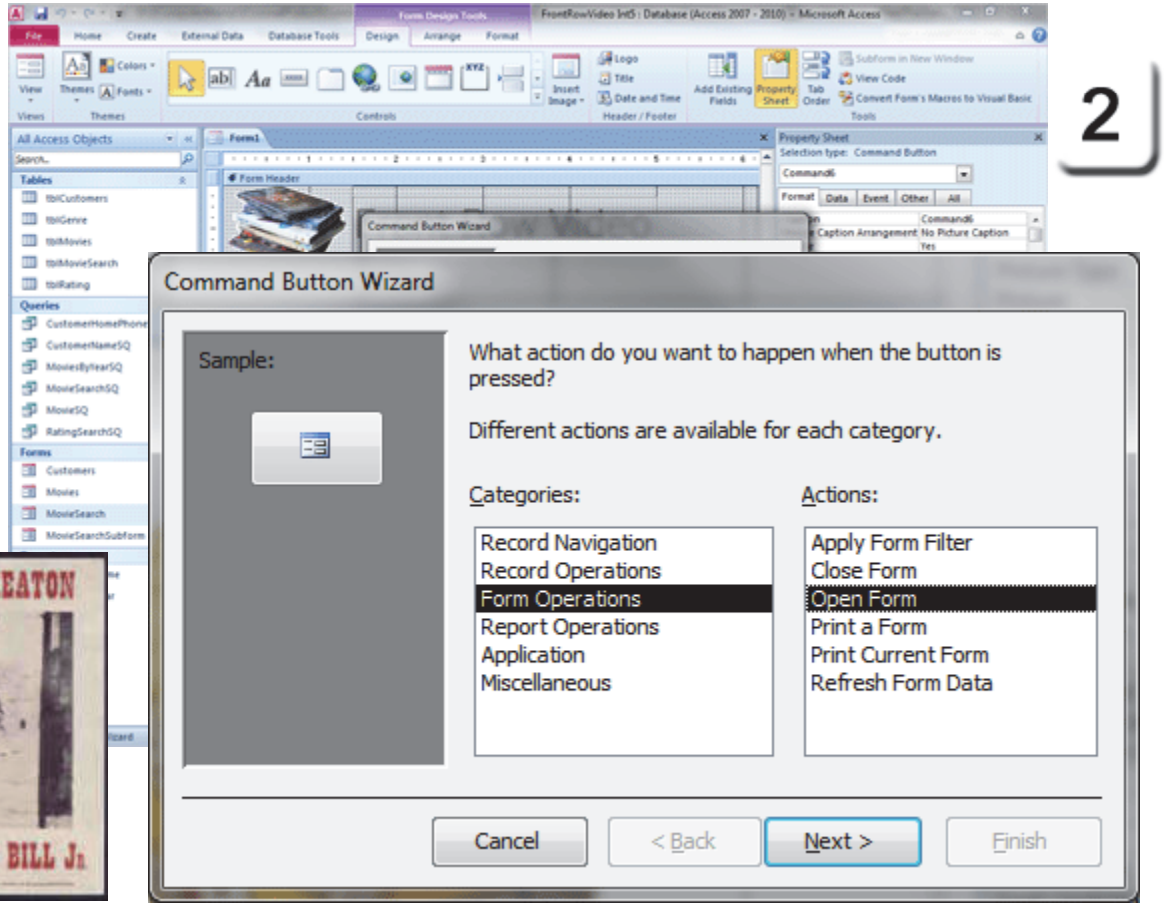
Command Button: Action

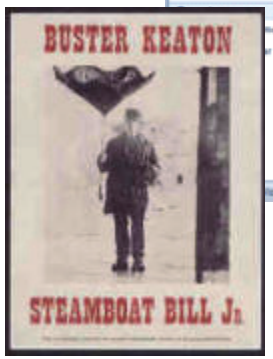
A Command Button can do many Actions.
The Categories include:
Record Navigation
Record Operations
Form Operations
Report Operations
Application
Miscellaneous

Each Category has several Actions.

2. Try it: Program the Action
Select a **Category**: Form Operations
Select an **Action**: Open Form

Click **Next**. Keep going...





2

Exam 77-885: Microsoft Access 2010
3. Building Forms
3.1. Create forms: Create Navigation Forms

Take One

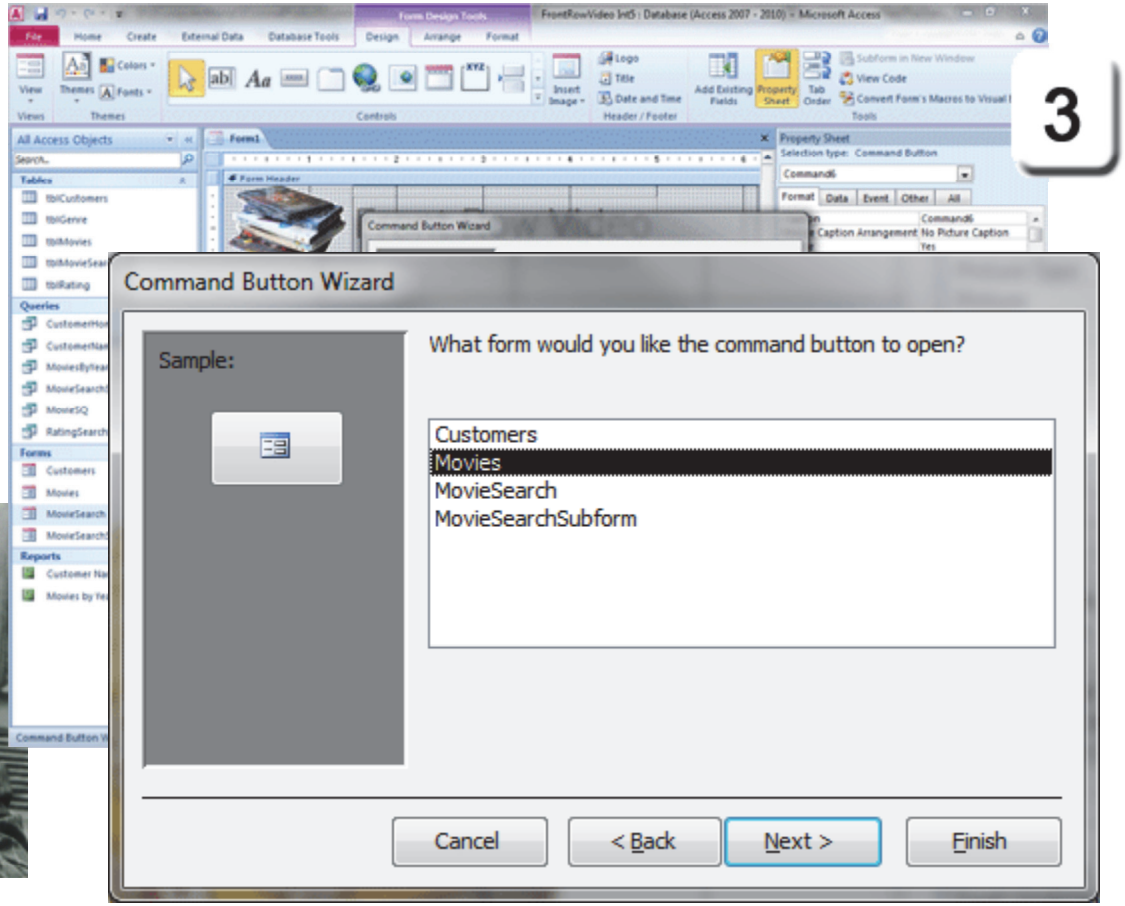
Command Button: Form

3. Try it: Select Which Form Should Open

Select a Form: Movies

Click **Next**. Keep going...

Form Design Tools ->Design->Controls->Button



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.1. Create forms: Create Navigation Forms

Take One

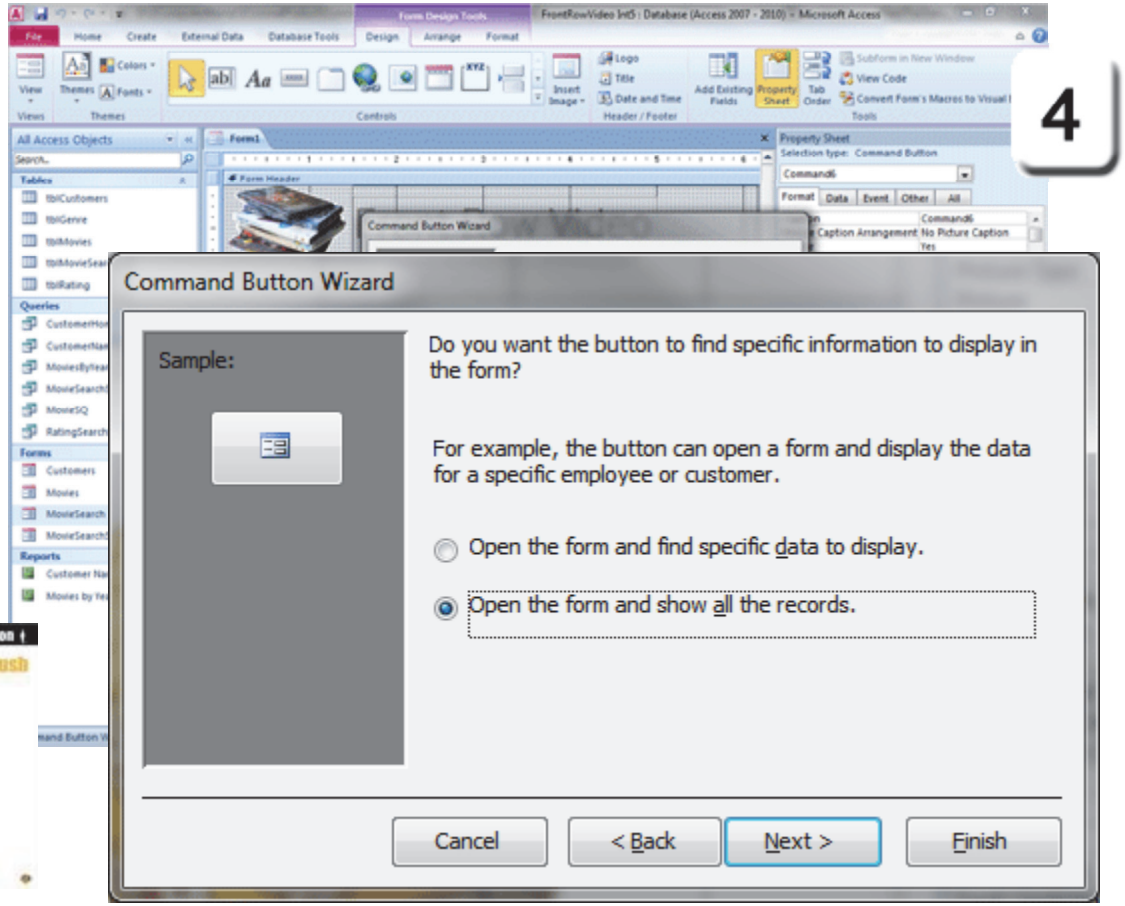
Command Button: Record

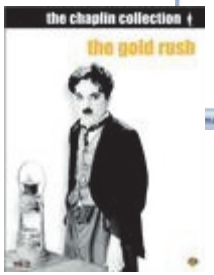
When you open a Form, you can show all of the Records, or only the one(s) that match your criteria. This Button will open the Movies Form and show all of the records in tblMovies.

4. Try it: Select the Records
Click: Open the form and show all the records.

Click **Next**. Keep going...!

Form Design Tools ->Design->Controls->Button





Exam 77-885: Microsoft Access 2010
3. Building Forms
3.1. Create forms: Create Navigation Forms

Take One

Command Button: Text

The Command Button Wizard gives you the option to use Text or Pictures for the Command Button. It is an interesting question. Many Users navigate by images.

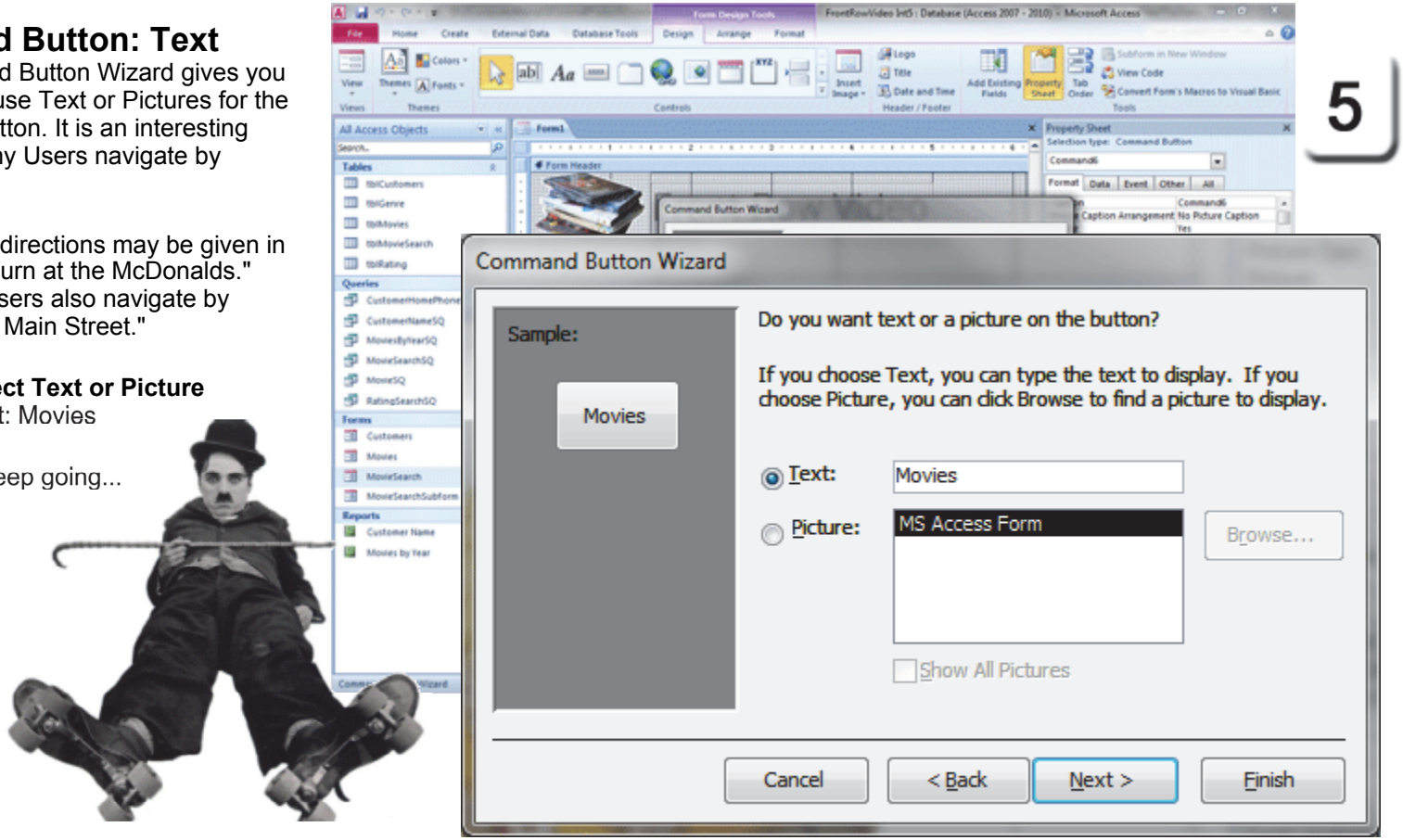
For example, directions may be given in landmarks. "Turn at the McDonalds." Many other Users also navigate by names: Go to Main Street."

5. Try it: Select Text or Picture
Enter the Text: Movies

Click **Next**. Keep going...

Form Design Tools ->Design->Controls->Button

5



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.1. Create forms: Create Navigation Forms

Take One

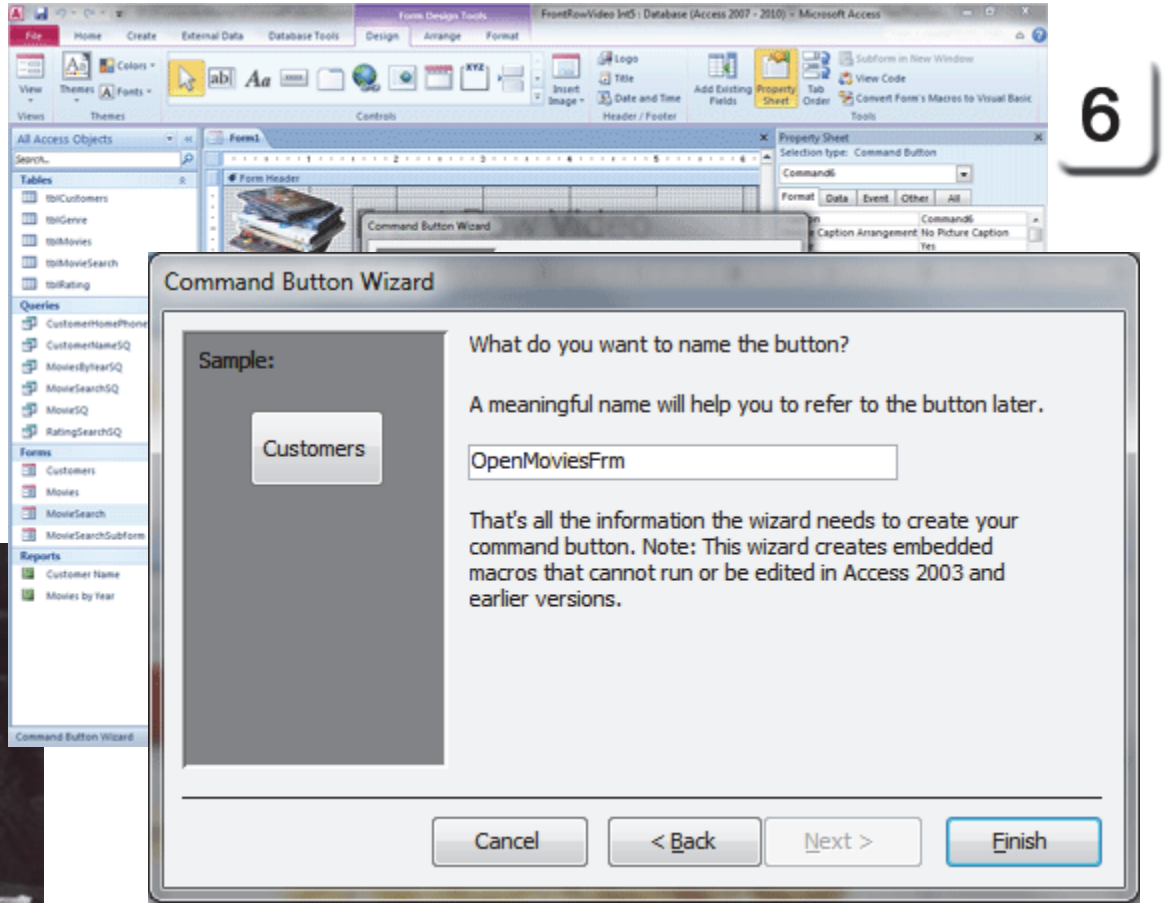
Command Button: Name

6. Try it: Name the Button
Enter the name: OpenMoviesFrm
Click **Finish**.

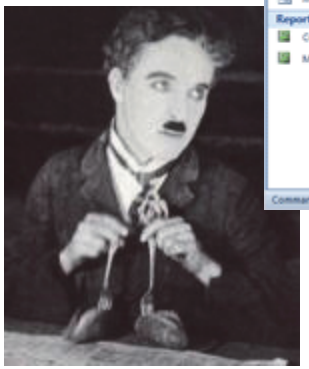
What Do You See? There should be a little Command Button in the Detail Section of the Switchboard Form.

Keep going. There are a few more steps.

Form Design Tools ->Design->Controls->Button



6



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.1. Create forms: Create Navigation Forms

Take One

Edit the Button Properties

7. Try it: Edit the Button Properties

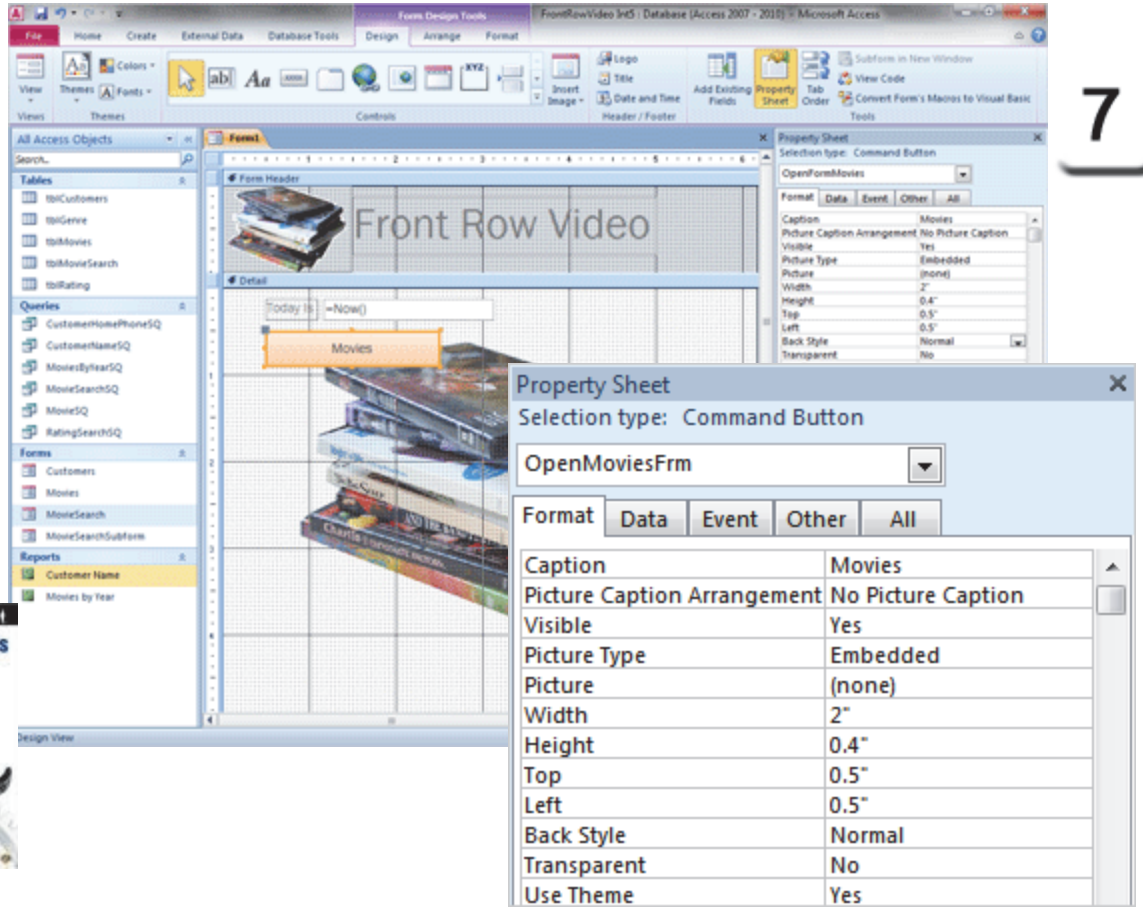
Select the OpenMoviesFrm Button.

Edit the Command Button Properties:

Caption: Movies
Width: 2"
Height: 0.4"
Top: 0.5"
Left: 0.5"
Use Theme: Yes

Keep going, you want to see this.

Form Design Tools ->Design->Tools->Property Sheet



7

Exam 77-885: Microsoft Access 2010
3. Building Forms
3.1. Create forms: Create Navigation Forms

Take One

Apply a Quick Style

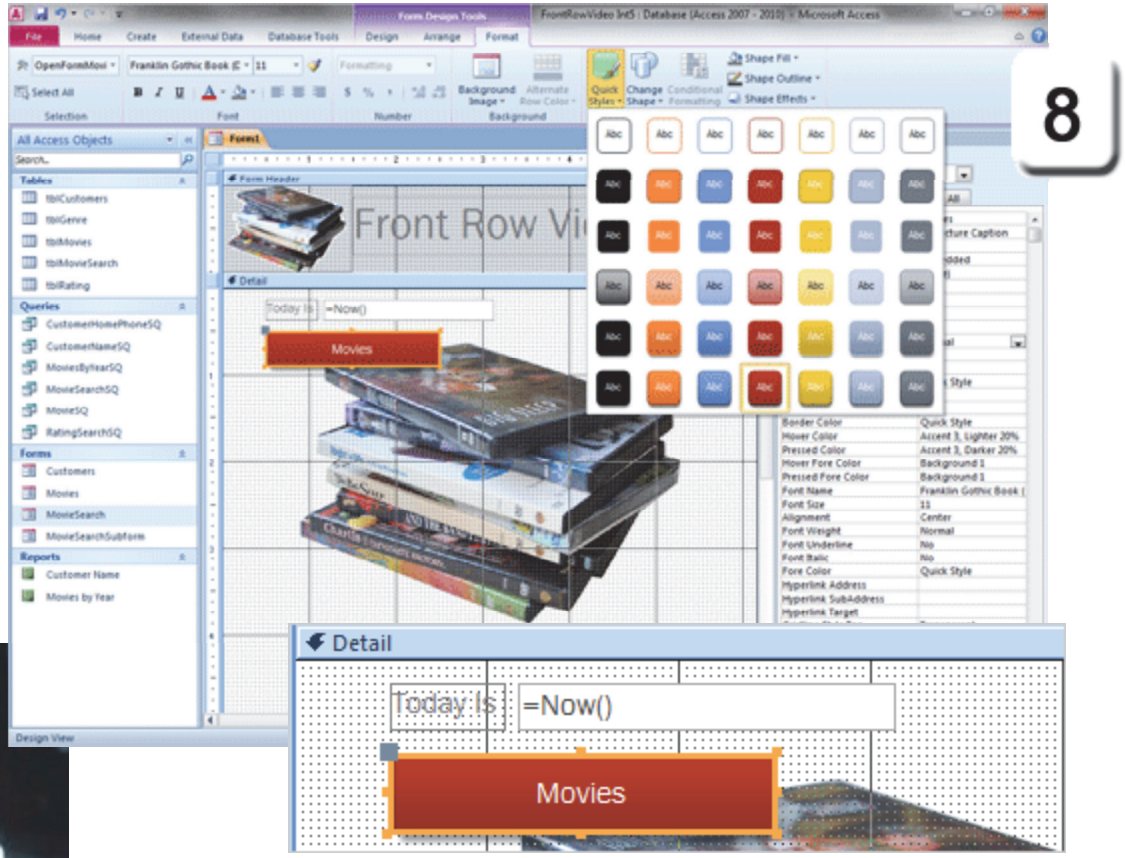
8. Try it: Apply a Quick Style

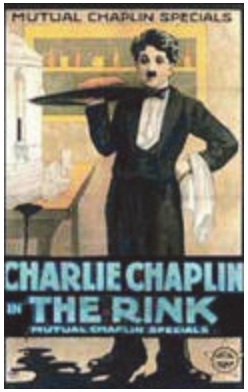
The Command Button is selected.
Go to **Form Design Tools ->Format.**
Go to **Control Formatting->Quick Styles.**
Select a **Style**: Intense Effect- Red, Accent 2

Keep going...

The Computer Mama Sez: This formatting is new to Microsoft Access 2010. It's a lot of fun!

Form Design Tools ->Format->Control Formatting->Quick Styles





Exam 77-885: Microsoft Access 2010
3. Building Forms
3.4. Apply Form Format options: Apply Quick Styles to Controls in a Form

Take One

Add More Stars

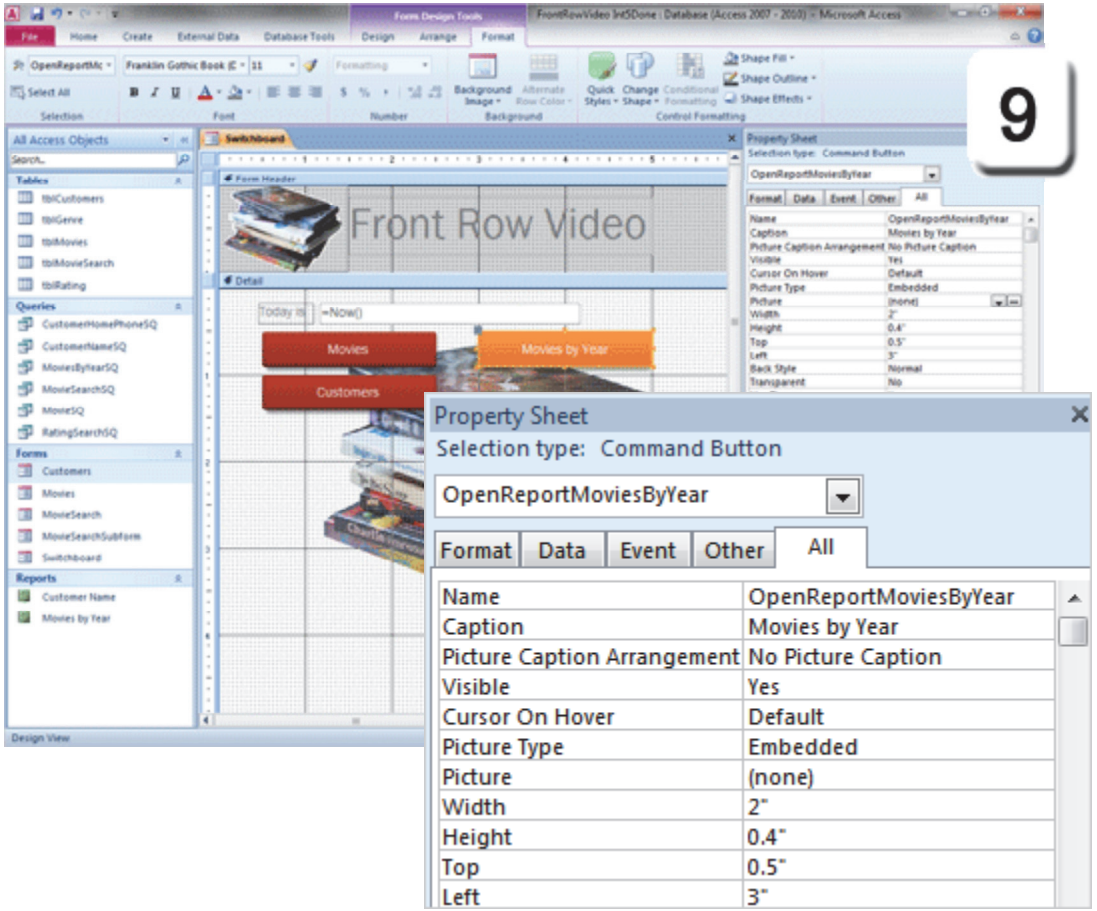
9. Try it: Add A Button for the Customers
Go to **Form Design Tools ->Design->Controls.**
Select a **Control: Button.**
Click on the **Form Detail**.

Select a Category: Form Operation
Select an Action: Open Form
Select the Form: Customers
Choose the Records: All Records
Enter the Text: Customers
Name the Button: OpenCustomersFrm

Try This, Too: Add A Button for a Report
Select a Category: Report Operation
Select an Action: Preview Report
Select the Form: Movies by Year
Enter the Text: Movies by Year
Name the Button: OpenReportMoviesByYear

Edit the following Properties for each button:
Width: 2"
Height: 0.4
Apply a **Quick Style**.
You can place the buttons similar to layout in the screenshot on this page if you wish.

Form Design Tools ->Format->Control Formatting->Quick Styles



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.4. Apply Form Format options: Apply Quick Styles to Controls in a Form

Take One

Test the Switchboard Form

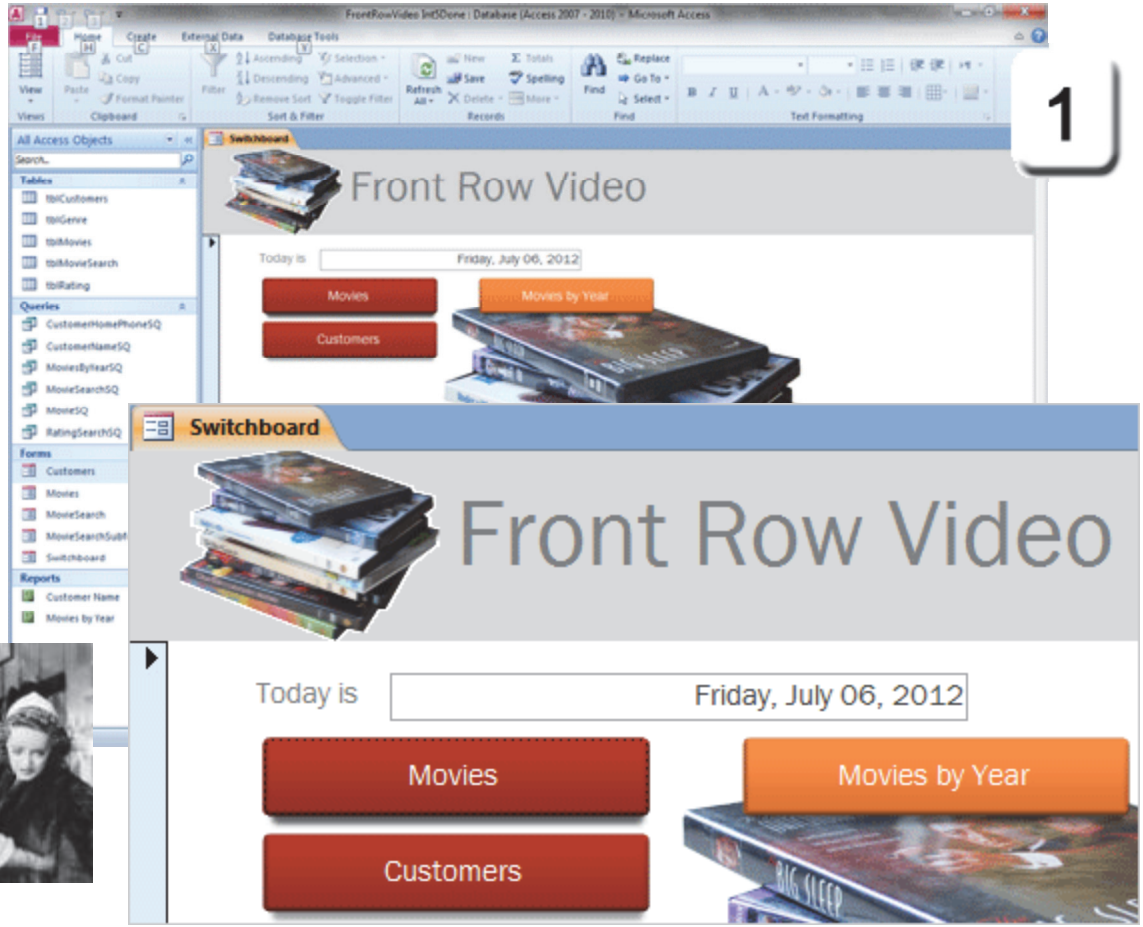
There is only one way to see if the buttons work: open the Switchboard Form in Form View and try it like a User.

Do This, First: Save the Form Design
Go to **File->Save.**

1. Try This: Change the View
Go to **Form Design Tools ->Design->Views.**
Choose a **View: Form View.**

What Do You See? The Switchboard has the current date in a Text Box. There are two Buttons to open the Forms. There is a third Button that opens a Report in Print Preview.

Form Design Tools ->Design->Views->View



Take One

Home

Test the Command Buttons

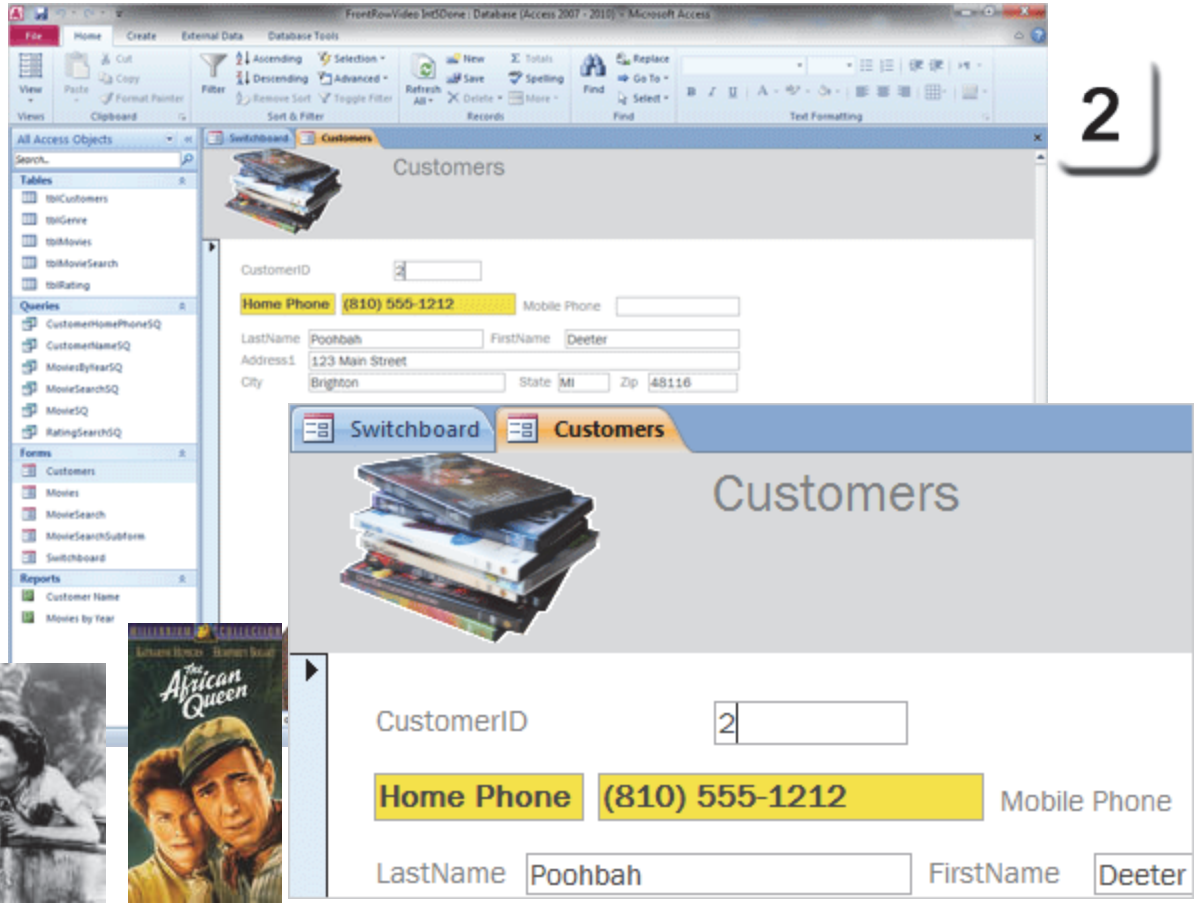
2. Try it: Test the Command Buttons
Click on: **Customers.**

What Do You See? The Customers Form should open in a new Window, to the right of the Switchboard Form.

What Do You Think? There should be a way to Close the Customers Form and Return to the Switchboard when you are done editing the Customers' Records.

There are two parts to this programming:
Open the Switchboard Form.
Close the Customers Form.

Let's begin by adding a Home Button to open the Switchboard Form.



"We are not responsible for the weather" -Katherine Hepburn as Rose Sawyer

Exam 77-885: Microsoft Access 2010
3. Building Forms
3.1. Create forms: Create Navigation Forms

Take One

There And Back Again

Before You Begin: Change the View
The Customers Form is open.
Go to **Home->Views->View.**
Choose a **View: Design View.**

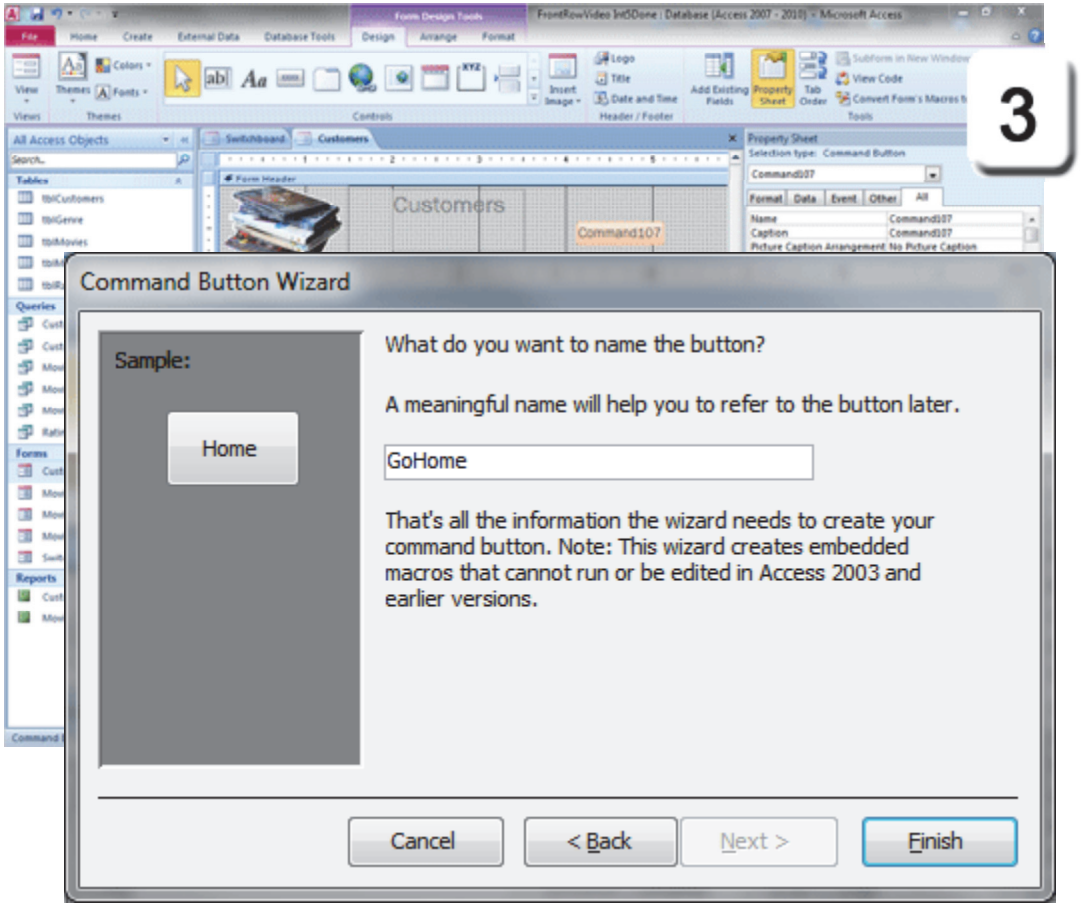
3. Try it: Create a Home Button
Go to **Form Design Tools ->Design->Controls.**
Select a **Control: Button.**
Click on the **Form Header.**

Select a Category: Form Operation
Select an Action: Open Form
Select the Form: Switchboard
Enter the Text: Home
Name the Button: GoHome
Click **Finish** to close the Wizard.

Try This, Too: Edit the Button Properties
Width: 2"
Height: 0.4
Top: 0.125"
Left: 5"

Save your changes. Keep going...

Form Design Tools ->Design->Controls



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.1. Create forms: Create Navigation Forms

Take One

Test the Home Button

Before You Begin: Change the View
The Customers Form is open in Design View.
Go to **Form Design Tools ->Design->Views.**
Choose a **View: Form View.**

4. Try it: Test the Home Button
Click on the Home button on the Customers Form.

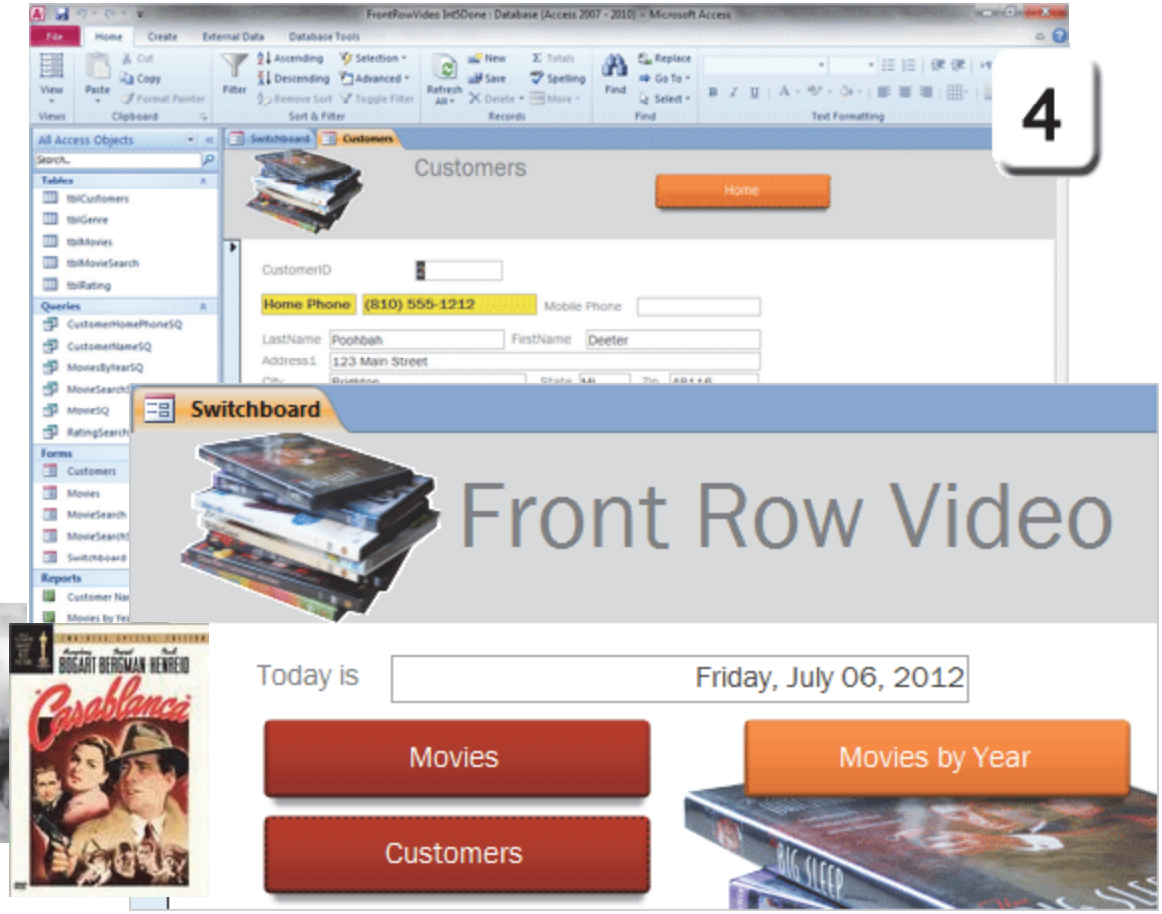
What Do You See? The Switchboard will open.

What Else Do You See? There are two Forms open. Now, we need to add the code that closes a Form when you are done with it.

Keep going...

Rick: "Who are you really? And what were you before? What did you do and what did you think? Huh?"

Form Design Tools ->Design->Views->View



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.1. Create forms: Create Navigation Forms

Take One

Behind the Scenes

When you used the Command Button Wizard you created an **Embedded Macro**. This is a new format for Microsoft Access 2007 and 2010. It cannot be edited by any previous version of Access. This demonstration will show you how to review and edit the Macro.

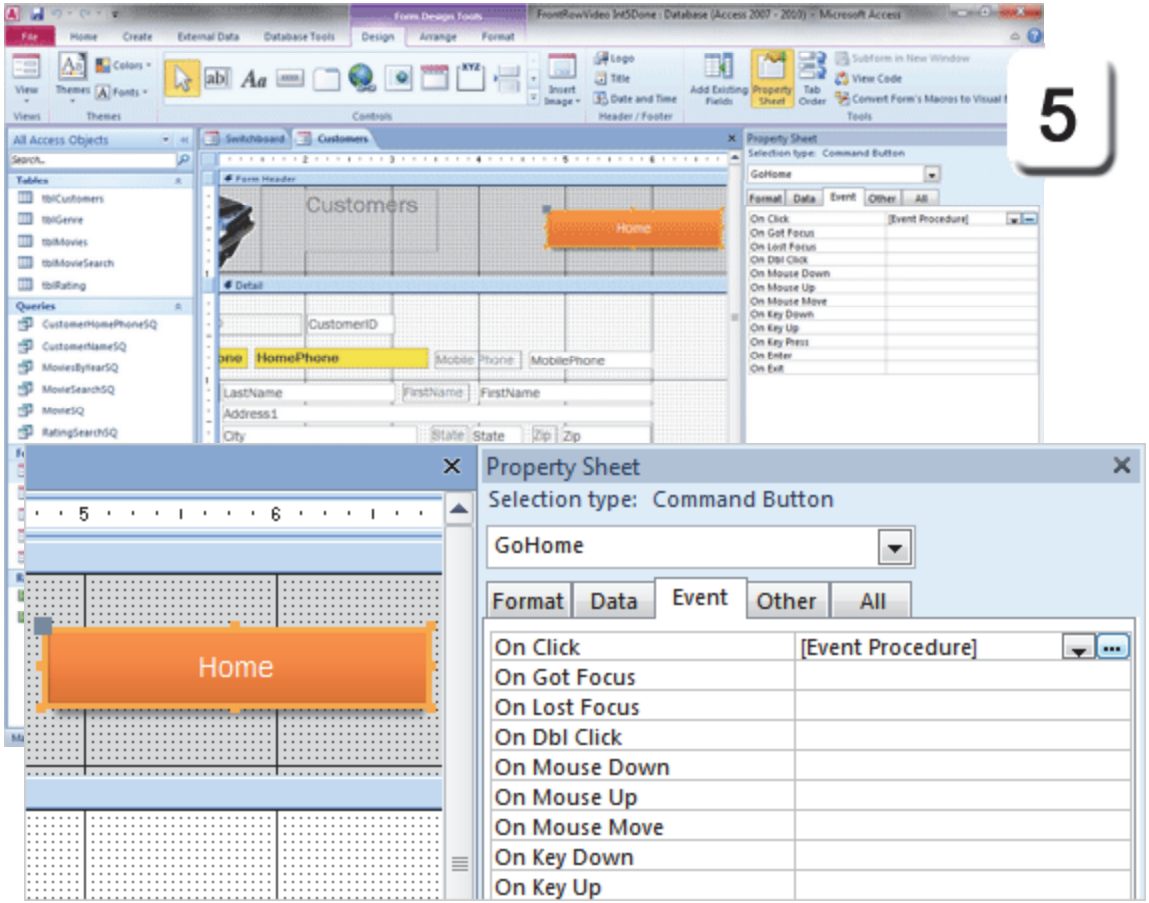
5. Try This: Review the Embedded Macro
Open the Customers Form in Design View.
Select the Home Button.

Go to **Property Sheet->Event**.
Go to the **On Click** Event.
Click **Embedded Macro**.

Do you see the three-dot builder?
Click the builder. Keep going...

Memo to Self: Why call the Switchboard Button, "Home?" On the Internet, Home means the first page in a website. The concept works here in a database, too. It is a term people use to navigate.

Form Design Tools ->Design->Views->View



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: View Code

Take One

Review the Macro

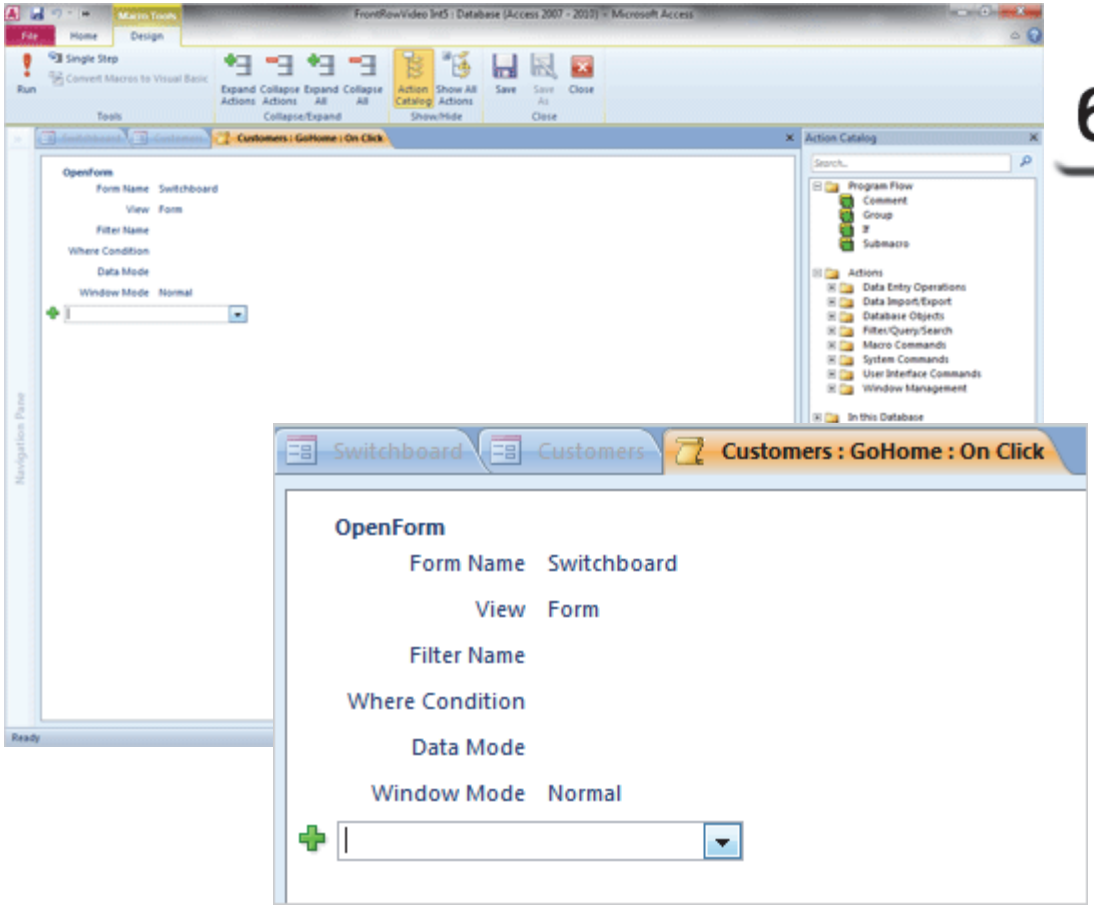
When you invoke the three-dot builder, a new Window should open. The Macro Tools should be available as well.

6. Try it: Review the Macro
The Code for the GoHome Macro is open. The Macro Tools are available.

The Macro begins with: OpenForm
Form Name: Switchboard
View: Form

Keep going...

Form Design Tools ->Design->Tools->Property Sheet->Event



6

Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: View Code

Take One

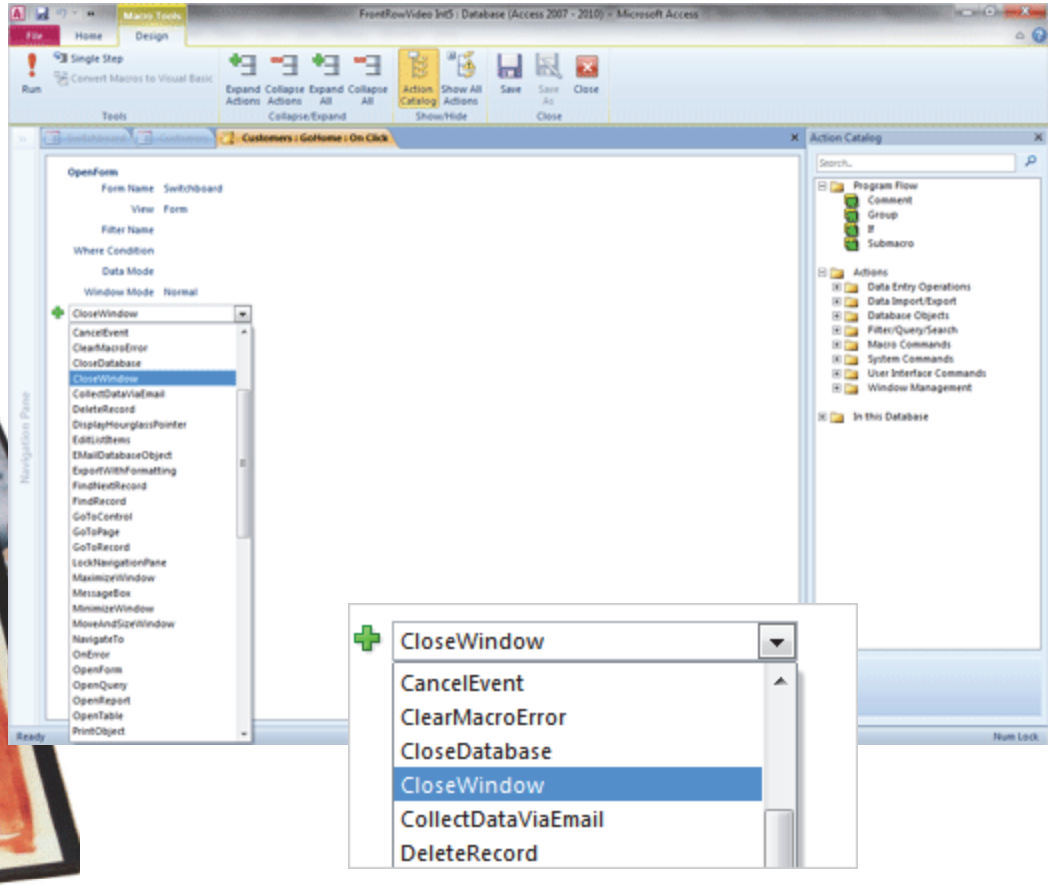
Add to the Macro

Our goal is to close the Customers Form when we click to return Home, to the Switchboard. Here are the steps.

7. Try it: Add to the Macro
Click on the green plus sign.
Select an Action: CloseWindow

Keep going...

Form Design Tools ->Design->Tools->Property Sheet->Event



7

Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: View Code

Take One

Edit the Code Arguments

What Do You See? A editor will open. Each variable in the code has a place.

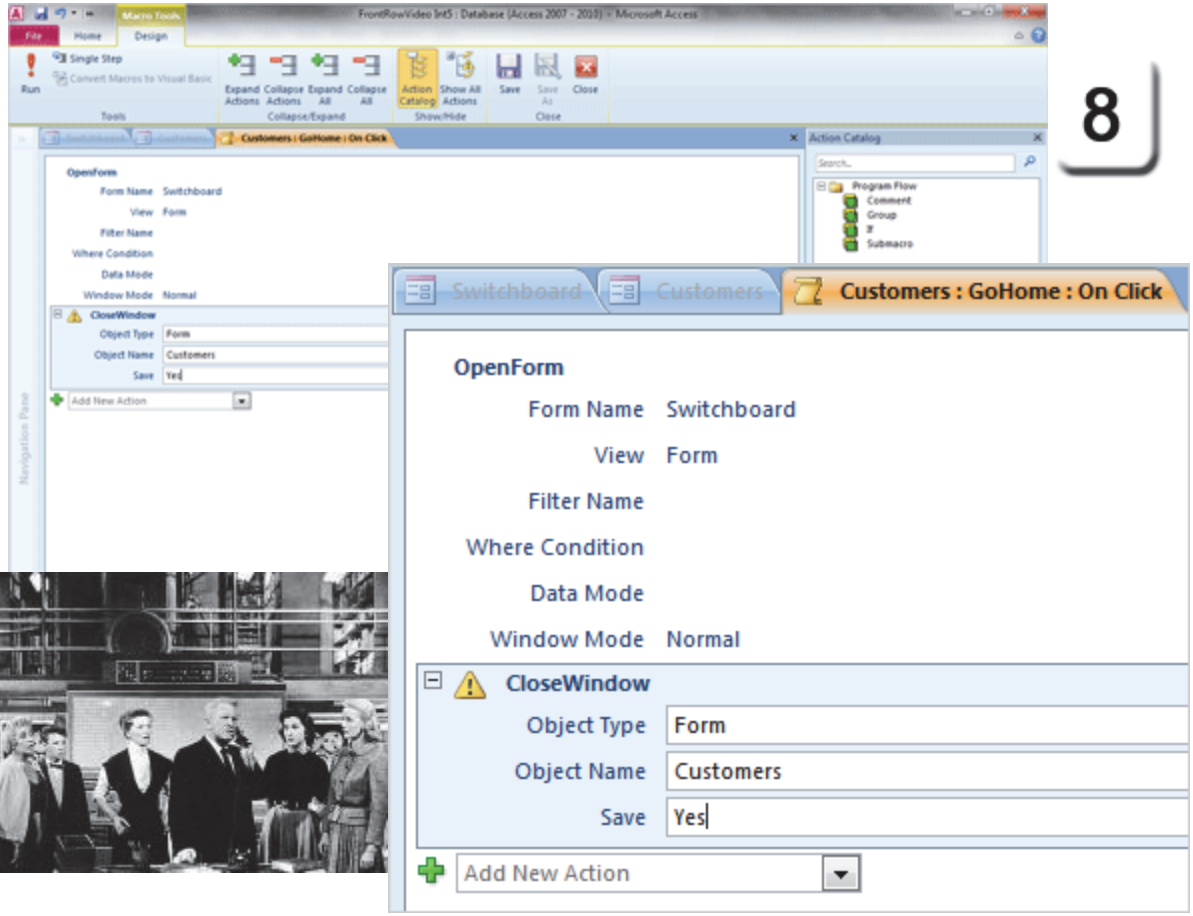
8. Try it: Edit the Arguments
Please select the following:
Object Type: Form
Object Name: Customers
Save: Yes

Try This, Now: Save the Macro
Go to **Macro Tools->Design->Save**.

Click **Close**. Keep going...

Memo to Self: You want to open the new Form before you close the old one!

Macro Tools->Design->Save



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: View Code

Take One

Test the Command Button

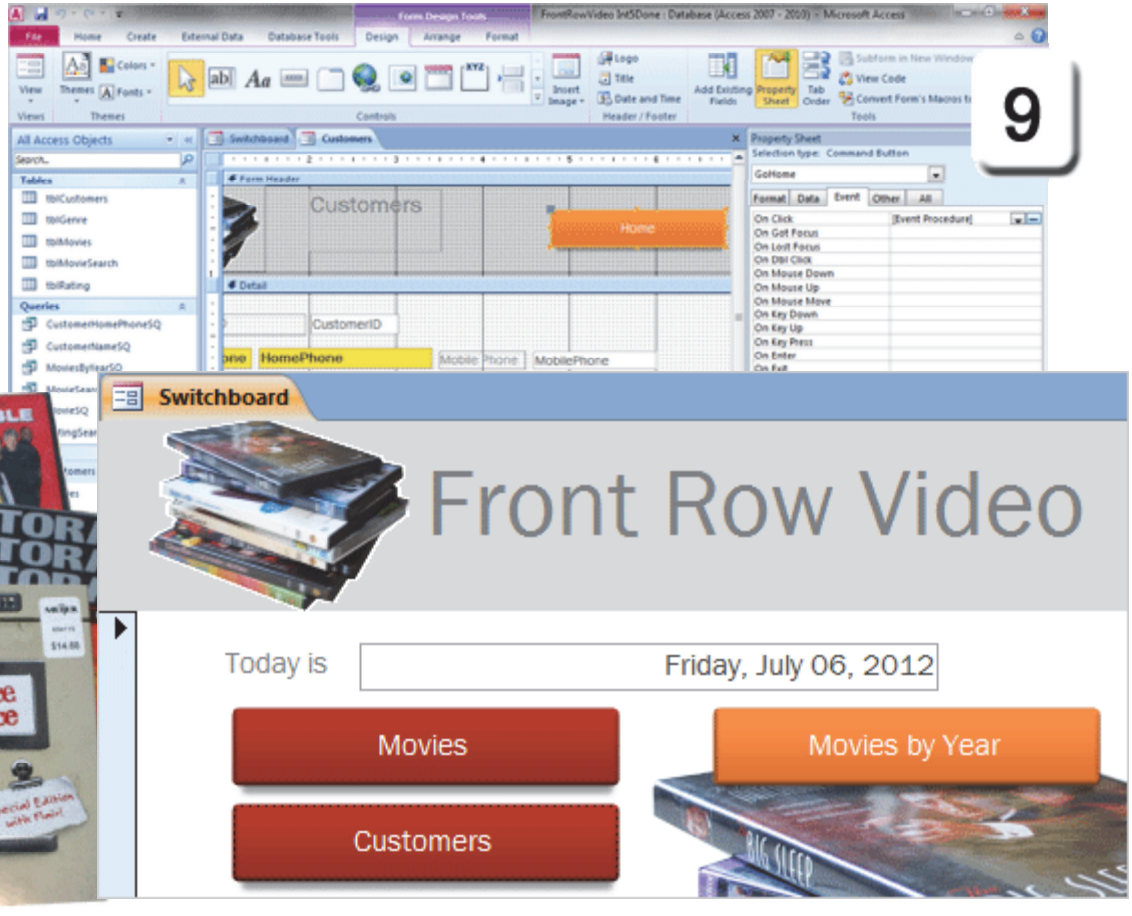
Before You Begin: Change the View
The Customers Form is still open in Design View.
Go to **Form Design Tools ->Design->Views.**
Choose a **View: Form View**.

9. Try it: Test the Updated Command Button
Click the **Home** Button on the Customers Form.
The Customers Form should close.
The Switchboard Form (Home) should be open.

What do you think, now?

Impressive.

Form Design Tools ->Design->Views->Form View



Take One

Convert the Form Macros to VBA

Macros are one method of programming actions in your Mighty Access database. As we saw in the previous lesson, Visual Basic for Applications (VBA) is another.

Before You Begin: Change the View
The Customers Form is open in Form View.
Go to **Form Design Tools ->Design->Views.**
Choose a **View: Design View.**

1. Try it: Convert the Form's Macros to VBA
Go to **Form Design Tools ->Design->Tools.**
Click: **Convert Form's Macros to Visual Basic.**

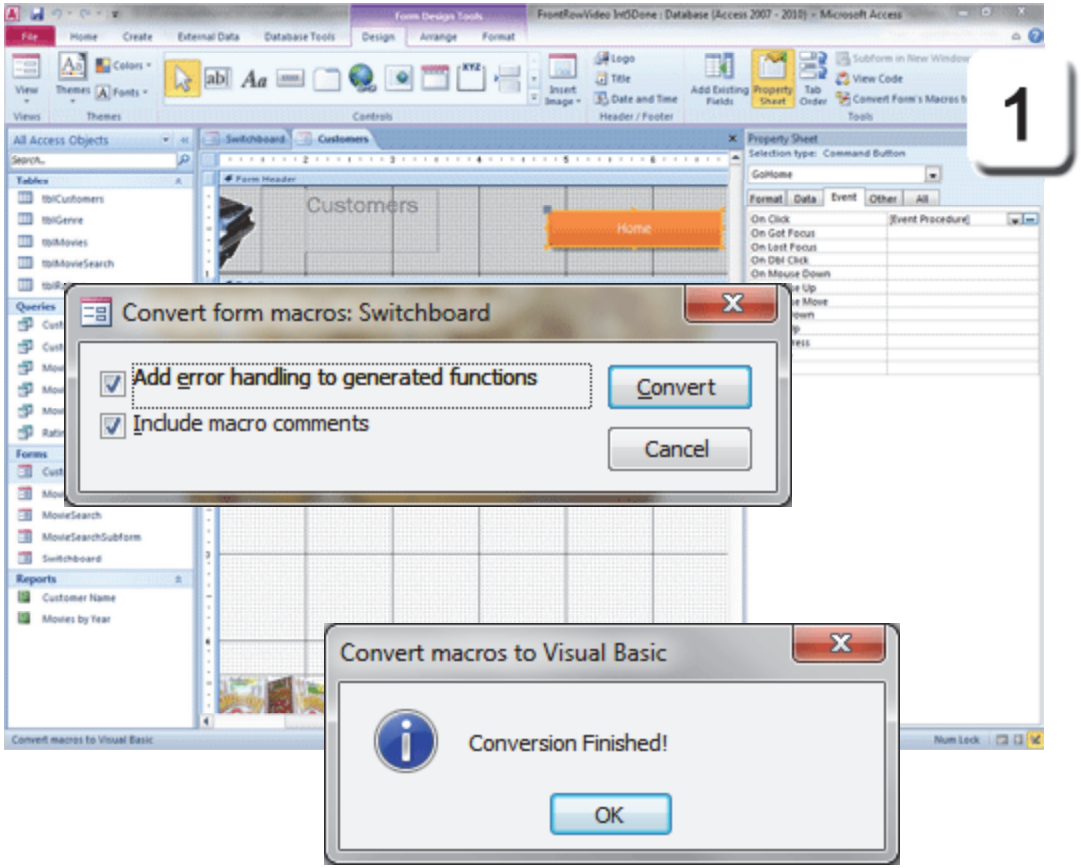
You will be prompted to select the following:
Add error handling to generated functions.
Include macro comments.

Click **Convert**.

Now, What Do You See? In a few seconds, a pop up will say: Conversion Finished!

Click **OK**. Keep going...

Form Design Tools ->Design->Tools->Convert Form's Macros to Visual Basic



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Convert Macros to Visual Basic

Take One

Review the Event Procedure

When the process is done, the Embedded Macros on this Form will be converted to Event Procedures.

2. Try it: Find the Event Procedure
The Customer Form is open in Design View.
The "GoHome" Button is selected.

Go to **Property Sheet->Event->On Click**.

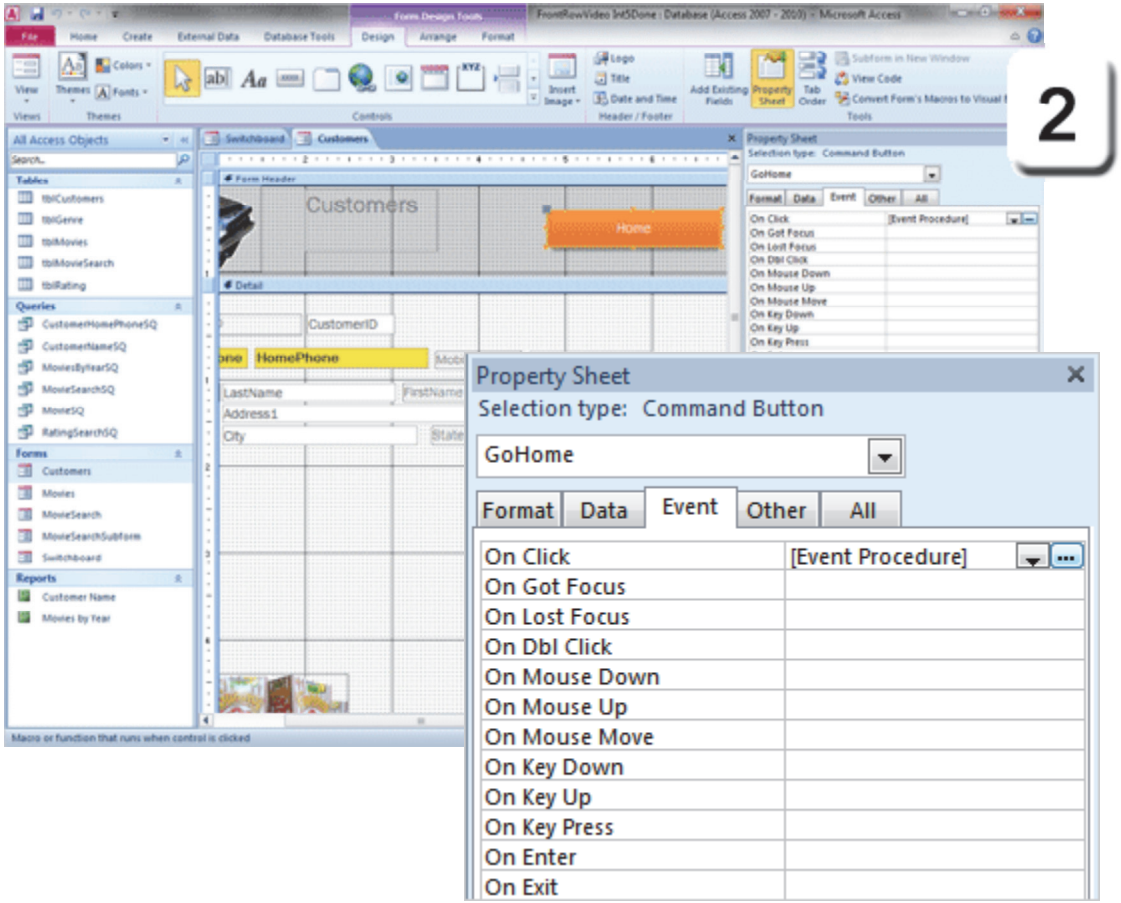
What Do You See? There is an Event Procedure that will run whenever a User clicks on this Button.

Try This, Too: Review the Event Procedure
Click on Event Procedure.
Click on the Three-dot Builder.

The Visual Basic for Applications Windows should open. Curious? Keep going...

Memo to Self: The Conversion from Macro to VBA is for this Form, only.

Form Design Tools ->Design->Tools->Convert Form's Macros to Visual Basic



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Convert Macros to Visual Basic

Take One

Microsoft Visual Basic for Applications

Review the VBA Code

3. Try it: Review the Code

The Code begins with: Private Sub
It must finish with: End Sub
"Sub" means subroutine.

The first Action is: **DoCmd.Open Form**
Where "Switchboard" is the Form name.

The second Action is: DoCmd.Close
Where "Customers" is the Form name.

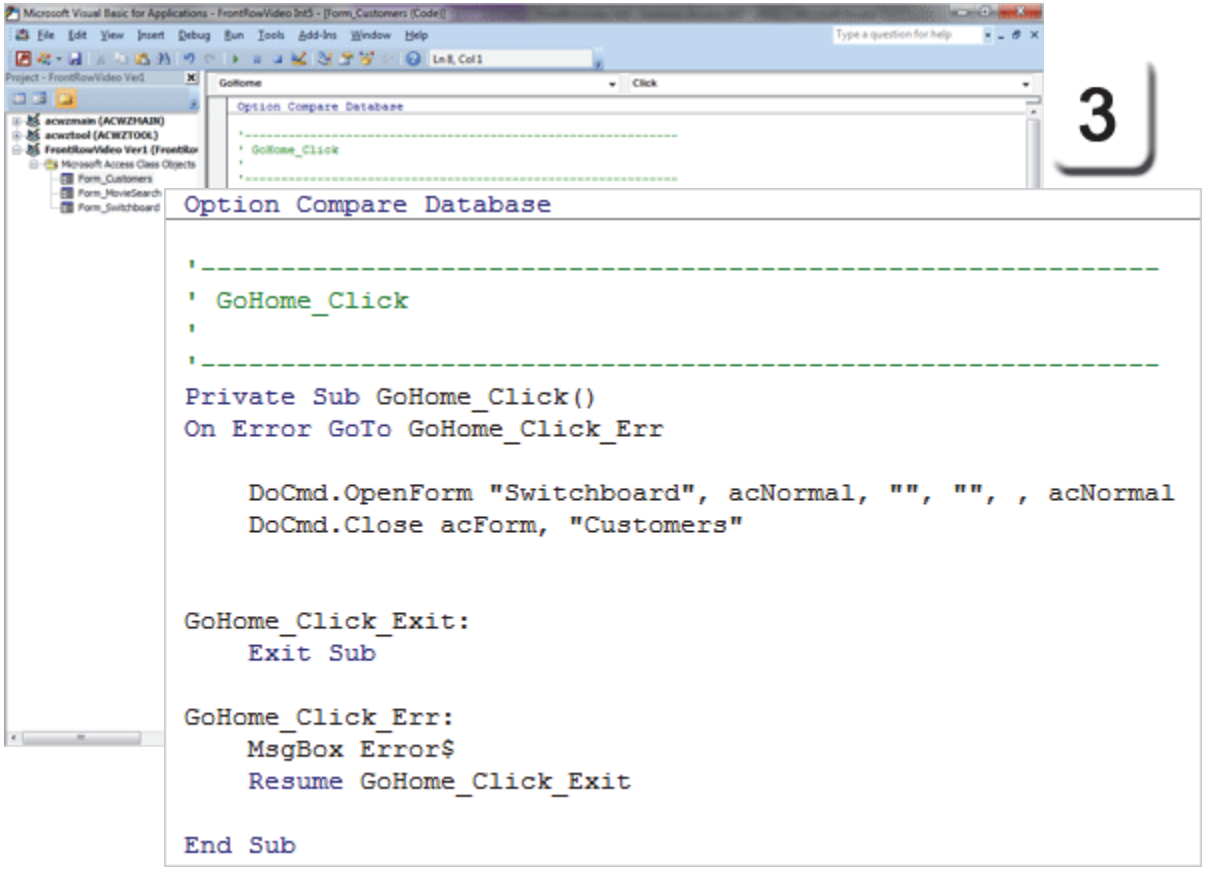
Error Trapping

The rest of the code looks for errors. If you spell the name of the form wrong, the subroutine should catch that mistake and bring up a message box (MsgBox).

Error trapping is a good thing. It keeps the computer from running around in circles if it can't figure something out.

Please **Save** and **Close** the VBA editor.

When you return to your Access database, **Save** and **Close** the Customer Form.



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: View Visual Basic Code

Take One

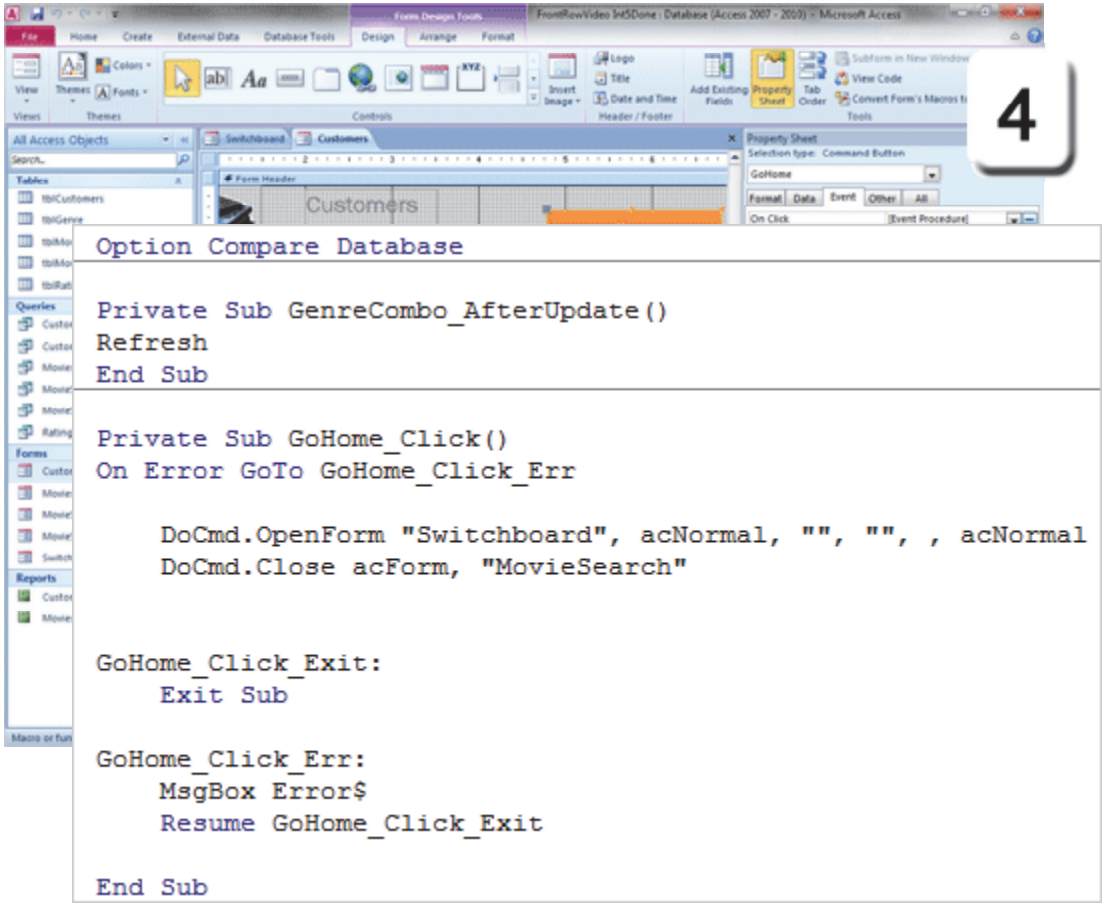
Add a Button to Each Form

4. Try This: Finish the Switchboard Form
For each Button on the Switchboard Form, edit the Event and add the code that will close the Switchboard Form when you open another Form.

Try This, Too: Add a Button to Each Form
Please include the "GoHome" code to open the Switchboard Form as well as the code to close the Form that you are currently on.

It seems like a silly exercise, but it is one your Users will appreciate.

Form Design Tools ->Design->Controls



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.1. Create forms: Create Navigation Forms

Take One

A Hard Day's Night

It's Quitting Time! Let's give the Users a way to quit. Here is a simple Button that will close your Microsoft Access Database.

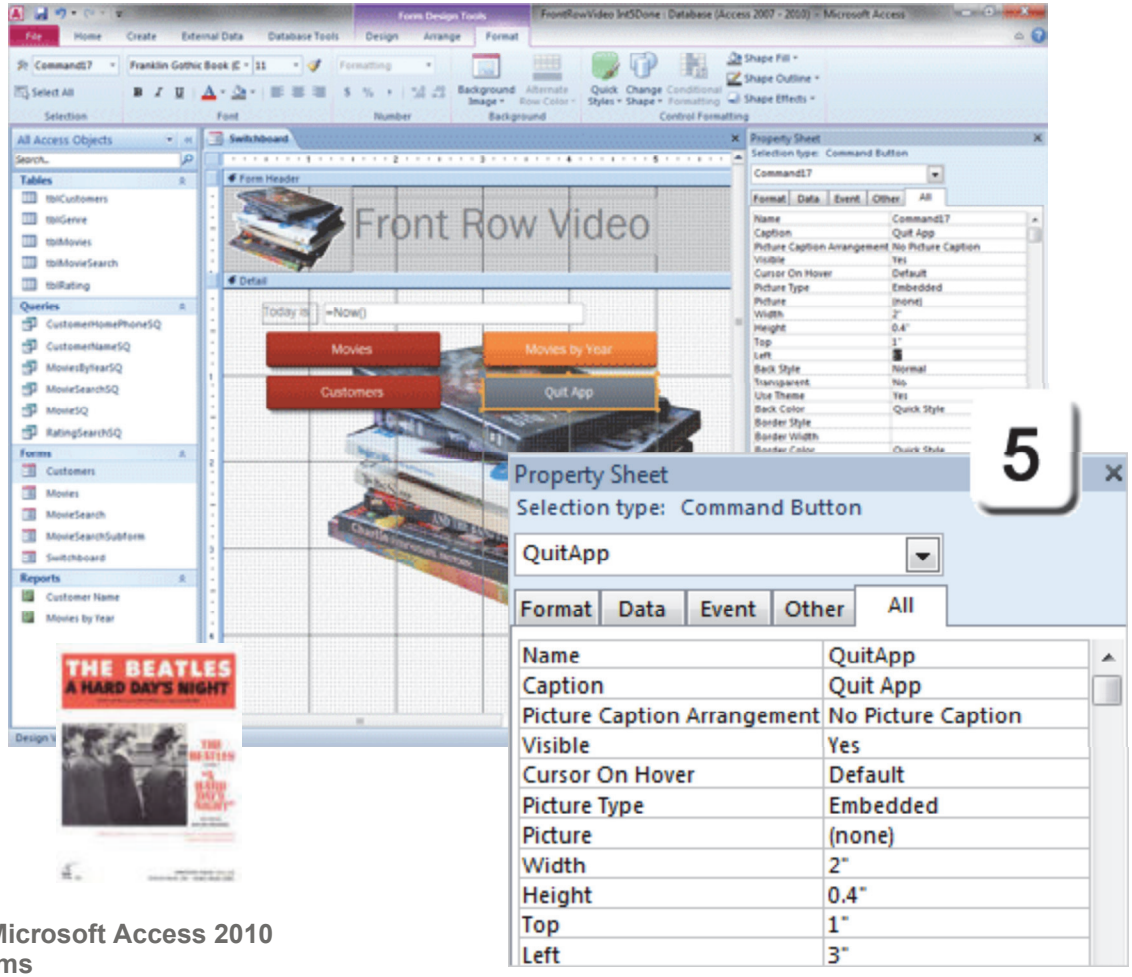
5. Try it: Add an Application Button
Open the Switchboard Form in Design View.
Go to **Form Design Tools ->Design->Controls.**
Choose a **Control: Button.**
Click on the **Form Detail.**

The Command Button Wizard will ask you to:
Select a Category: Application
Select an Action: Quit Application
Enter the Text: Quit App
Name the Button: QuitApp
Click **Finish**.

What Do You See? There should be another Button on the Switchboard Form. You can format the Control to match the others if you wish.

Save your programming. Change the View back to Form View. Go ahead, try the Buttons.

Form Design Tools ->Design->Controls



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.1. Create forms: Create Navigation Forms

Take One

Summary

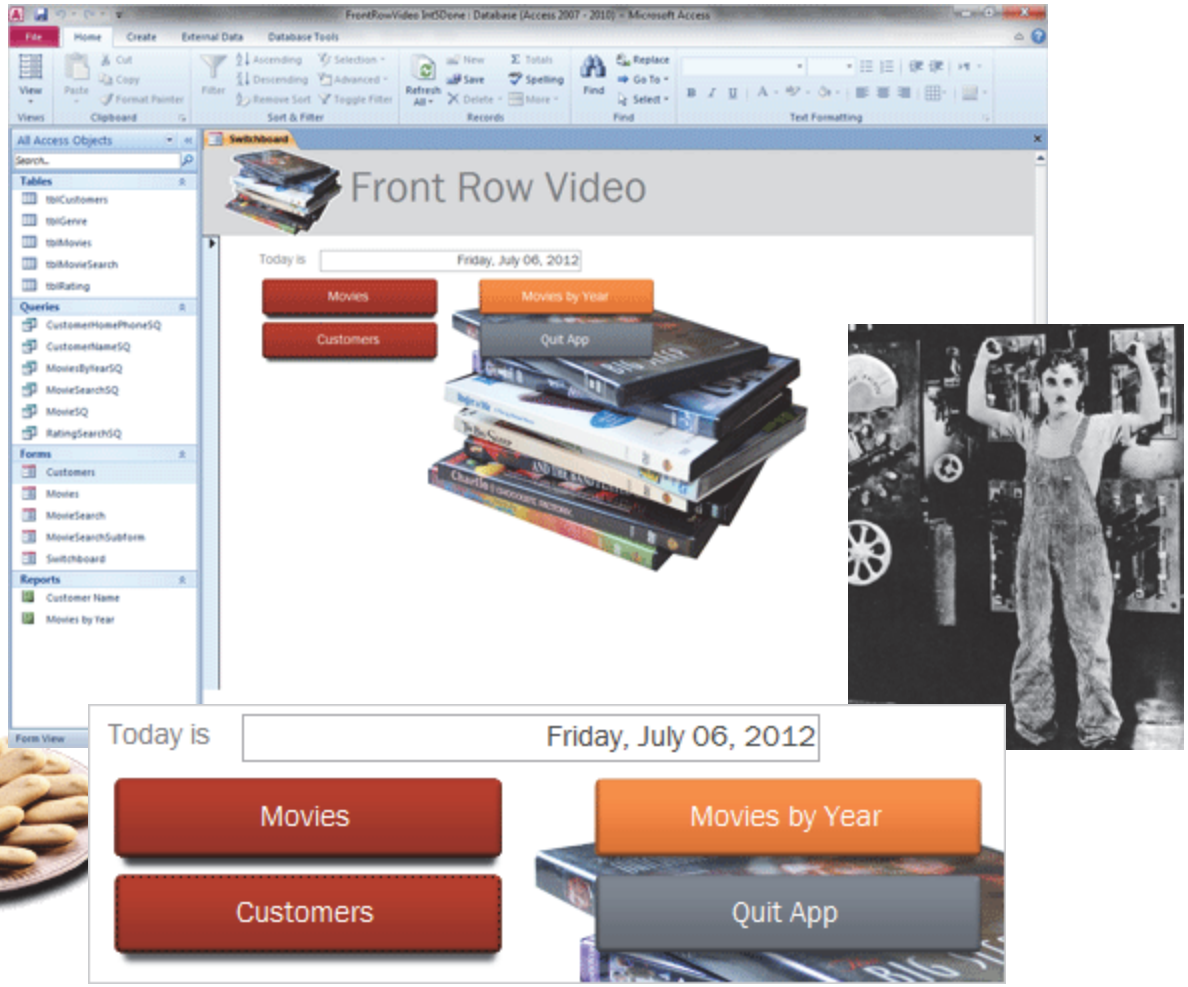
This lesson created a Switchboard with Command Buttons. A Command Button is a Shape that responds to an Event.

We used the Command Button Wizard to add Buttons to open:
Two Forms: Movies, Customers.
One Report: Movies by Year

We also added a "GoHome" Button to the Movies and Customers Forms that Users can click to return to the Switchboard.

The next lesson continues with the "Opening Scene." What do the Users see when they start up your Access Database?

You done good. Go get a cookie and come back when you are ready.



Practice Activities

Lesson 6: Meet the Stars!

Try This: Do the following steps

1. Open the Brown Bag Lunch database you have been working on. Or, you may download **BBL Int ver6.accdb**.

2. Create a new Blank Form and go to Design View.

3. Add an Unbound Text Box. Use the Property Sheet to add the Control Source: =Now()

4. Apply Medium Date and set the width to 2”

5. Edit the Text Box label to say: Today’s Date.

6. Add a Logo in the Form Header.

Use the image: **Brown Bag Logo.jpg**. Edit the image properties:
Name: BBLunchLogo
Width: 1”
Height: 1”
Top: 0.25”
Left: 0.25”

7. Add a Label to the Form Header. Edit the following properties:
Name: Banner
Caption: Brown Bag Lunch Co.
Width: 4”
Height: .75”
Font Size: 24

8. Add a background image: **Lunch1.gif**

9. Save the Form as Switchboard.

10. Add a Command Button that opens the Products Form.
Choose to show all Records.

11. Use the text Products on the Button. Name the button OpenProductsForm.

12. Edit the command button properties: Width 2” and Height 0.4”

13. Create a Command Button that opens the Customers Form.

14. Use the text Customers on the Button. Name the button OpenCustomersForm.

15. Edit the command button properties: Width 2” and Height 0.4”

16. For both the Products and Customers buttons, click on the On Click Event and edit the Embedded Macro with the three-dot builder. For OpenProductsForm and OpenCustomersForm close the Switchboard after the Form is opened. Don't Save.

17. Return to Form View and test each command button. Does the right Form open? Does the Switchboard close when the other Form opens?

18. On both the Products and Customer Forms, add a Home button that opens the Switchboard Form. Use the text Home on the Button and the name GoHome. For both the Products and Customers buttons, click on the On Click Event and edit the Embedded Macro with the three-dot builder to close the Switchboard after the Form is opened. YES, Save the Form data.

19. Return to the Switchboard. Add a new Command Button that opens the Report Products by Type.

20. Use the text Products by Type on the Button. Name the button OpenProdbyTypeReport

21. Edit the command button properties: Width 2” and Height 0.4”

22. Add a new Command Button that uses the Quit App command.

23. Use the text Quit on the Button. Name the button QuitApp

24. Edit the command button properties: Width 2” and Height 0.4”

Test Yourself

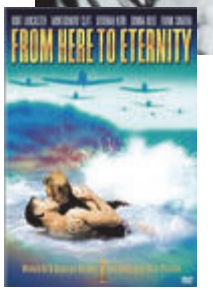
1. Which is true about a Switchboard?
(Give all correct answers.)
A. A menu of options
B. A Form made up of Command buttons
C. An Unbound Form
Tip: Intermediate Access, page 153, 156

2. Which is true about a Switchboard?
(Give all correct answers.)
A. A Switchboard saves data
B. A Switchboard does not save data
C. A Switchboard does not have a Table or Query as a Record source
D. A Switchboard uses a Query only as its Record source
Tip: Intermediate Access, page 158

3. Which are Command button Categories?
(Give all correct answers.)
A. Record Navigation
B. Form Operations
C. Report Operations
D. Miscellaneous
Tip: Intermediate Access, page 164

4. Which is an option for opening a Form with a Command button?
(Give all correct answers.)
A. Open the form and find specific data to display
B. Open the form and show all records
Tip: Intermediate Access, page 166

5. The Quit Application command closes just the open database and leaves the program Access open.
A. True
B. False
Tip: Intermediate Access, page 185



"It's not confidence, ma'am; it's honesty"

Take Two

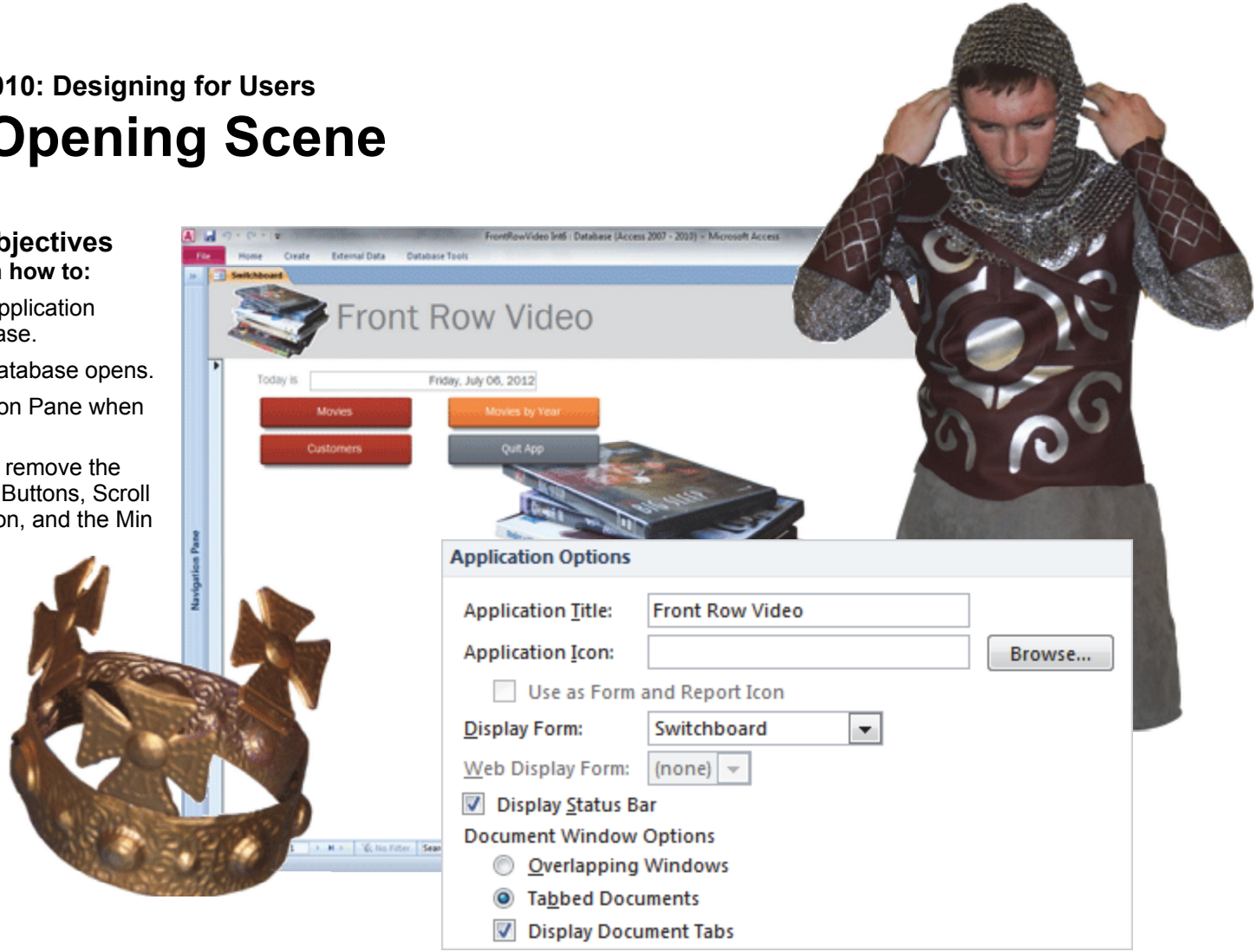
Access 2010: Designing for Users

The Opening Scene

Intermediate Access Objectives

In this lesson, you will learn how to:

1. Set the Microsoft Access Application options for the Current Database.
2. Display a Form when the database opens.
3. Do not display the Navigation Pane when the database opens.
4. Use the Form Properties to remove the Record Selectors, Navigation Buttons, Scroll bars, Control Box, Close Button, and the Min Max Buttons.



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Lesson 7 : The Opening Scene

1. Readings
Read Lesson 7 in the Intermediate Access guide, page 189-203.

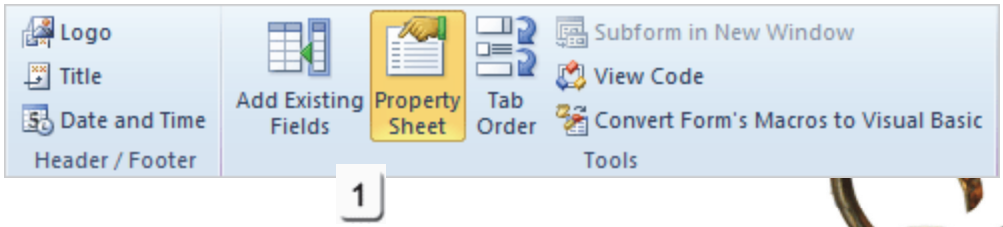
Project
Change the Start Up Options to display a Form when the database opens. Edit the Properties on the Switchboard Form.

Downloads
FrontRowVideo Int7.accdb
BBL Int ver7.accdb

2. Practice
There is no Practice Activity for this lesson.

3. Assessment
Review the Test questions on page 204.

Form Design Tools->Design Ribbon



1

Menu Maps

From the **Backstage**
File->Options, page 194
File->Options->Current Database, page 195

From the **Form Design Tools->Design Ribbon**
1. Form Design Tools->Design->Tools->Property Sheet, page 200

The Opening Scene

Setting the Stage

Some people are afraid of databases. They don't want to see the database properties. They are allergic to Queries and Tables. Just give them a button to push and a Form to fill out so they can get their work done.

Other people are curious. They like to take things apart: with or without learning how it all works.

You are the director: you decide what should be seen and when it shouldn't. You can also set the stage and control the action. A good director leads the audience where they are supposed to go. In this lesson, we will look at how the database opens.

"Something Wicked This Way Comes!"
Macbeth, by Shakespeare

Microsoft Access 2010: Example of a Switchboard Form

What Are the Objectives?

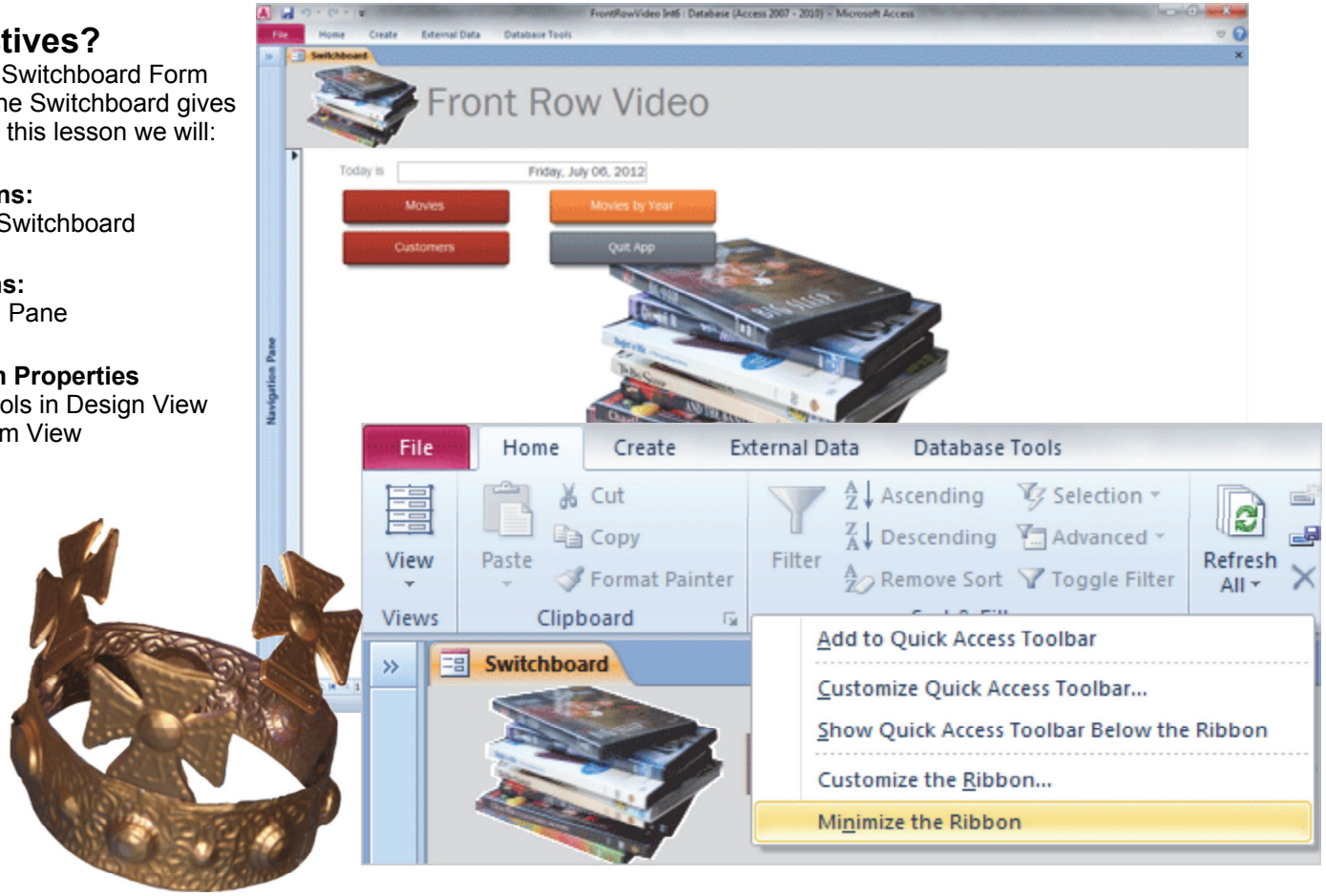
The database can display a Switchboard Form when the program opens. The Switchboard gives Users someplace to start. In this lesson we will:

Edit the Application Options:
Display a startup Form, the Switchboard

Edit the Navigation Options:
Show or hide the Navigation Pane

Edit the Switchboard Form Properties
Remove the Windows Controls in Design View
Minimize the Ribbons in Form View

That's the plan.



Before You Begin

Before You Begin: Open the Sample Database
Go to **Start -> All Programs ->Microsoft Office**. Click on **Microsoft Office Access 2010**.

Access will prompt you to open a database. This lesson uses the database that was programmed in the previous lesson. You can continue with the same database if you wish.

The FrontRowVideo Int7.accdb database has:
Five Tables: tblCustomers, tblGenre, tblMovies, tblMovieSearch and tblRating.

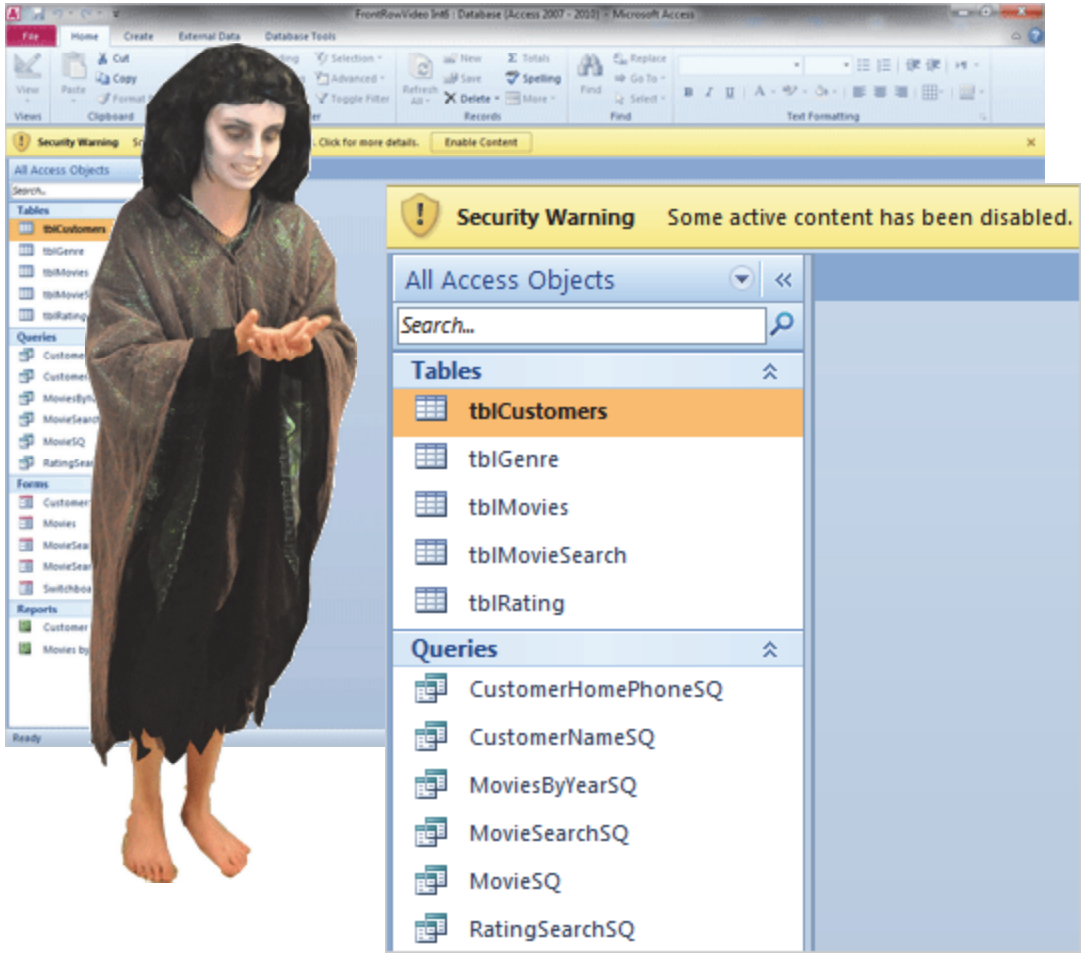
Six Queries: CustomerHomePhoneSQ, CustomerNameSQ, MoviesByYearSQ, MovieSQ,, MovieSearchSQ and RatingSearchSQ.

Four Forms: Customers, Movies, MovieSearch and MovieSearchSubform.

Two Reports: Movies by Year, Customer Name. Keep going...

Memo to Self: Click **Enable Content** if you see the Security Warning.

Start -> All Programs ->Microsoft Office-> Microsoft Office Access 2010



Backstage Pass

In this Mighty Access Database, the Front Row Video Switchboard Form will take center stage. When the database opens, the User will see a Home menu with simple choices. Everything else—including the database objects in the Navigation Pane—should be invisible to the user.

1. Try it: Find the Options

Click on **File**.

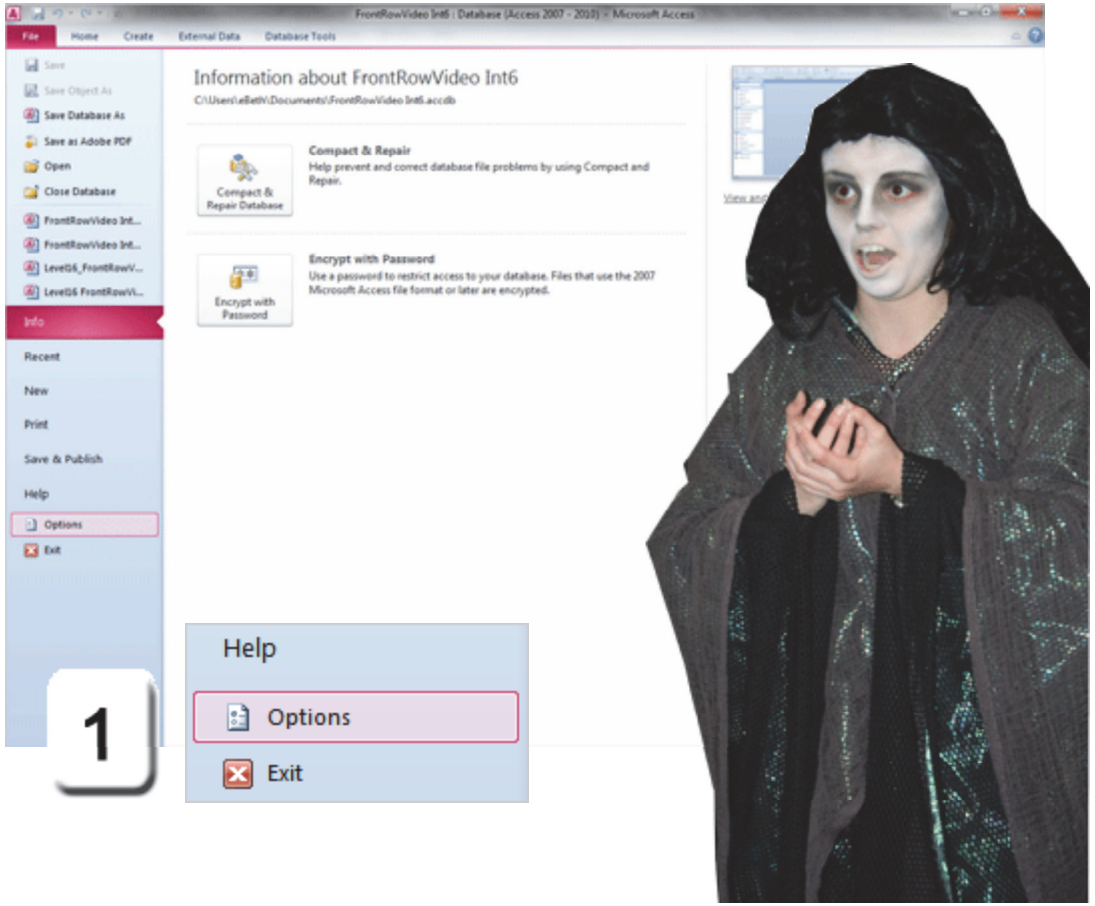
The Backstage has the following:

Save, Save Object As, Save Database As
Open, Open Database
Info
Recent
New
Print
Save & Publish
Help
Options
Exit

2. Try it: Change the Options

Go to **File->Options.** Keep going...

File->Options



Exam 77-885: Microsoft Access 2010
1. Managing the Access Environment
1.1. Create and manage a database: Set Access Options

Current Database Options

The **Access Options** include many places where you can customize the database.

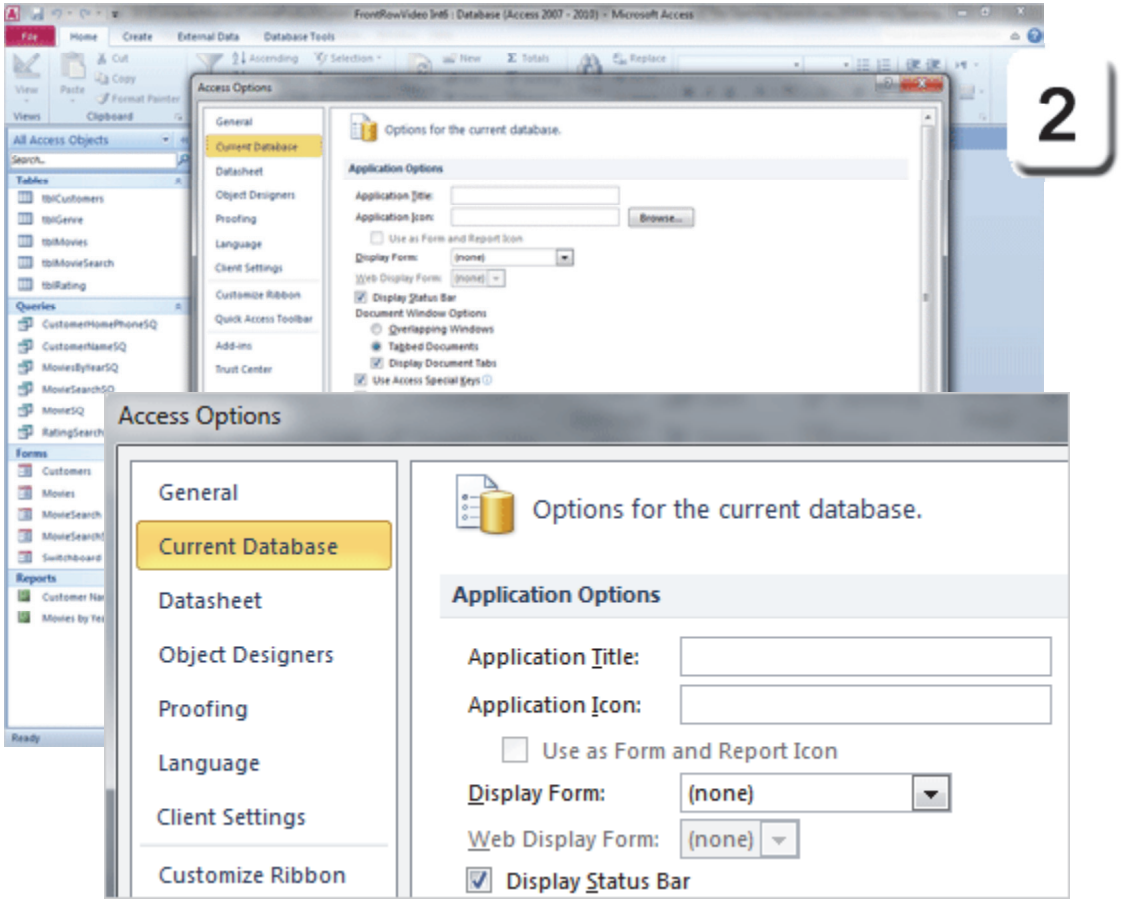
The categories include the following:
General
Current Database
Datasheet
Object Designers
Proofing
Language
Client Settings
Customize Ribbon
Quick Access Toolbar
Add-ons
Trust Center

2. Try This: Review the Current Database
Go to **Current Database**.

What Do You See? By default, the **Application Options** are blank.

Keep going...

File->Options->Current Database



Exam 77-885: Microsoft Access 2010
1. Managing the Access Environment
1.1. Create and manage a database: Set Access Options

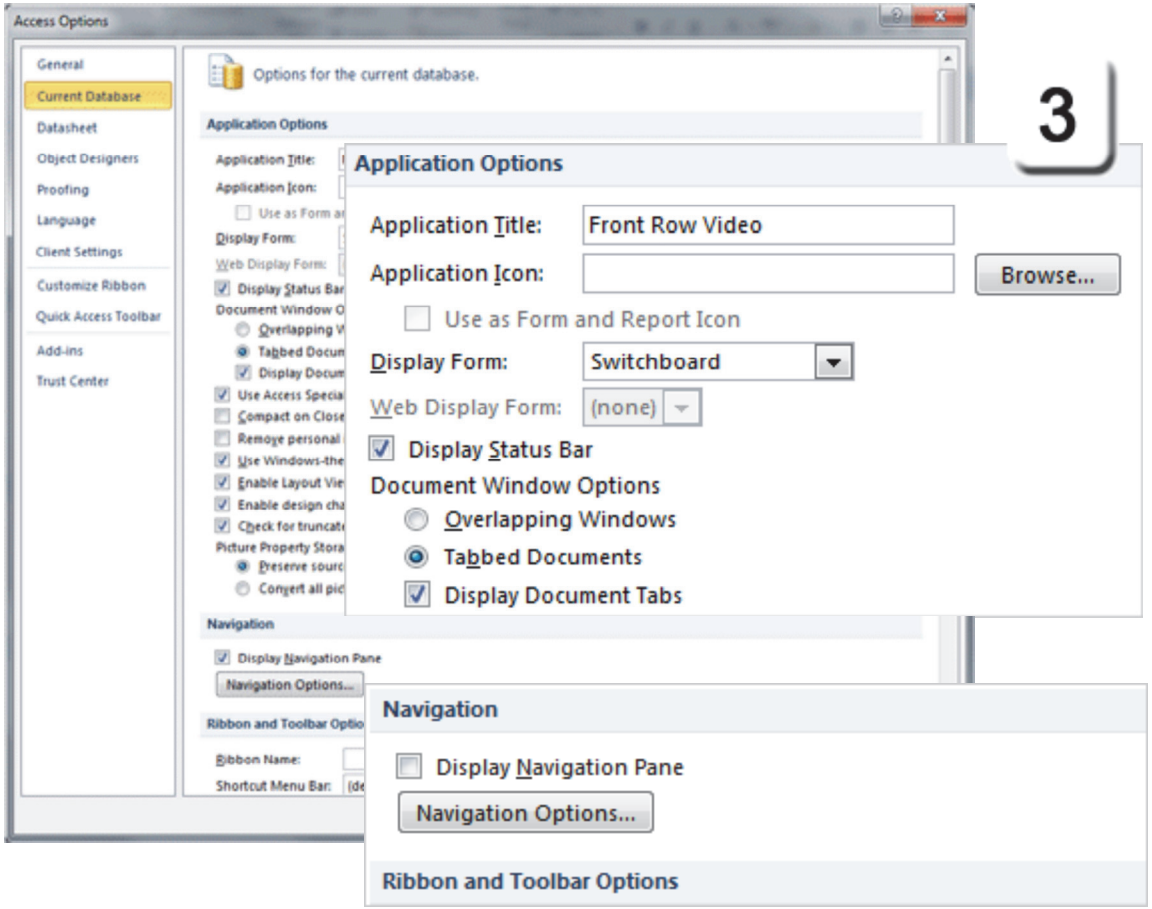
Edit the Current Database

3. Try This: Edit the Application Options
Application Title: Front Row Video
Display Form: Switchboard
Display Status Bar: Yes
Document Window Options
Tabbed Documents: Yes
Display Document Tabs: Yes

Try This, Too: Edit the Navigation Options
Display Navigation Pane: No

Click **OK**. Keep going...

File->Options->Current Database



Exam 77-885: Microsoft Access 2010
1. Managing the Access Environment
1.1. Create and manage a database: Set Access Options

Reopen the Current Database

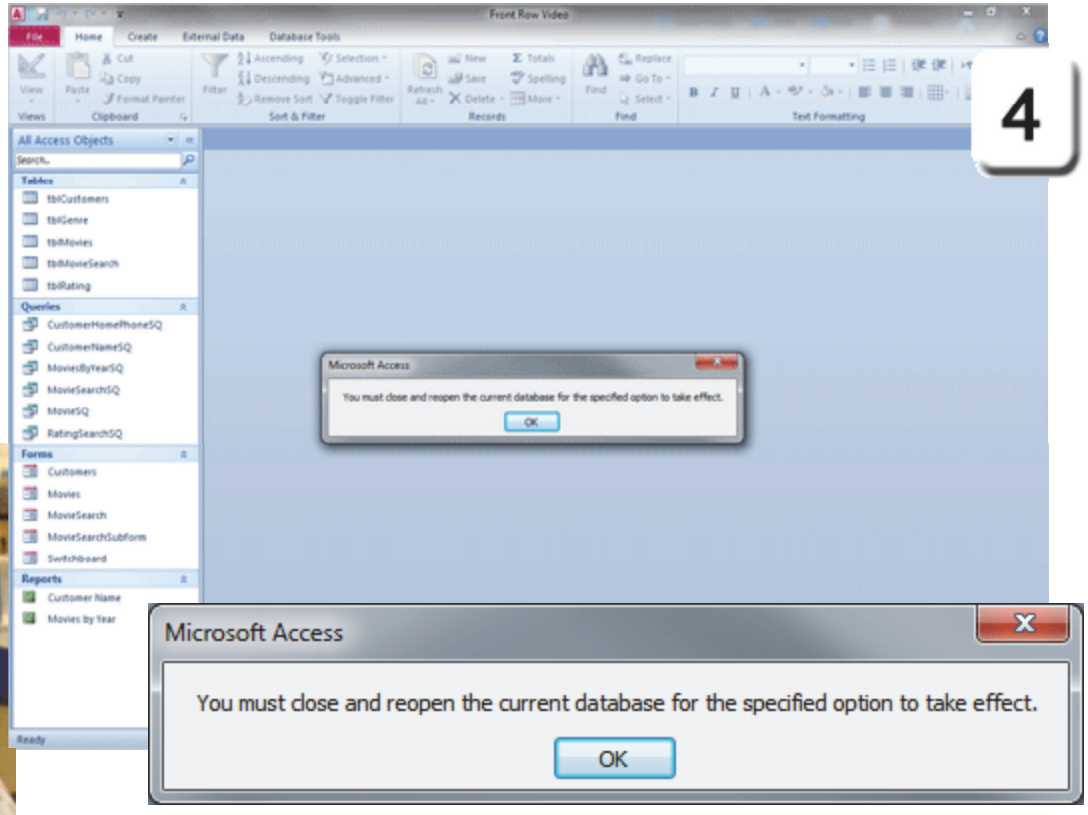
The changes we just made will show up when you reopen the database.

4. Try it: Confirm and Reopen the Database
You will be prompted to close and reopen the current database for the options to take effect.

Click **OK**.

Close the database and **Open** it again.
Keep going...

File->Options->Current Database



Exam 77-885: Microsoft Access 2010
1. Managing the Access Environment
1.1. Create and manage a database: Set Access Options

The Opening Scene

5. What Do You See? The database opened and displayed the Switchboard Form. The Title at the top of the database says Front Row Video, not Microsoft Access.

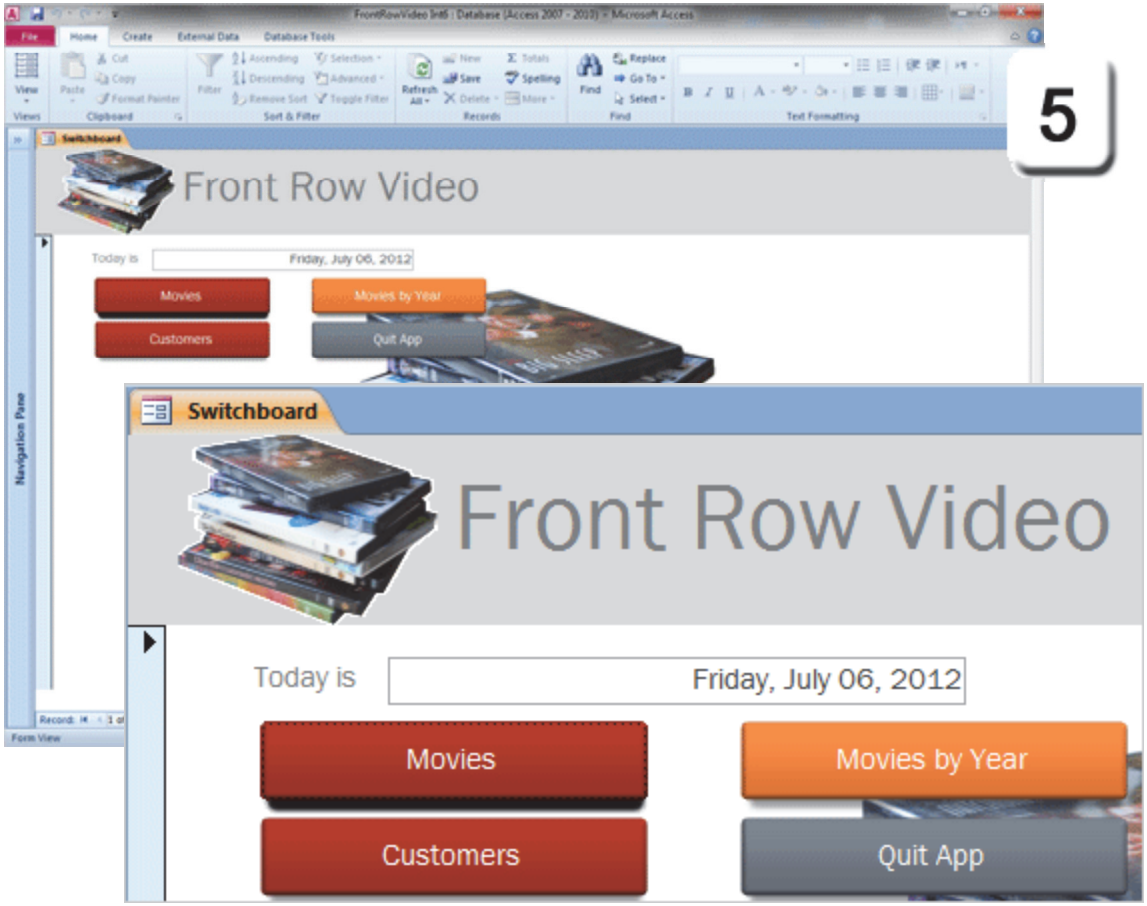
What Don't You See? There is a Record Selector on the right side of the Switchboard Form. The Navigation Pane is hidden.

Try This, Too: Show the Navigation Pane
The Navigation Pane lists all of your Microsoft Objects: Tables, Forms, Queries and Reports. We still have a lot of programming to go through. Please change the options for the Current Database.

Go to **File->Options->Current Database.**
Edit the Navigation options:
Display Navigation Pane: Yes
(We are turning the Pane back on, again.)
Click **OK** to close the Options.
Click **OK** when you are prompted to reopen.

Close the database and **Open** it again.
Keep going...

File->Options->Current Database



Exam 77-885: Microsoft Access 2010
1. Managing the Access Environment
1.1. Create and manage a database: Set Access Options

Designing for Users

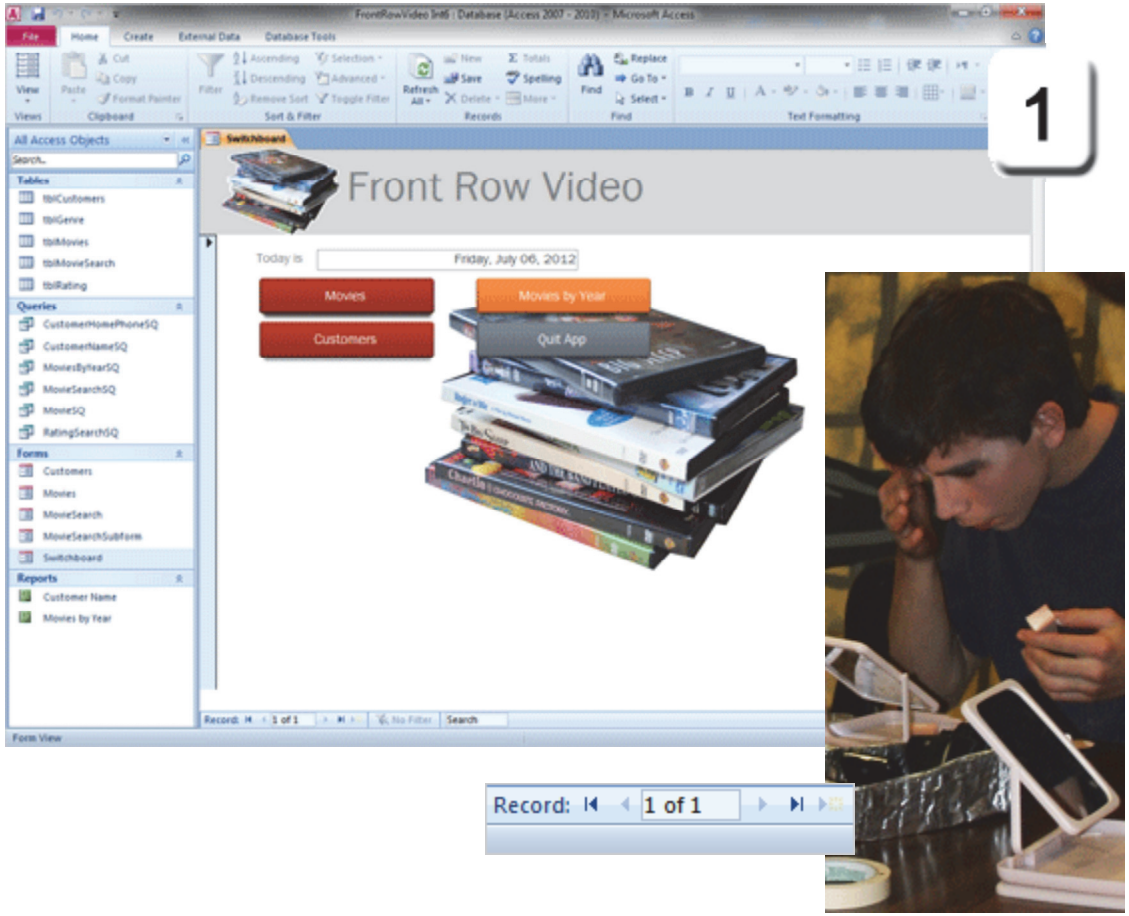
In an earlier lesson, we used the Property Sheet to edit a couple of Form Properties: Tab Order and Cycle. The Property Sheet can also control what a User can see or edit. In an earlier lesson, we also mentioned that Real Users get Real Mad when a Form does not act as expected.

Let's review the options and look for ways to make our Form more effective.

1. Try it: Review the Form
Go to **All Access Objects->Forms**.
If needed, open a Form: Switchboard.

What Do You See? The Switchboard Form has Record Selectors and Navigation Buttons. Since the Switchboard Form does not save any data, there is no need to use the Record Selectors or find a different Record. We can turn those features off in the Property Sheet.

Home->Views->View->Form View



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Edit the Property Sheet

Controlling Form Properties

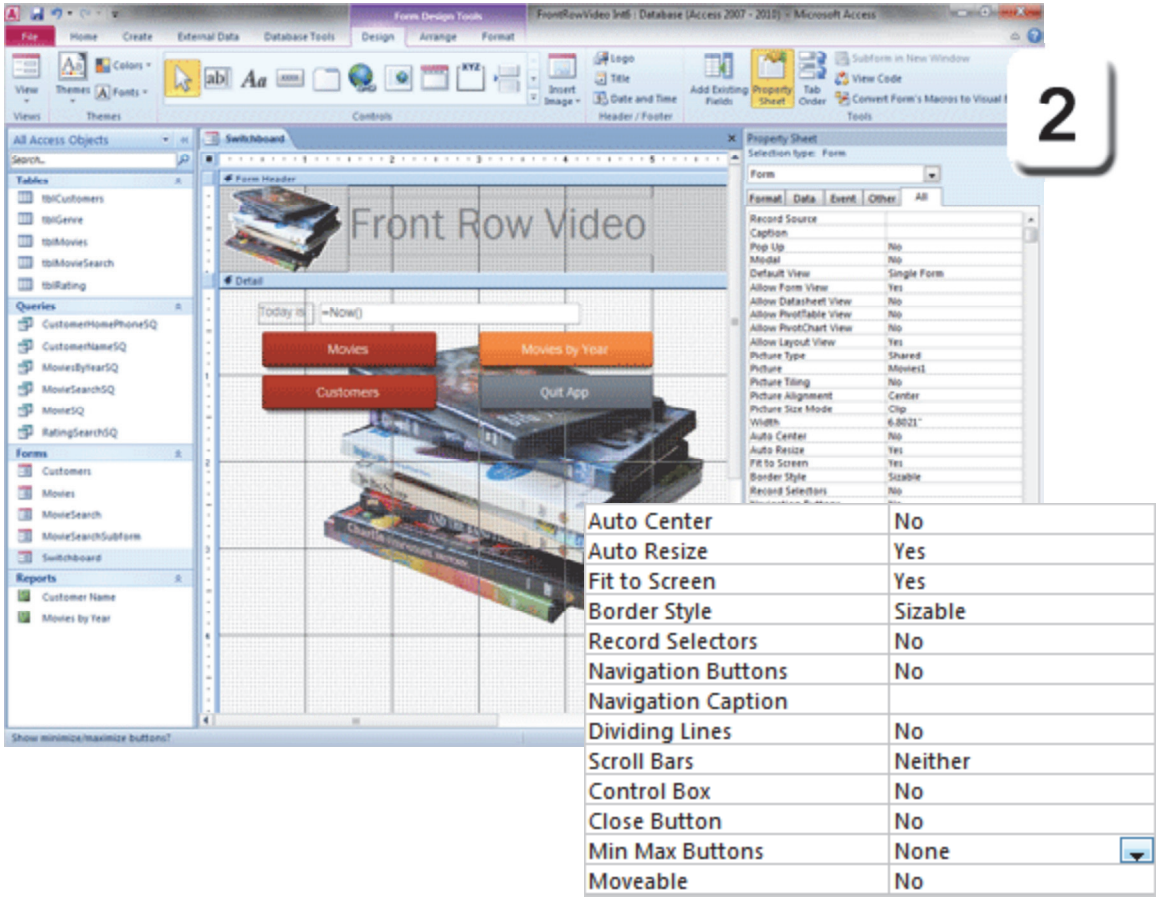
What happens when a User closes the Switchboard in this Mighty Access Database? How will she get back to work if the Navigation Panel is hidden? As a database designer, you can be proactive and remove the Close Button.

Before You Begin: Change the View
The Switchboard Form is open in Form View.
Go to **Home->Views->View->Design View.**

2. Try it: Edit the Form Properties
Click on the Form Selector.
Go to the **Property Sheet->All.**

Edit the following Properties:
Auto Resize: Yes
Fit to Screen: Yes
Record Selectors: No
Navigation Buttons: No
Scroll Bar: Neither
Control Box: No
Close Button: No
Min Max Buttons: None
Moveable: No
Save your changes. Keep going...

Form Design Tools->Design->Tools->Property Sheet



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Edit the Property Sheet

Take Two

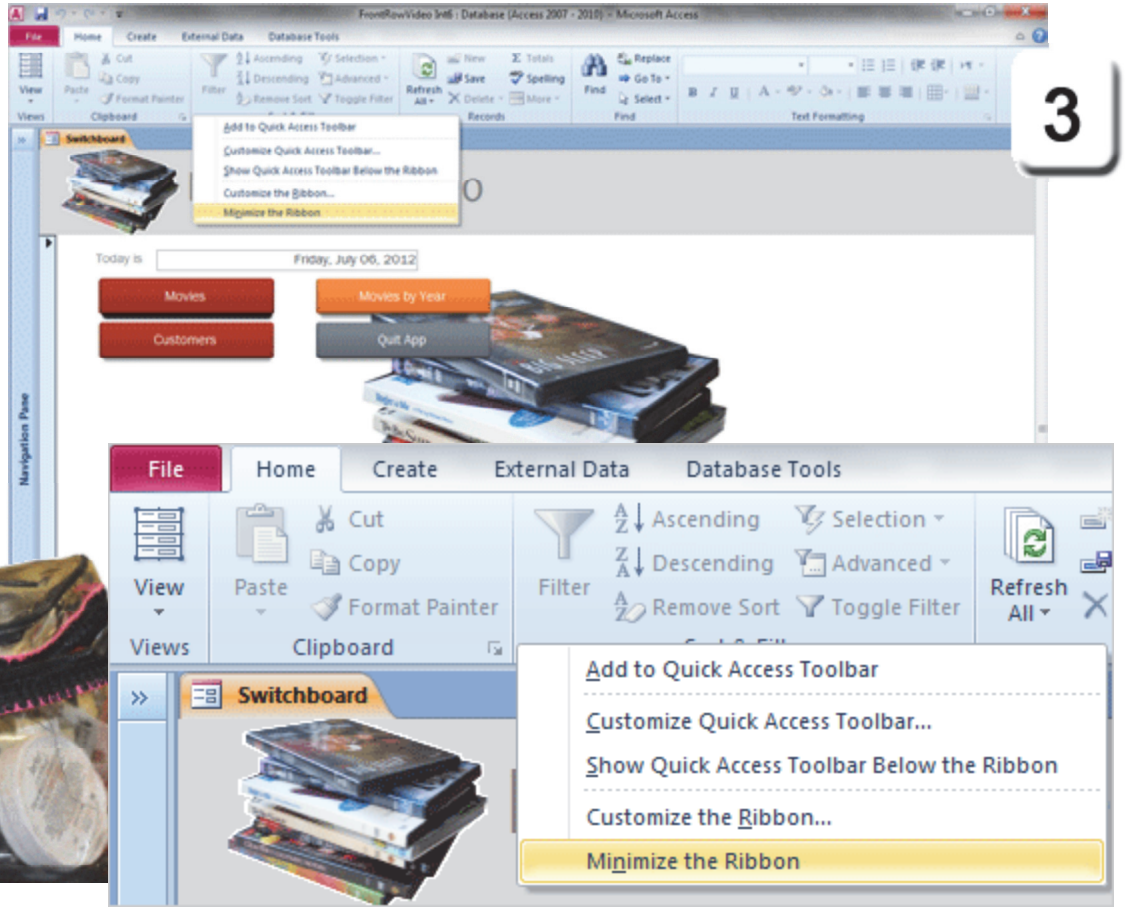
Minimize the Ribbons

The Ribbons allow Users full control of your Access Database. The Ribbons--Home, Create, External Data and Database Tools--have many functions that could damage the data if someone doesn't know how to use them correctly. Some actions have no "Undo."

3. Try This: Minimize the Ribbon
Right-click the Home Ribbon.
Select an Option: Minimize the Ribbon.

Keep going...

Home->View->Views->Form View



Exam 77-885: Microsoft Access 2010
1. Managing the Access Environment
1.1. Create and manage a database: Minimize the Ribbon

Take Two

A Simplified Form

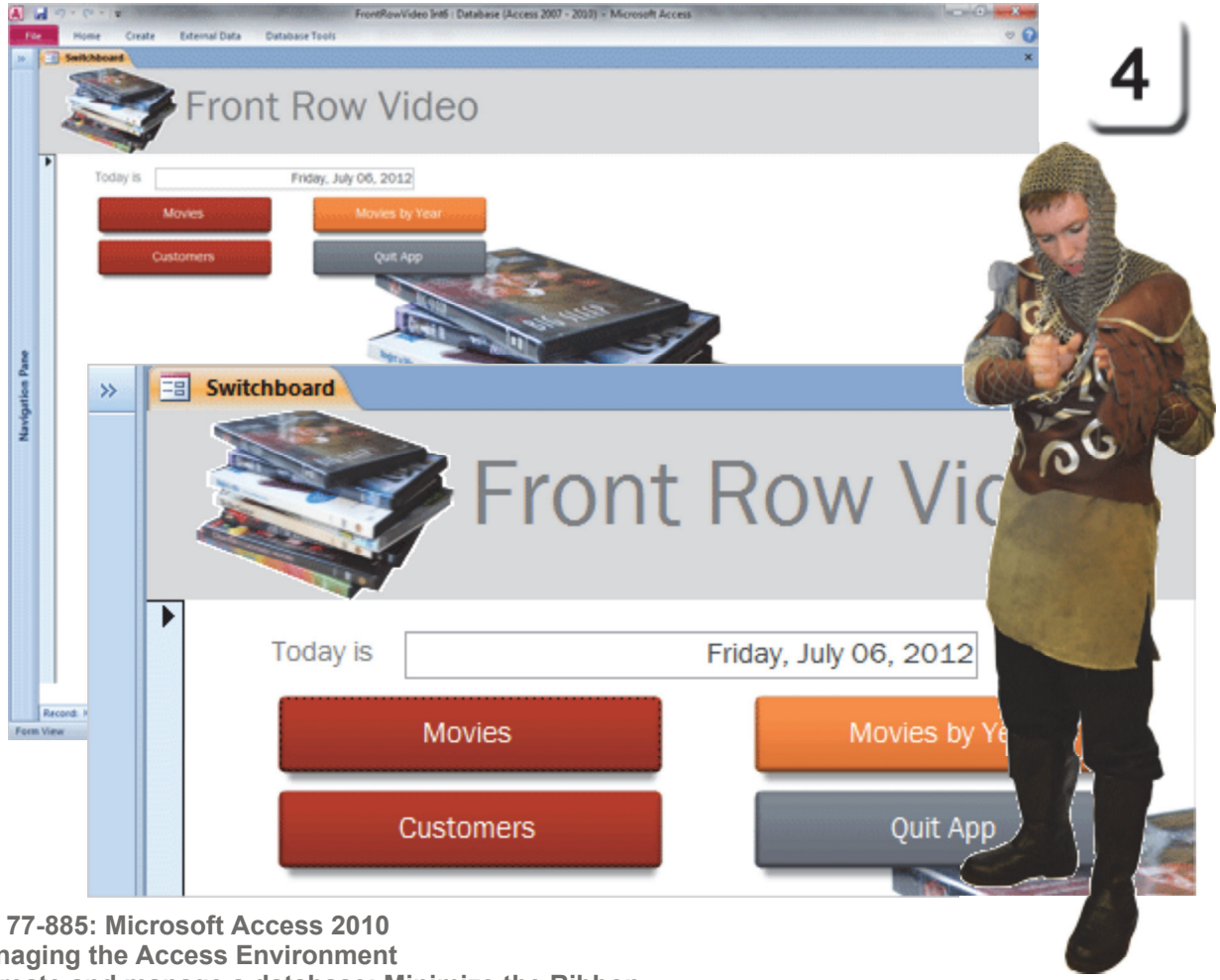
4. What Do You See? This Form has been stripped of several Controls including the Records Selector, Navigation Buttons and Scroll Bars.

The Windows Controls are also hidden: Min, Max and Close.

The Ribbons are hidden, but this is not real security. Users can still see the Menus.

That's good enough for now.

Home->View->Views->Form View



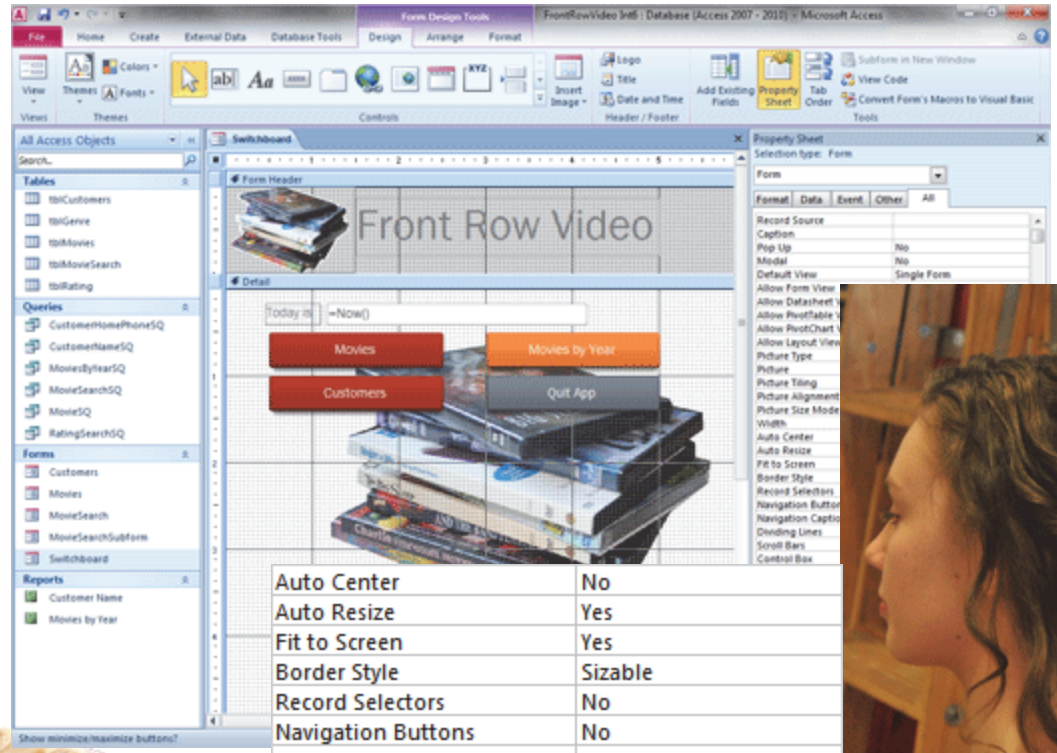
Exam 77-885: Microsoft Access 2010
1. Managing the Access Environment
1.1. Create and manage a database: Minimize the Ribbon

Take Two

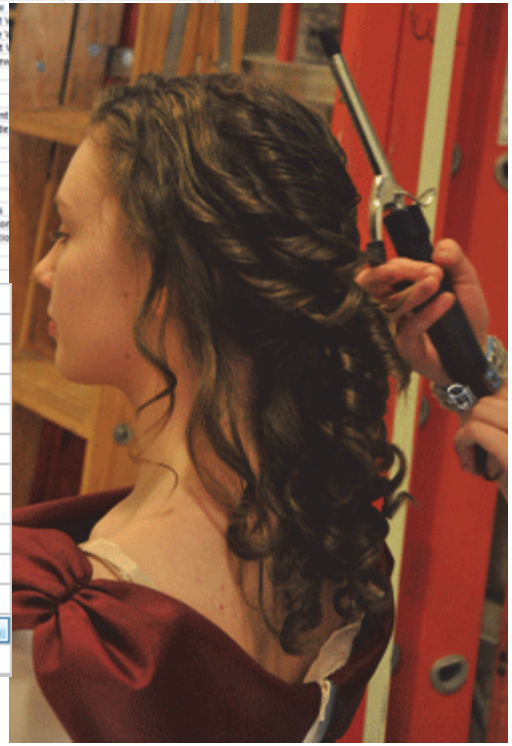
Summary

There are lots of ways that a User can be confused by a Form. We just used a half-dozen Properties to simplify the Switchboard Form.

You done good.
You get the cookie.



Auto Center	No
Auto Resize	Yes
Fit to Screen	Yes
Border Style	Sizable
Record Selectors	No
Navigation Buttons	No
Navigation Caption	
Dividing Lines	No
Scroll Bars	Neither
Control Box	No
Close Button	No
Min Max Buttons	None
Moveable	No



Practice Activities

Lesson 7: The Opening Scene

Try This: Do the following steps

1. Download the database **BBL Int ver7.accdb**.

It is not recommended that you use the database you have been programming because this activity removes controls from view.

2. Open the Switchboard Form in Design View.
3. Using the Property Sheet, edit the following:
Record Selectors: No
Navigation Buttons: No
Scroll Bar: Neither
Control Box: No
Min Max Buttons: No
Movable: No
4. Go to File->Options. Go to Current Database. Edit the Application Options as follows:
Application Title: Brown Bag Lunch
Display Form: Switchboard
Display Status Bar: Yes
Document Window Options: Tabbed documents; Display Document Tabs=yes
Display Navigation Pane: No
5. Close and Reopen the database when prompted.
6. Minimize the Ribbons.
7. Review the database's new look.
8. You may close without saving.

Test Yourself

1. Which of the following is listed in the Access Navigation Pane?
(Give all correct answers.)
A. Tables
B. Forms
C. Queries
D. Reports
Tip: Intermediate Access, page 198

2. The Property Sheet allows access to remove which commands from Access?
(Give all correct answers.)
A. Record Selectors
B. Navigation buttons
C. Scroll Bar
D. Close button
E. Mix and Max buttons
Tip: Intermediate Access, page 200

3. Which is the command for Minimizing the Ribbon?
A. Right click the Ribbon and select Hide
B. Right click the Ribbon and select Minimize
C. Go to File-> Options-> Ribbons
Tip: Intermediate Access, page 201

4. When the Ribbons are Minimized, the user cannot see or access them at all.
A. True
B. False
Tip: Intermediate Access, page 202

5. Which are reasons to remove controls in Access, such as the Navigation Pane and the Close button? (Give all correct answers.)
A. To keep the interface clean, simple and non-threatening
B. To keep the database secure from damage by users
Tip: Intermediate Access, page 191

Take Three

Access 2010: Designing for Users

Dress Rehearsal: Testing Software

Intermediate Access Objectives

In this lesson, you will learn how to:

1. Use the Property Sheet to troubleshoot Form errors.

2. Use the Query Tools to troubleshoot several common programming errors.

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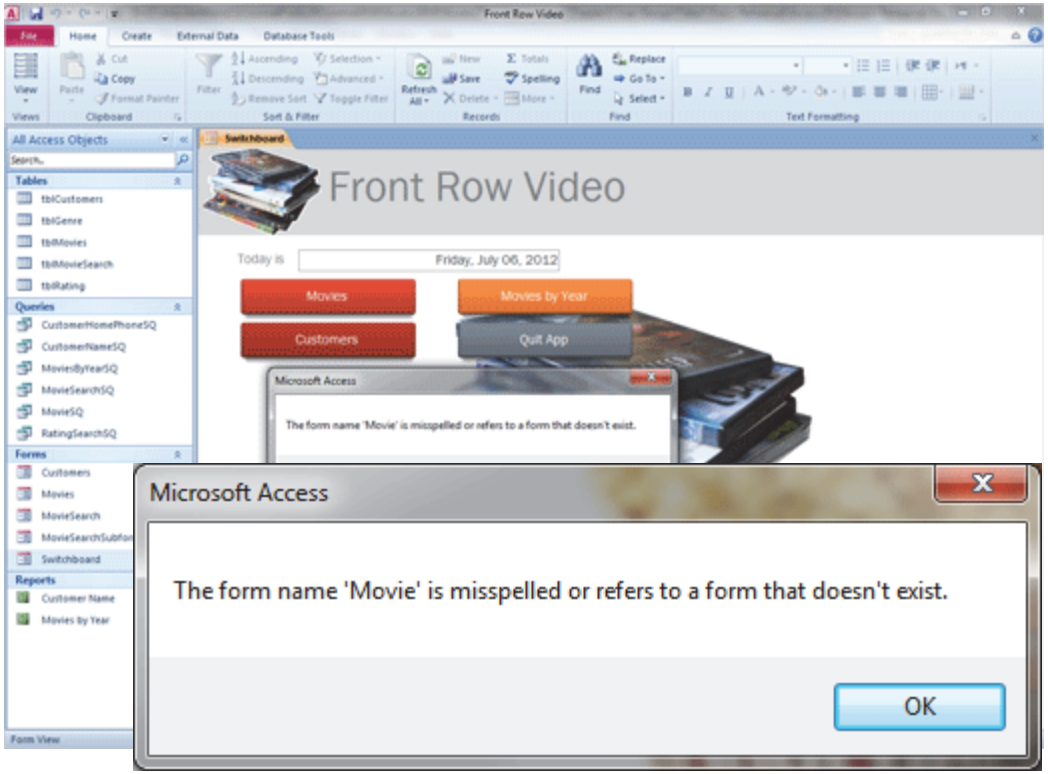


Lesson 8 : Dress Rehearsal Software Testing

1. Readings
Read Lesson 8 in the Intermediate Access guide, page 205-219.

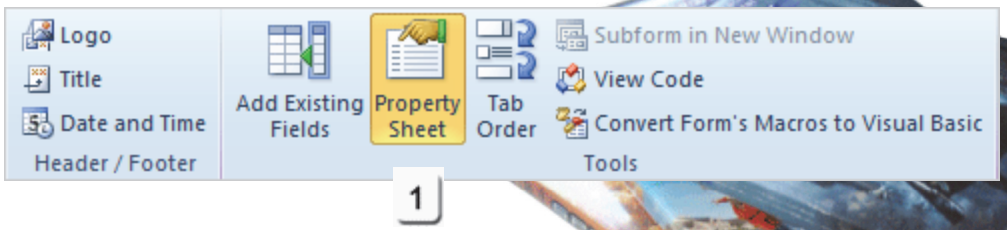
Project
A sample query to test errors.

Downloads
FrontRowVideo Int8.accdb

2. Practice
There is no Practice Activity for this lesson.

3. Assessment
Review the Test questions on page 220.

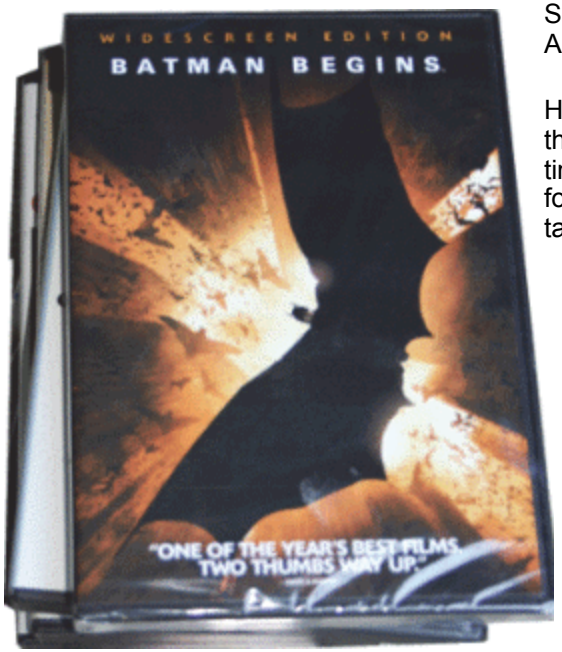
Form Design Tools->Design Ribbon



1

Menu Maps
From the **Form Design Tools->Design Ribbon**
1. Design->Tools->Property Sheet, page 209

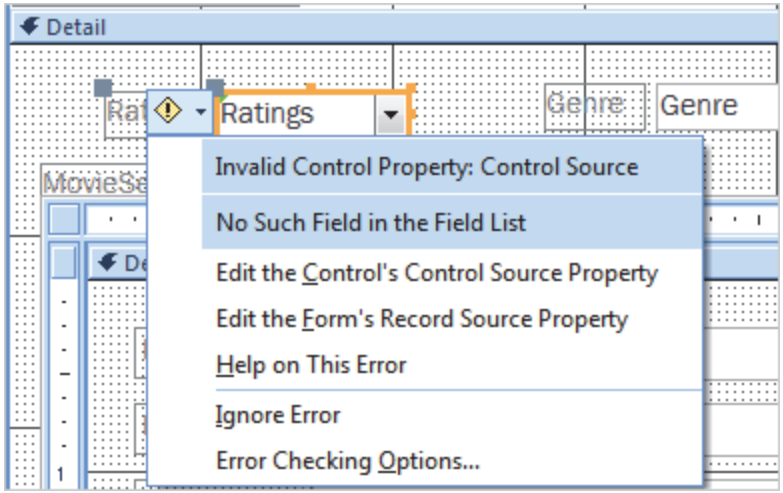
Dress Rehearsal: Software Testing



Software should be tested in a lab—never live on the real company network. If your Mighty Access database doesn't work, at least it won't keep the customers waiting.

How should the testing be done? There are software products that can be programmed to run through a series of steps. These products are very accurate: the same test can be run many times. Even without sophisticated test software, you should thoroughly check your database. Each form needs to be inspected for function, tab order, even spelling. Does the database complete the task it was created to do?

Microsoft Access 2010: Example of a Form with an error



Take Three

Before You Begin

Before You Begin: Open the Sample Database
Go to **Start -> All Programs ->Microsoft Office.**
Click on **Microsoft Office Access 2010.**

Access will prompt you to open a database. This lesson uses the database that was programmed in the previous lesson. You can continue with the same database if you wish.

The **FrontRowVideo Int8.accdb** database has:
Five Tables: tblCustomers, tblGenre, tblMovies, tblMovieSearch and tblRating.

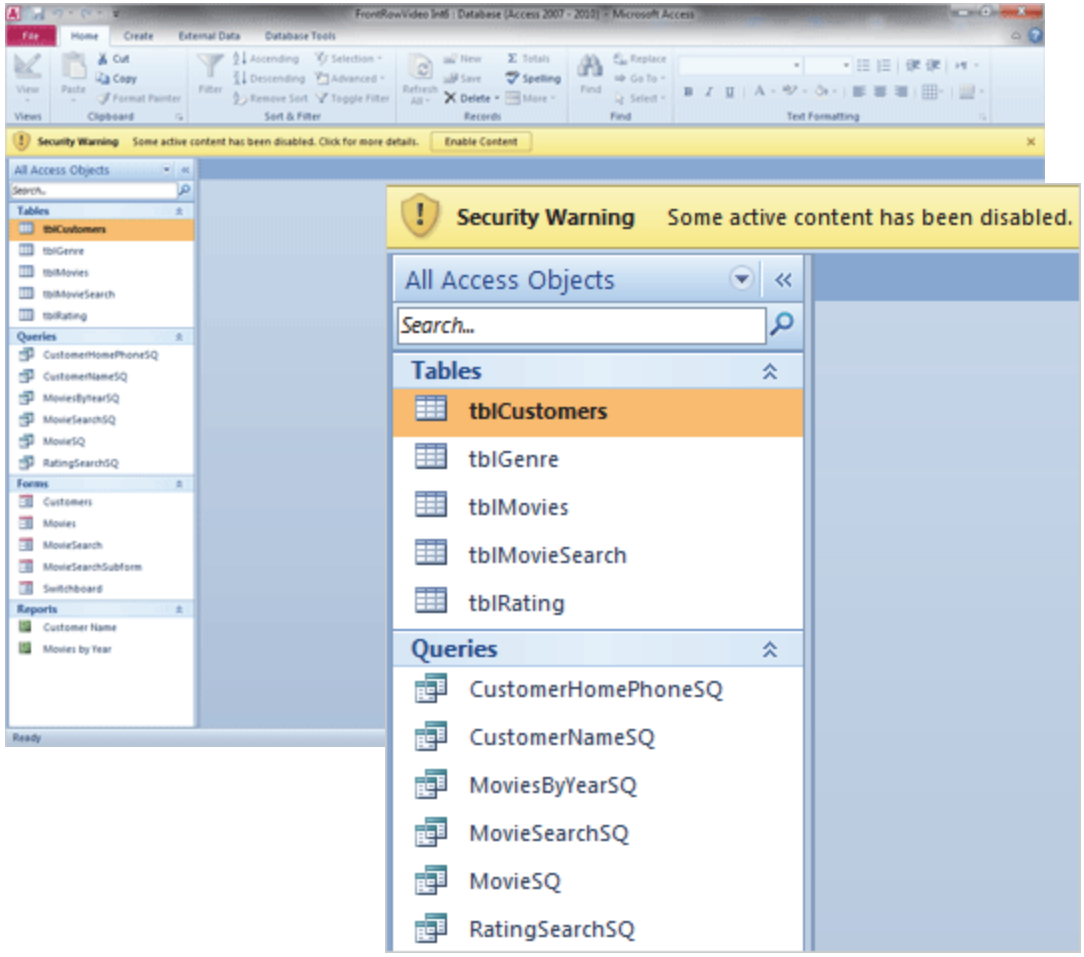
Six Queries: CustomerHomePhoneSQ, CustomerNameSQ, MoviesByYearSQ, MovieSQ,, MovieSearchSQ and RatingSearchSQ.

Four Forms: Customers, Movies, MovieSearch and MovieSearchSubform.

Two Reports: Movies by Year, Customer Name.
Keep going...

Memo to Self: Click **Enable Content** if you see the Security Warning.

Start -> All Programs ->Microsoft Office-> Microsoft Office Access 2010



Take Three

Common Form Errors

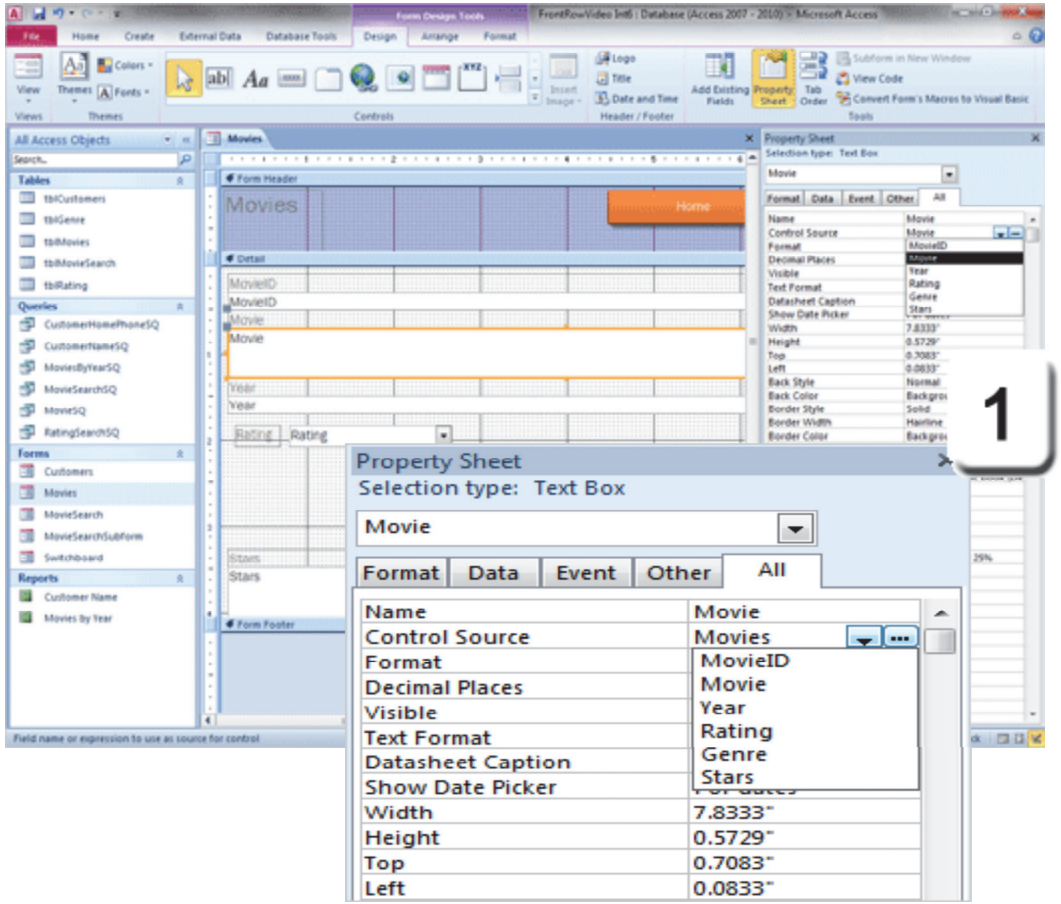
The following pages will set up several mistakes that are common in database programming: bad spelling and incomplete punctuation. After the error has been tested, we will undo the mistakes and confirm that the Form or Query works again.

1. Try This: Create a Typo
Go to **All Access Objects->Forms**.
Open a Form in **Design View**: Movies.
Select a Control: Year.
Go to the **Property Sheet->All**.
Select the **Control Source**: Movie.

What Do You See? The Control Source drop down lists all of the Fields in the Record Source for this Form: tblMovies.

Keep going...

Form Design Tools ->Design->Tools->Property Sheet



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: View the Property Sheet

Take Three

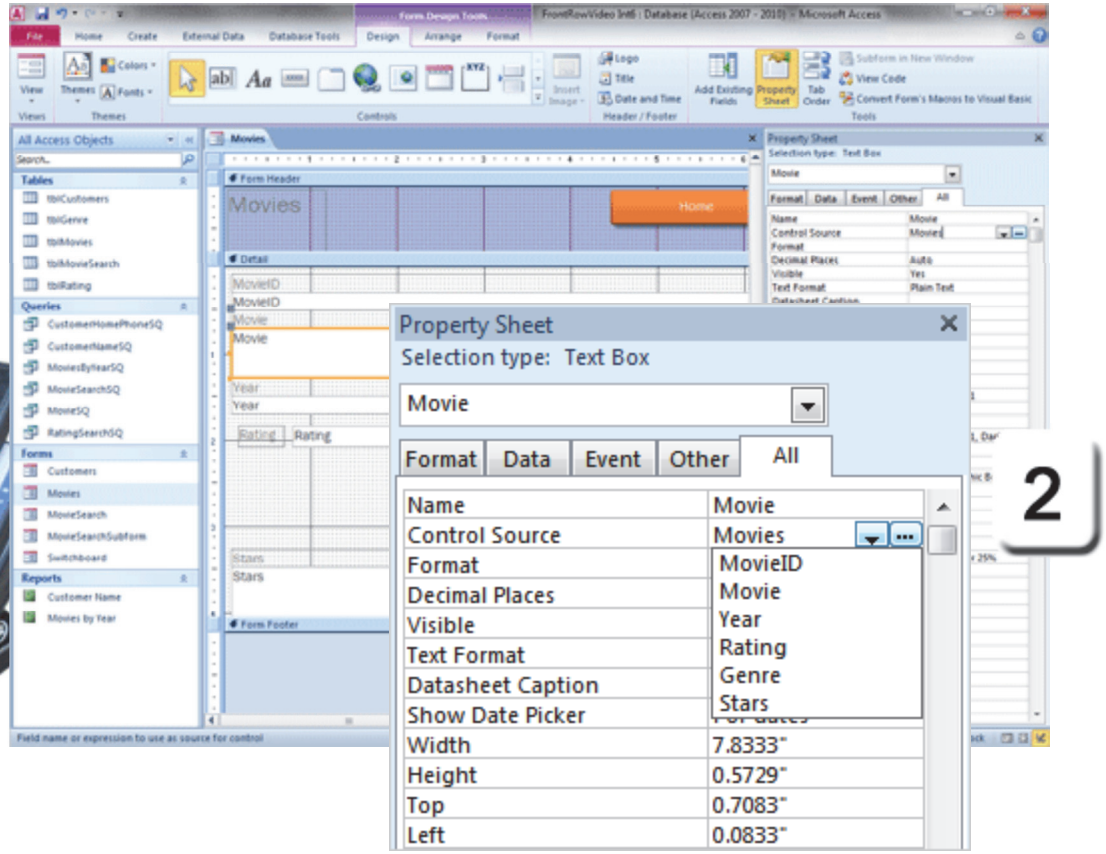
Misspell the Control Source

2. Try it: Spell the Name Wrong

The Movie Control is still selected.
Go to the **Property Sheet**.
Rename the Control Source (type): Movies.
(It does not MATCH any Field in the Table.)

Keep going...

Form Design Tools ->Design->Views->View



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Edit the Property Sheet

Take Three

The Screen Test

3. Try This, Now: Change the View
Go to **Form Design Tools ->Design->Views.**
Select a **View: Form View.**

What Do You See? There is an error on the Form: **#Name?** Microsoft Access cannot match the name of the Control Source in the Property Sheet with the Field in tblMovies.

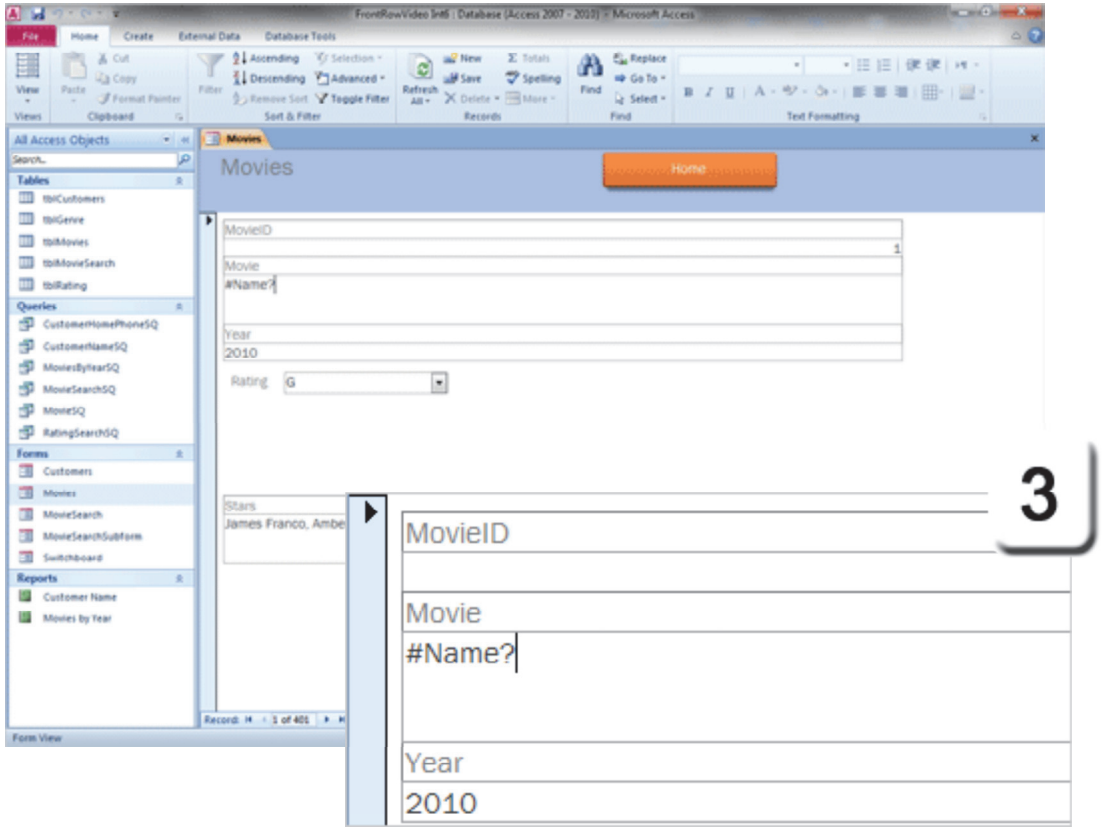
Do This, Now: Correct the Error
Go to Form Design Tools ->Design->Views.
Select a View: Form View.

Select the Movie Control.
Go to the **Property Sheet.**
Select the **Control Source: Movie.**

Save your changes.
Test the Form in Form View, again.

Done and done. **Close** the Form.

Form Design Tools ->Design->Views->View



Exam 77-885: Microsoft Access 2010
3. Building Forms
3.2. Apply Form Design options: Edit the Property Sheet

Take Three

Common Query Errors

There are several common Query errors. Each mistake has it a different error message. The following pages will look at two Query mistakes: punctuation and spelling.

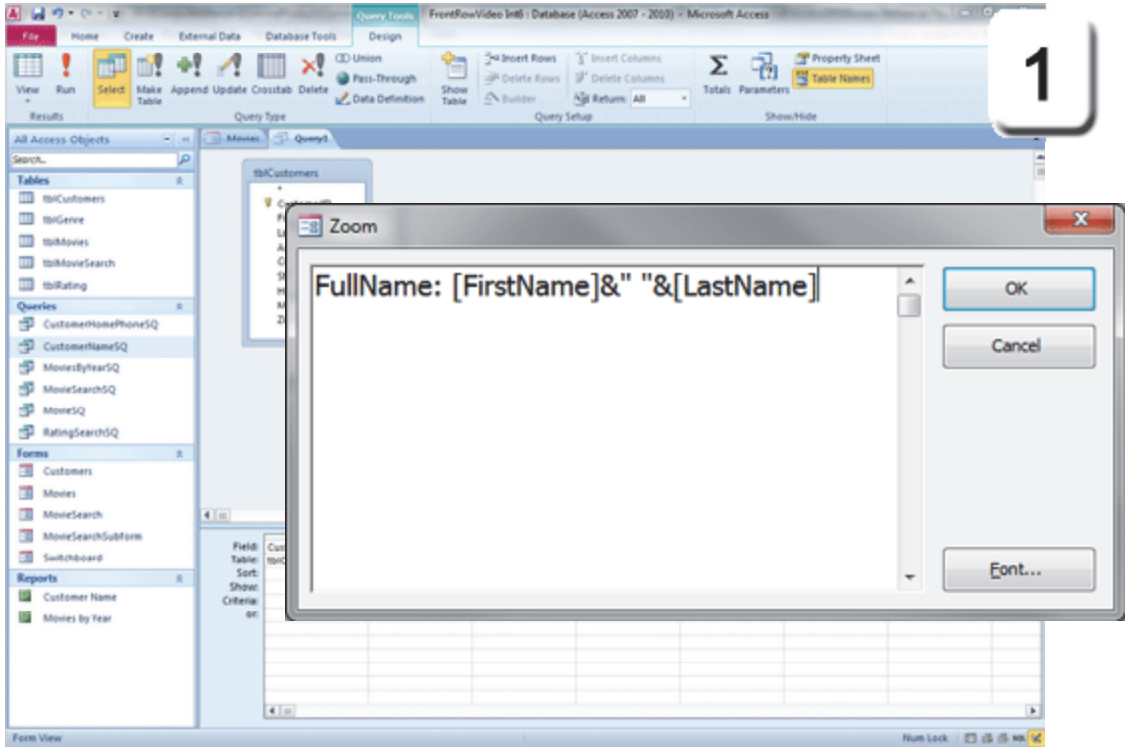
1. Try This: Create a Sample Query
Go to **Create ->Queries-> Query Design.**
Select a Table: tblCustomers
Click **Add**. Click **Close**

Try it: Add Fields to the Query
Go to tblCustomer.
Double click to select the following Fields:
CustomerID
FirstName
LastName

Try it: Concatenate Two Name Fields
Place your cursor in Column 4.
Type: FullName:[FirstName]&" "&[LastName]

Fullname is the label, or **alias**, for the new field.
[FirstName] and [LastName] are Fields from tblCustomer. The two **quotes** have a space between them.

Query Design Tools ->Design->Results->Run



Exam 77-885: Microsoft Access 2010
4. Creating and Managing Queries
4.1. Construct queries: Create a Select Query

Take Three

Match Match Match

The concatenation should have two brackets surrounding a Field. For example: [LastName]. What happens if they do not match?

2. Try it: Type a Mistake
Right click the FullName Field and **Zoom** to see the code. Please edit the expression as follows:

Delete the last bracket.
Type a brace: }

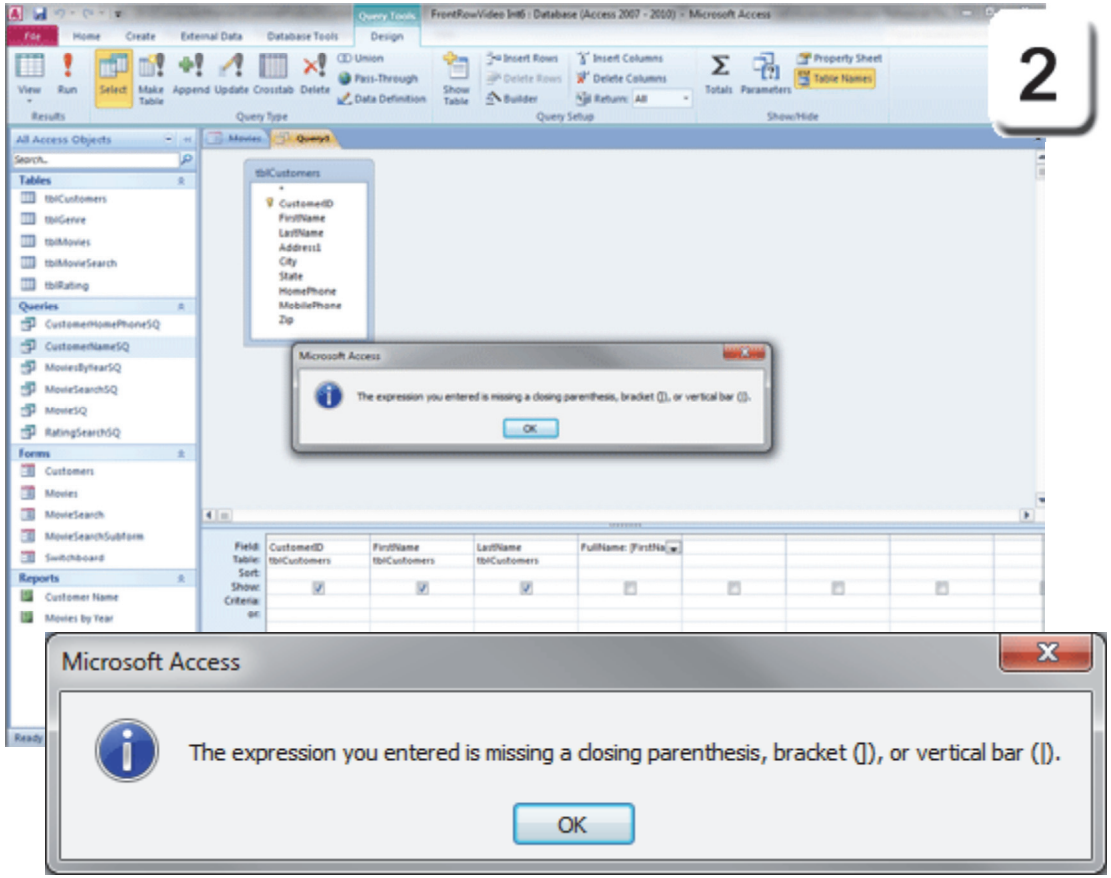
Click **OK** to close the Zoom Window. When you return to the Query, click **Tab** on the keyboard. This will prompt Access to proof the expression.

What Do You See? Microsoft Access will alert you that this expression is missing a closing parenthesis, bracket or vertical bar.

Click **OK**. keep going...

Memo to Self: Proof your Query and make sure the punctuation matches. If you start with a parenthesis you need to close with a parenthesis. Same goes for brackets.

Query Design Tools ->Design



Exam 77-885: Microsoft Access 2010
4. Creating and Managing Queries
4.1. Construct queries: Create a Select Query

Take Three

Spelling Counts

3. Try it: Spell the Field Name Wrong
Right click the FullName Field and Zoom to see the code. Please edit the expression as follows:

Delete the last brace: }
Type a bracket:]
Edit the Field Name. Type: Last Name

Click **OK** to close the Zoom Window. You should return to the Query.

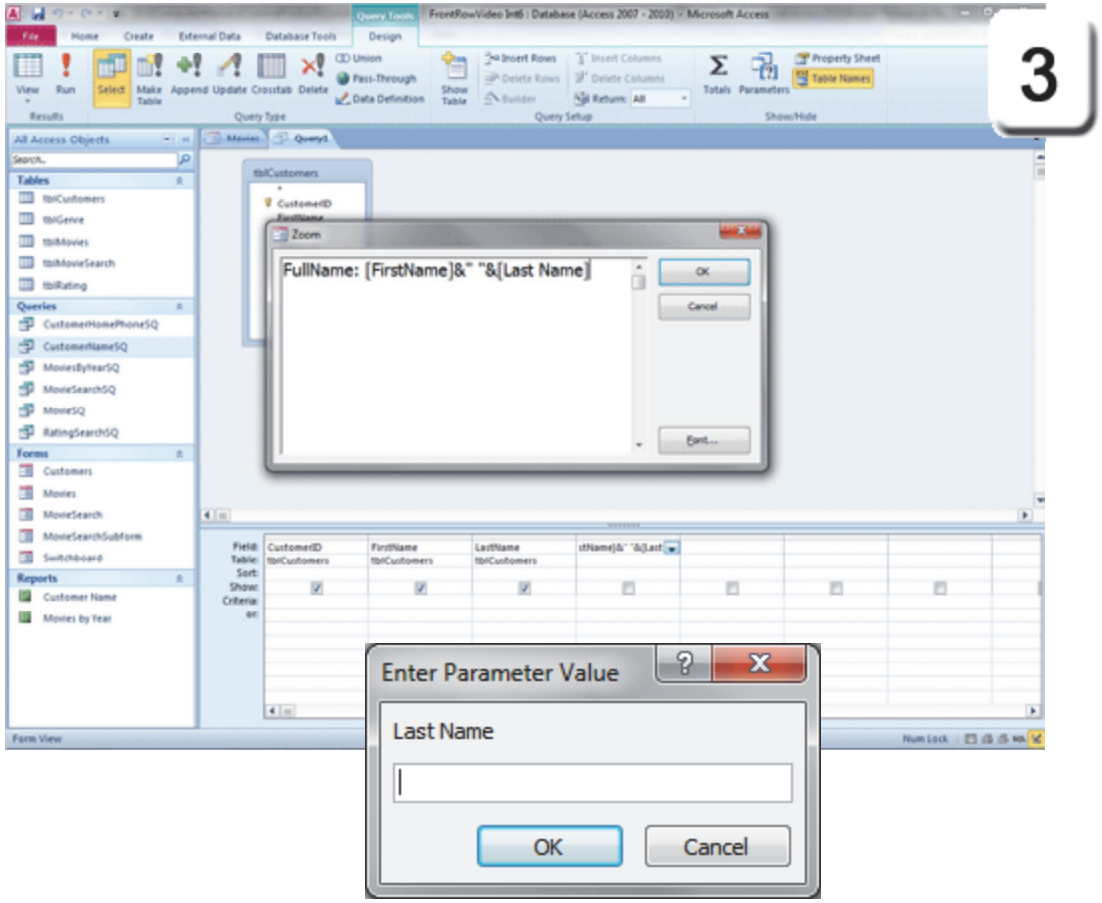
Try This, Too: Run the Query
Go to **Query Design Tools ->Design->Results**
Click on **Run.**

What Do You See? Microsoft Access will ask you to Enter Parameter Value for Last Name. This means that the database could not find Field for Last Name in tblCustomers. The Table has a Field for LastName. They do not match.

Click **Cancel**.

OK. OK. That's enough error testing for now. Close the sample Select Query without saving.

Query Design Tools ->Design->Results->Run



Exam 77-885: Microsoft Access 2010
4. Creating and Managing Queries
4.1. Construct queries: Create a Select Query

Take Three

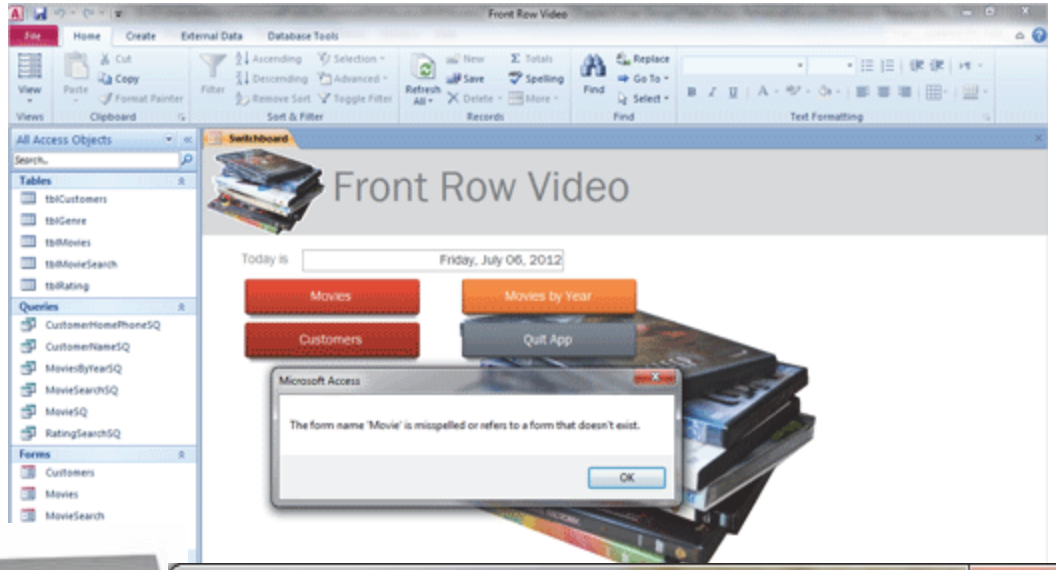
Who Should Do the Testing?

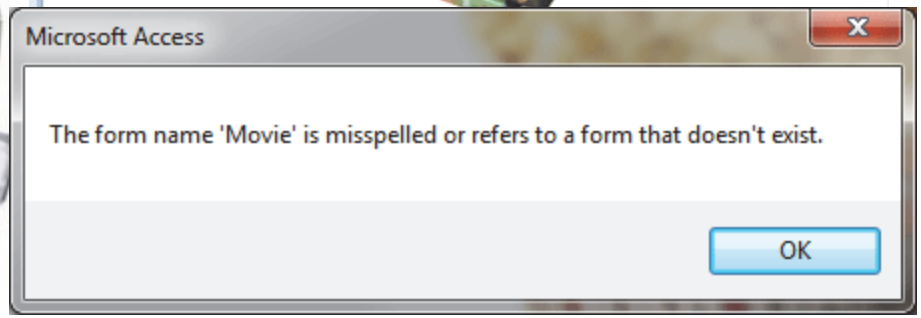
All good software should be tested by real Users. Software testing doesn't require thousands of Users to find the flaws or bugs. Pick five people and let them try the software. If all five Users fail at the same point, you don't need another 995 people to tell you that there's something wrong with the expression or navigation.

In the initial test, you should select people who are not upset by failure.

Some people are not appropriate for software testing. They are easily offended by errors. Their bad impressions can destroy a good program that needs a little more work.

Sample Error: The name of the Form is spelled wrong in the Macro. It should be Movies.





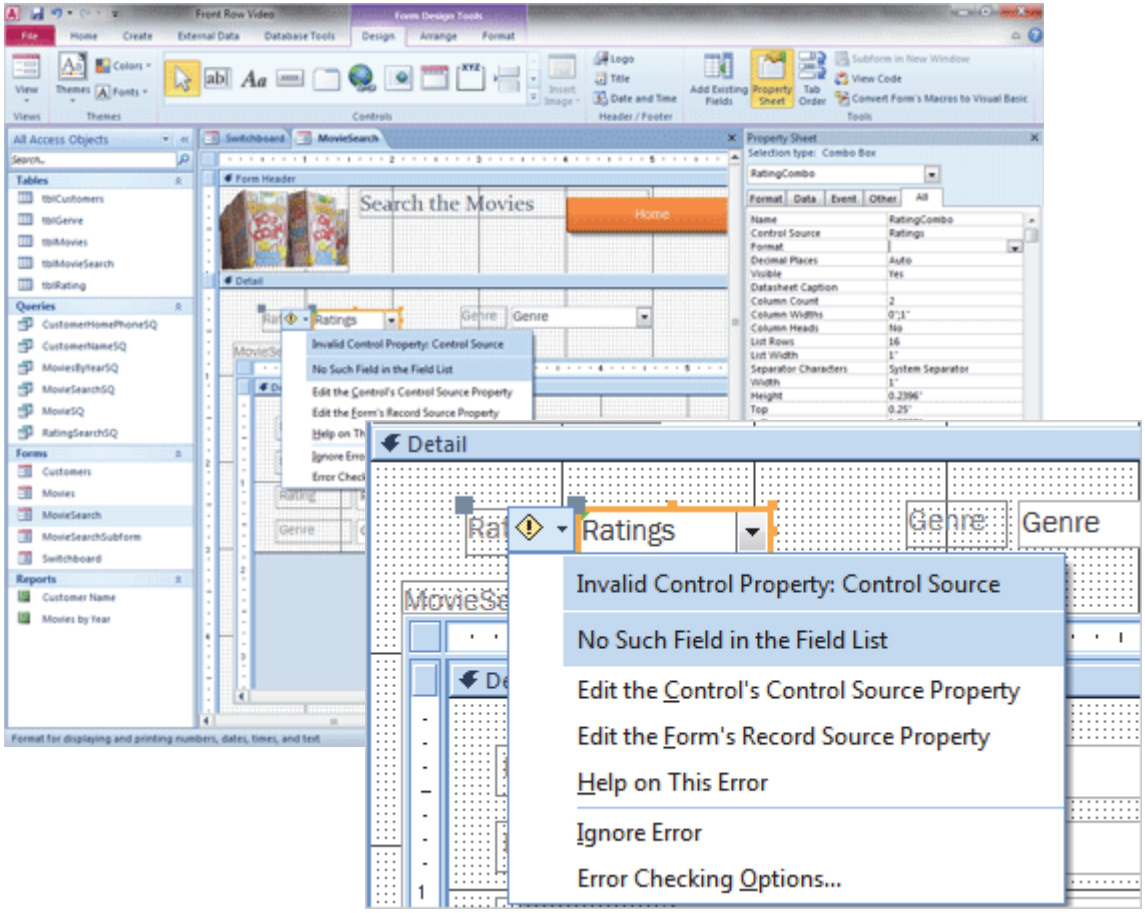
Take Three

Errors Are Not Failures

The reason you are testing the software is to *discover* the weakness in your database.

Errors are not failures. Sometimes Users navigate in ways you did not expect and your software simply wasn't designed to take that pathway. You can respond by blocking that step, or making it better if it helps your Users get the job done.

Sample Error: The name of the Control Source is spelled wrong in the Combo Box Properties



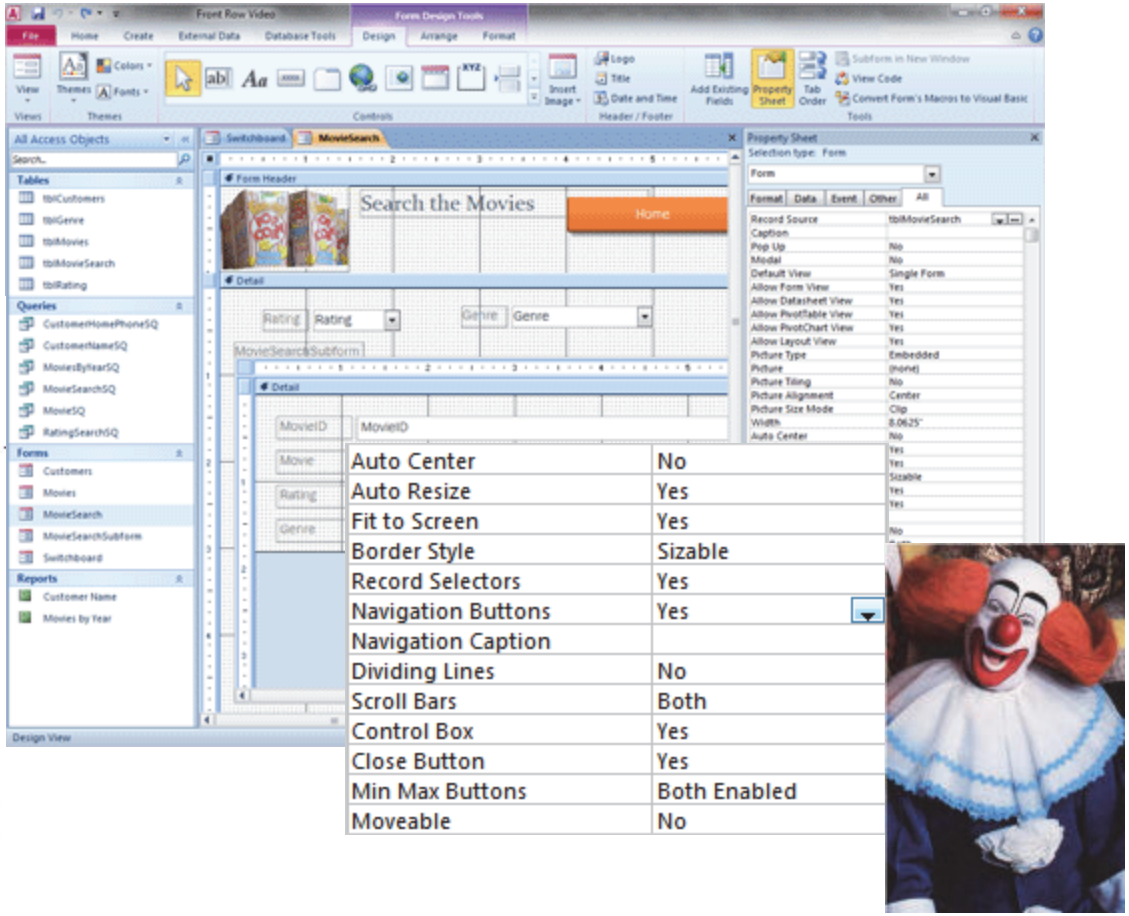
Take Three

What Is Success?

Users come to your software tests expecting software that works as well as any other Windows program.

We all learn to expect certain behaviors from the computer. An “X” can mean “exit” or close. It can also mean, “Don’t do that.” If you use “X” as “X marks the spot!” you will confuse your users. This is not what they assume when they click on the “X” symbol.

Property Sheet Settings for a Sample Form



Take Three

The Live Performance

A good piece of software needs little or no explanation. Users should be able to navigate through the assigned task and complete their work efficiently. That's the plan, anyways.

In reality, you should prepare for your software launch. Before you release your software, you should e-mail the people who will be using your database. Explain how the new database works and offer them an opportunity to join you in the new release. You should give them a method—an e-mail form or a phone number—so they can contact you if they have any questions.

A little communication goes a long way. You are going to change how they get their work done.

If you listen to your users when you develop the database, and listen again when you test the software, then you will be successful.

Sample Access Database Form

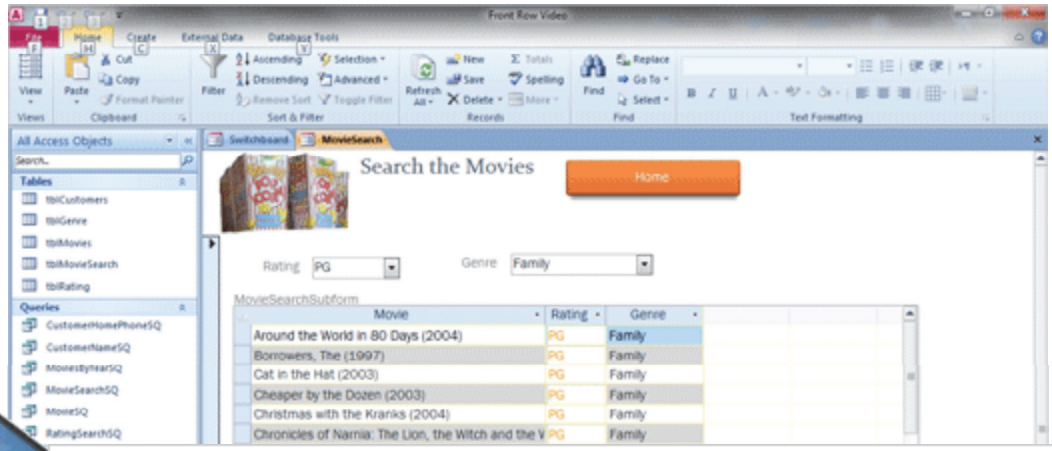
Take Three

Summary

The purpose of software testing is to create a better User experience. This lesson mocked up a couple of common programming mistakes and looked at the different errors.

Troubleshooting database errors can be frustrating when you don't see the mistakes right away, but there is nothing difficult.

Allez Allez in free.
You done good.



Rating PG13 Genre Action

MovieSearchSubform

Movie	Rating	Genre
Batman Begins (2005)	PG13	Action
Bourne Ultimatum, The (2007)	PG13	Action
Rise of the Planet of the Apes (2011)	PG13	Action
Scott Pilgrim vs. the World	PG13	Action
Sherlock Holmes: A Game of Shadows (2011)	PG13	Action
The Dark Knight (2008)	PG13	Action
The Hunger Games (2012)	PG13	Action
X-Men: First Class (2011)	PG13	Action

Test Yourself

1. What error is displayed when Access cannot match the name with the correct field?
A. #REF
B. #FIELD
C. #NAME
Tip: Intermediate Access, page 211

2. Two common Query errors are punctuation and spelling.
A. True
B. False
Tip: Intermediate Access, page 212

3. When Access prompts for a Parameter Value, it can mean that Access cannot find a matching field.
A. True
B. False
Tip: Intermediate Access, page 214

4. Which is true about testing a database.
A. Not necessary
B. Should be done by people not easily upset by failure
C. Used to discover weakness in database.
Tip: Intermediate Access, page 216

5. Which of the following is true about good software?
A. It needs little or no explanation to be used
B. Users should be able to navigate through the assigned table and complete their work efficiently.
Tip: Intermediate Access, page 218

Take One

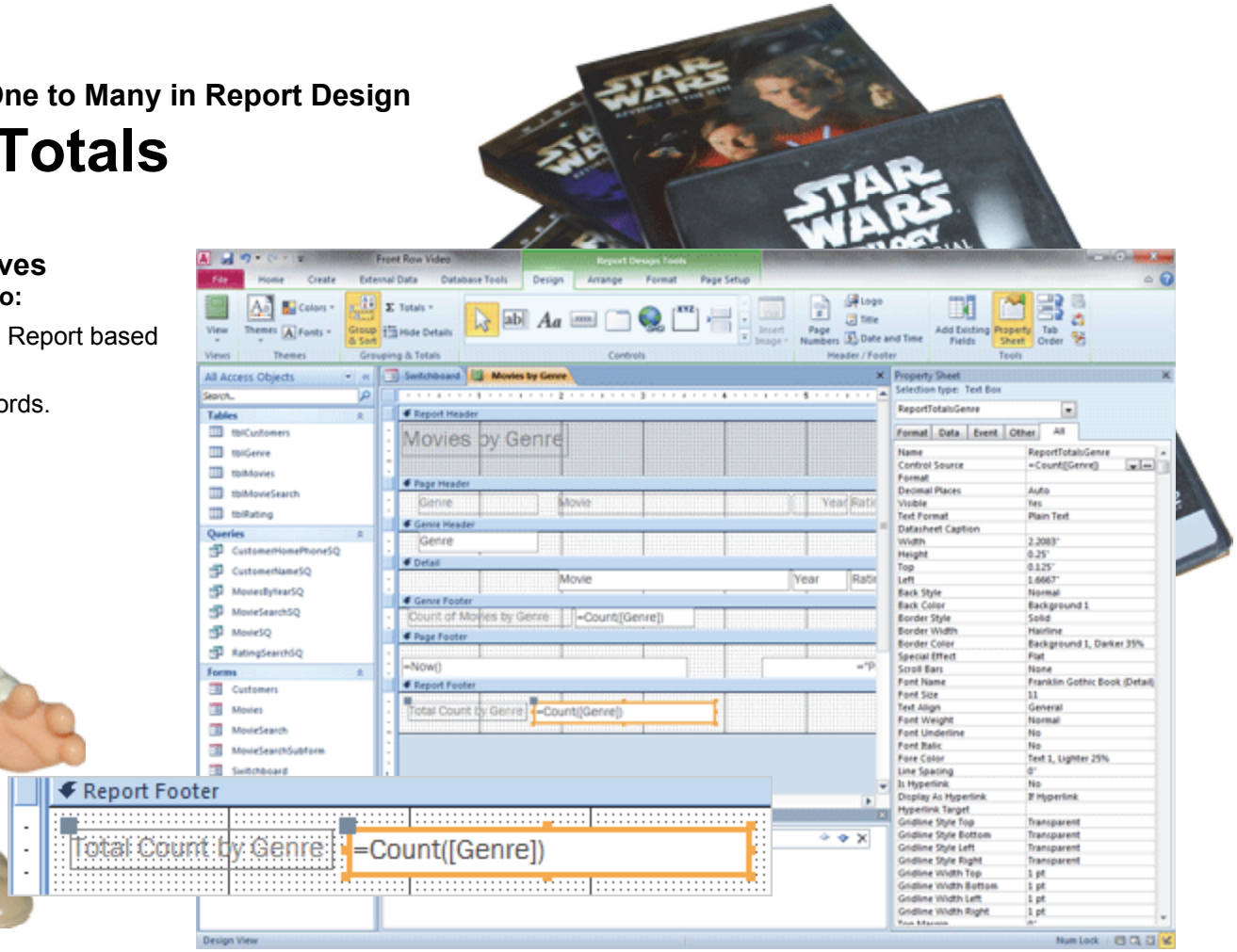
Access 2010: One to Many in Report Design

Report Totals

Intermediate Access Objectives

In this lesson, you will learn how to:

1. Use the Report Wizard to create a Report based on a Select Query.
2. Add Totals for each Group of Records.
3. Add Totals to the Report Footer.



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Lesson 9 : Report Totals

1. Readings
Read Lesson 9 in the Intermediate Access guide, page 221-248.

Project
A Report that Totals each Group.

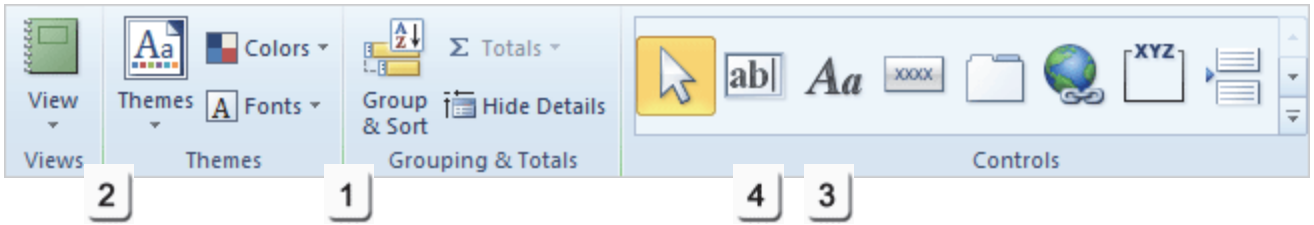
Downloads
FrontRowVideo Int9.accdb
popcorn1.gif, popcorn2.gif, popcorn3.gif, popcorn4.gif, movies1.gif

BBL Int ver9.accdb
BB Customers Logo.jpg
Brown Bag Logo.jpg
Lunch1.gif, Lunch2.gif, Lunch3.gif, Lunch4.gif

2. Practice
Do the Practice Activity on page 249.

3. Assessment
Review the Test questions on page 250.

Report Design Tools->Design Ribbon



Menu Maps

From the **Create Ribbon**
1. Create->Reports->Report Wizard, page 230

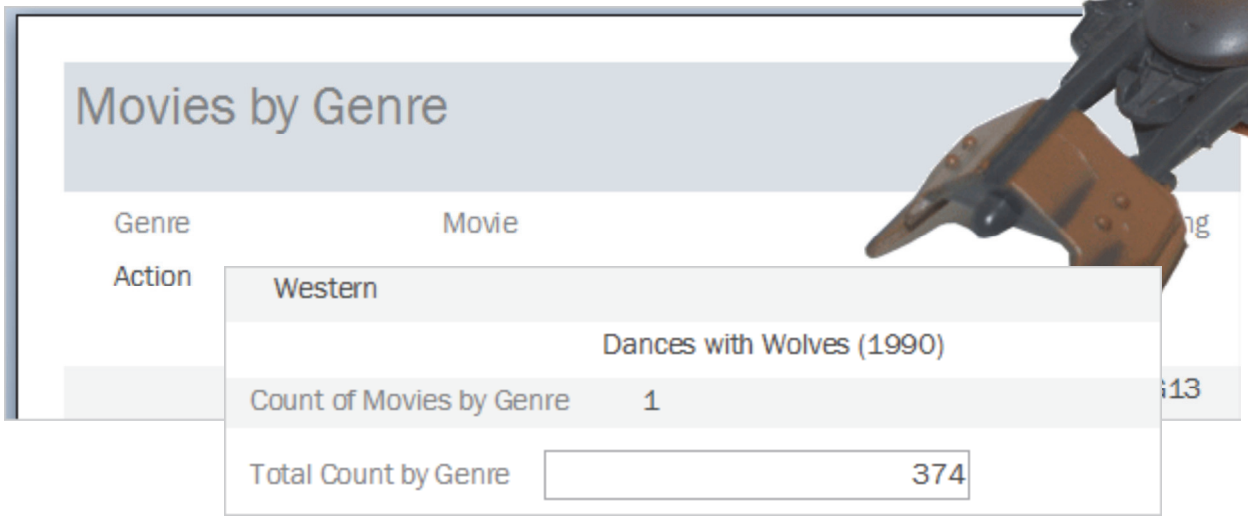
From the **Report Design Tools->Design Ribbon**.
1. Report Design Tools->Design-> Grouping and Totals->Group &Sort, page 237
2. Report Design Tools->Design->Views-> View->Print Preview, page 240
3. Report Design Tools->Design->Controls->Label, page 243
4. Report Design Tools->Design->Controls->Text Box, page 246

One-to-Many in Reports, part 1

This course has been looking at ways to represent one-to-many relationships. In our business scenario, there are many movies in each Genre. Grouping is a very effective way to represent one-to-many relationships in a Report. The first lesson will create a movie report that totals the movies in each Genre: how many Westerns, how many Comedies? The next lesson will apply some Report Formatting.

Working with Reports is like working with Forms in Design View: the Tools are very similar. Many of the steps may have a sense of déjà vu, particularly if you have been reading this all night! Very well, let's create a new Report.

Example of a Report in Microsoft Office Access 2010



Take One

What Are the Objectives?

This Report will be based on a Query that was made in an earlier lesson: MoviesSQ. This Query looks up information from tblMovies.

Here are the objectives for this lesson:

Create a Report based on a Query
Review the Query

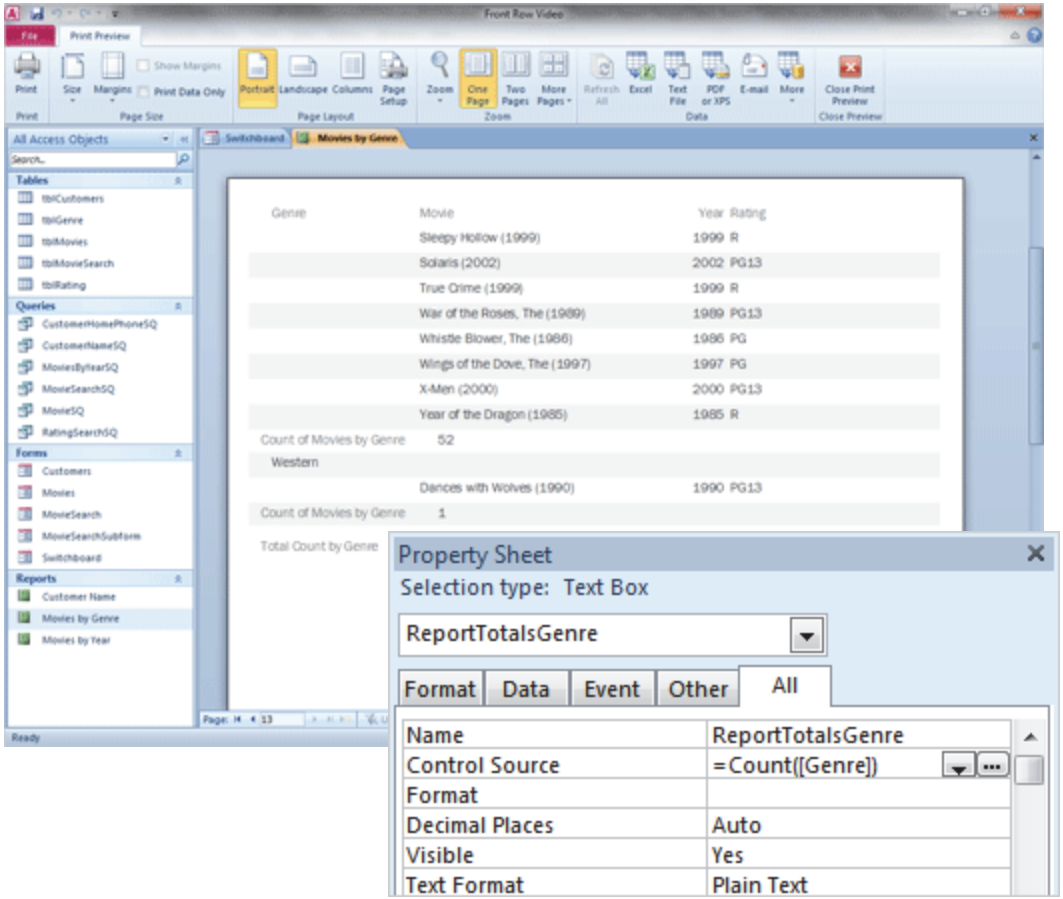
Create a Report with the Report Wizard
Select MoviesSQ Query as the Record Source

Add Sorting and Grouping
Group the Movies by Genre
Sort the Movies by Year

Add Totals to the Report
Total Each Group
Total for the Report

That's our goals for this lesson. There may be one or two more by the time we are done.

Example of a Calculated Control in a Microsoft Office Access 2010 Report



Take One

Before You Begin

Before You Begin: Open the Sample Database
Go to **Start -> All Programs ->Microsoft Office.** Click on **Microsoft Office Access 2010**.

Access will prompt you to open a database. This lesson uses the database that was programmed in the previous lesson. You can continue with the same database if you wish.

The FrontRowVideo Int9.accdb database has: Five Tables: tblCustomers, tblGenre, tblMovies, tblMovieSearch and tblRating.

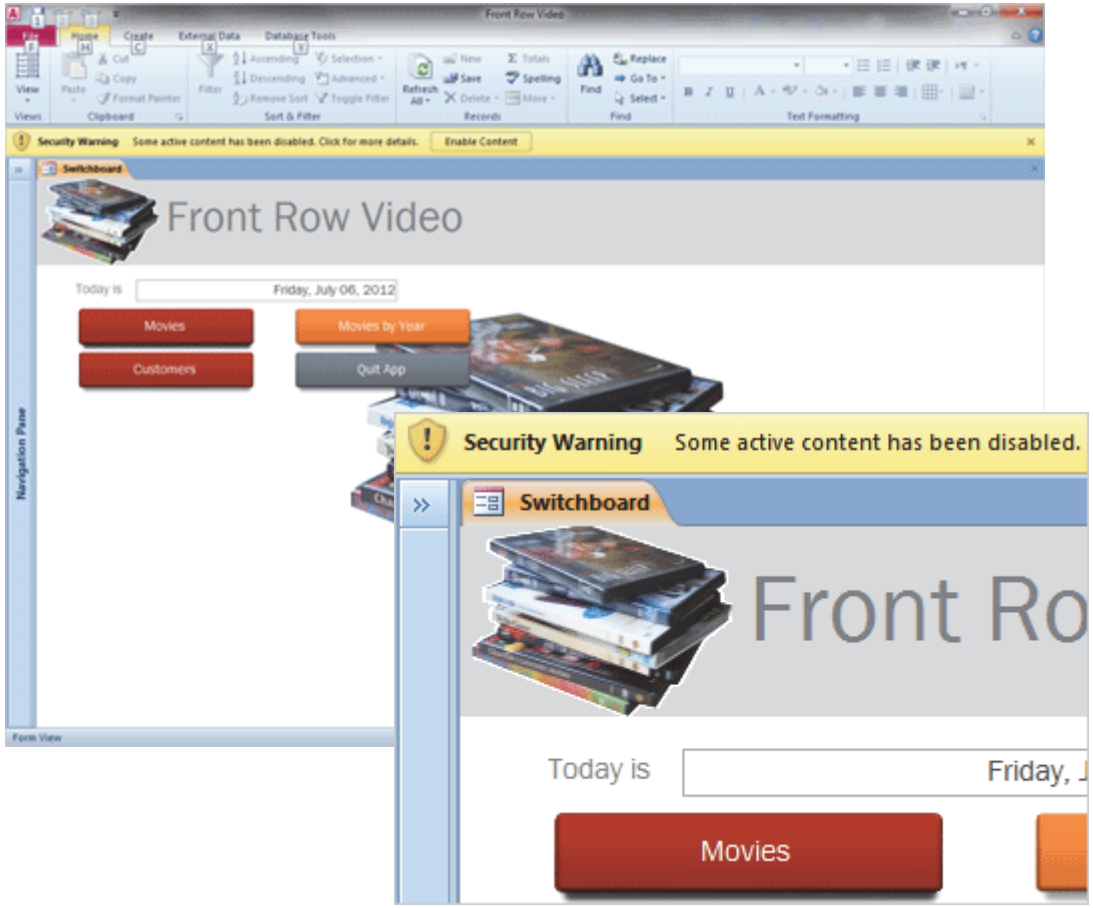
Six Queries: CustomerHomePhoneSQ, CustomerNameSQ, MoviesByYearSQ, MovieSQ, MovieSearchSQ and RatingSearchSQ.

Four Forms: Customers, Movies, MovieSearch and MovieSearchSubform.

Two Reports: Movies by Year, Customer Name. Keep going...

Memo to Self: Click **Enable Content** if you see the Security Warning.

Start -> All Programs ->Microsoft Office-> Microsoft Office Access 2010



Take One

Still Before You Begin

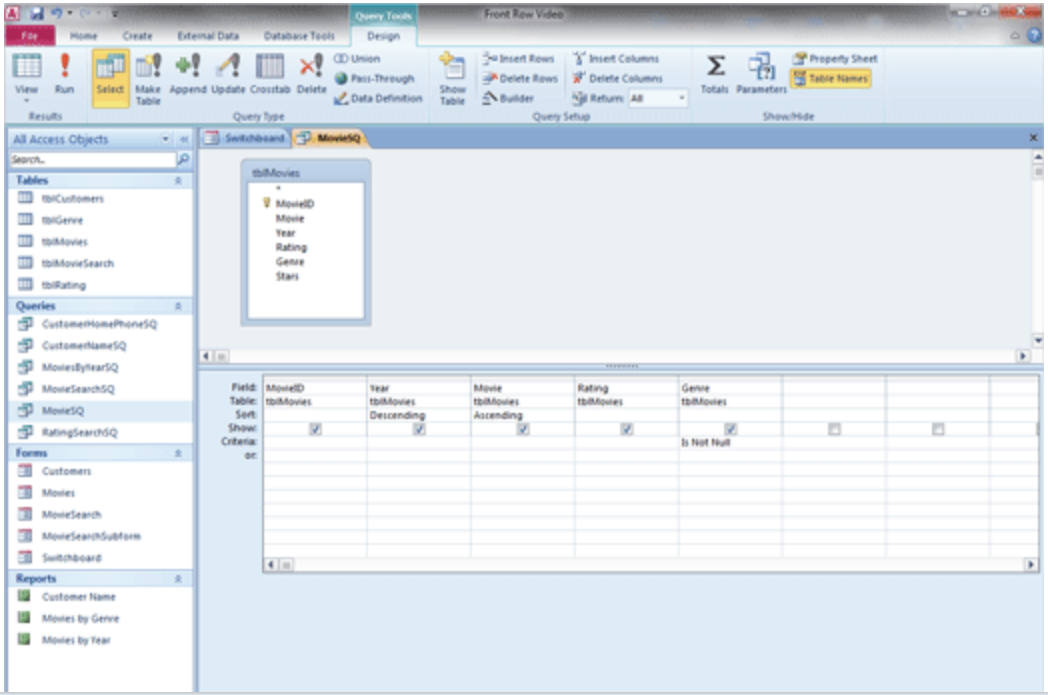
The best place to start is to review the data. A Report is only as good as the information in the Table or Query.

1. Try it: Review the Query
Go to **All Access Objects->Queries**.
Select a **Query**: **MovieSQ.**
Go to **Home->Views->View.**
Select a **View: Design View**.

What Do You See? There are five Fields selected from tblMovies:
MovieID
Year
Movie
Rating
Genre

Keep going...

Home->Views->View->Design View



1

Field:	MovieID	Year	Movie	Rating	Genre
Table:	tblMovies	tblMovies	tblMovies	tblMovies	tblMovies
Sort:		Descending	Ascending		
Show:	☑	☑	☑	☑	☑
Criteria:					
or:					

Exam 77-885: Microsoft Access 2010
4. Creating and Managing Queries
4.3. Manipulate fields

Take One

Run the Query

2. Try it: Run the Query

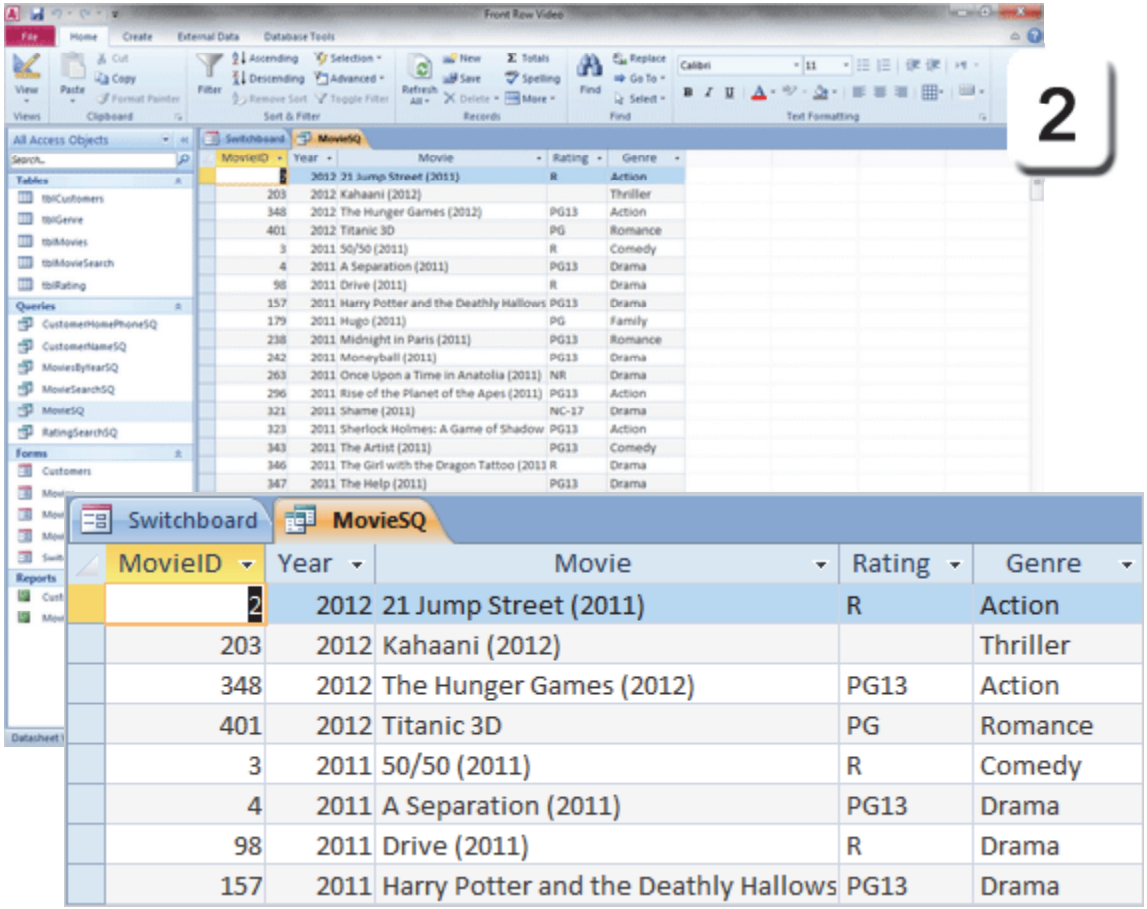
The Query is open in Design View.
Go to **Query Tools ->Design->Results->Run.**

What Do You See? The Query returned 401 Records. The Movies are sorted by Year.

What Else Do You See? The data is not complete. Some of the Movies have a Rating, Some do not. Some do not have a Genre.

Close the Query. Keep going...

Query Tools ->Design->Results->Run



Exam 77-885: Microsoft Access 2010
4. Creating and Managing Queries
4.3. Manipulate fields

Take One

Home->View->Views->Design View

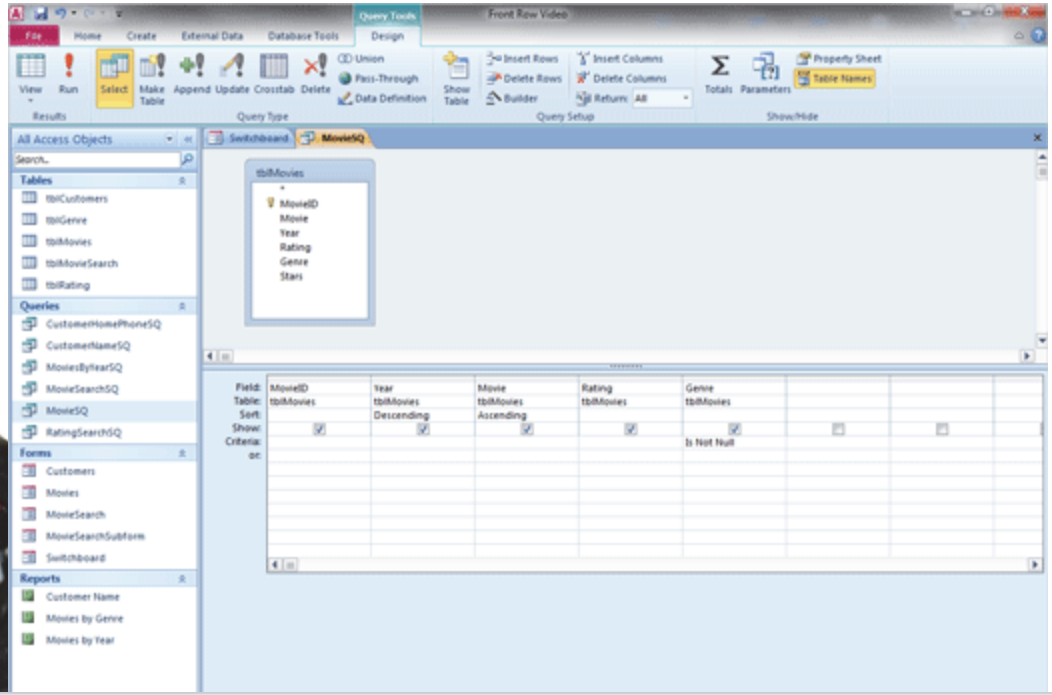
Edit the Query Criteria

This Report is supposed to Group and Total on the Genre. We can add a Criteria to the Genre Field that filters out all of the ones have a no value: they are Null.

Before You Begin: Change the View
Go to **Home->View->Views.**
Select a **View: Design View.**

3. Try it: Edit the Query Criteria
Go to the Genre Criteria.
Type: Is Not Null

Keep going...



3

Field:	MovieID	Year	Movie	Rating	Genre
Table:	tblMovies	tblMovies	tblMovies	tblMovies	tblMovies
Sort:		Descending	Ascending		
Show:	☑	☑	☑	☑	☑
Criteria:					Is Not Null
or:					

Exam 77-885: Microsoft Access 2010
4. Creating and Managing Queries
4.3. Manipulate fields: Use Criteria to Filter Records

Take One

Run the Query, Again

The Query Criteria, is Not Null, should filter out all of the Records that do not have a Genre.

Did it work? Only one way to find out: Run it!

4. Try it: Run the Query
The Query in still open in Design View.
Go to **Query Tools ->Design->Results->Run**.

What Do You See? The Query returned 374 out of 401 Records. All of the Records have a Genre, there are no empties (null).

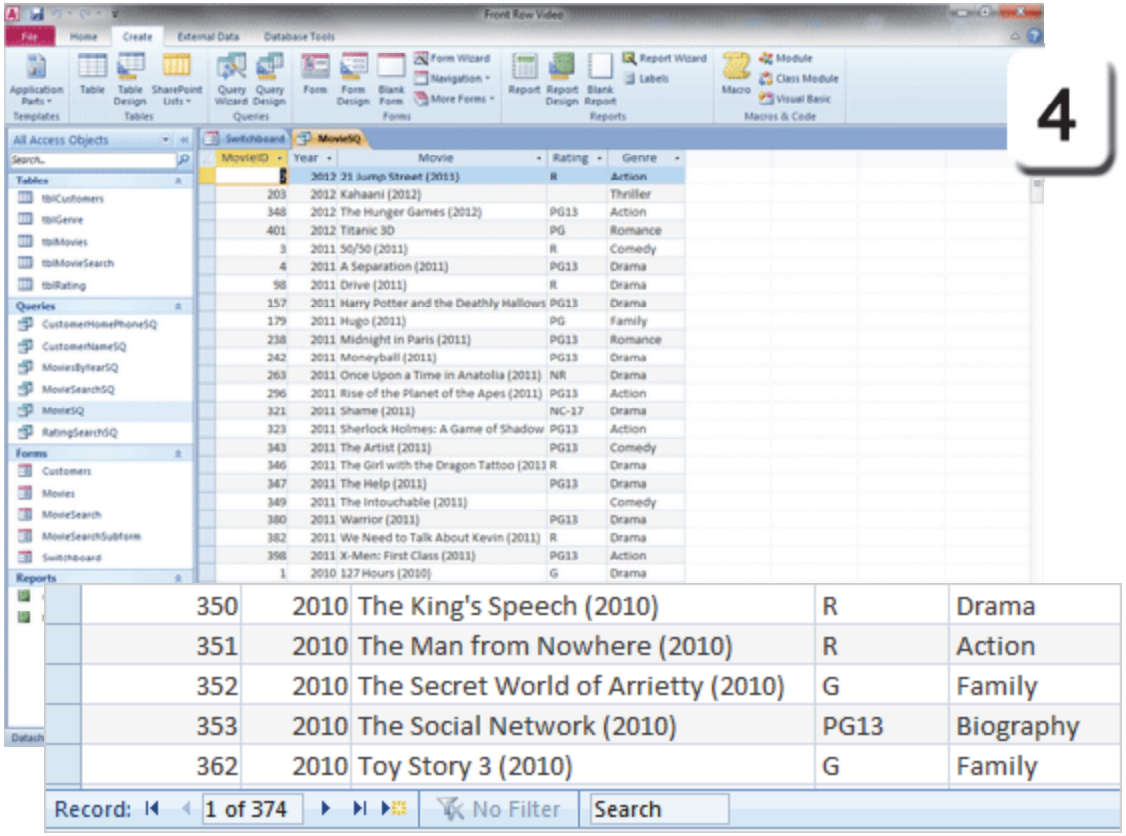
So, the Query Criteria worked.

What Else Do You See? The Movies are sorted by Year. The data is still not complete. Most of the Movies have a Rating.

Save your changes and **Close** the Query.

Let's create a Report and use this Query for the Record Source.

Query Tools ->Design->Results->Run



Exam 77-885: Microsoft Access 2010
4. Creating and Managing Queries
4.3. Manipulate fields: Use Criteria to Filter Records

Take One

Begin the Report Wizard

The following pages will walk through the Report Wizard. Please note the steps that include Sorting, Grouping and Totals.

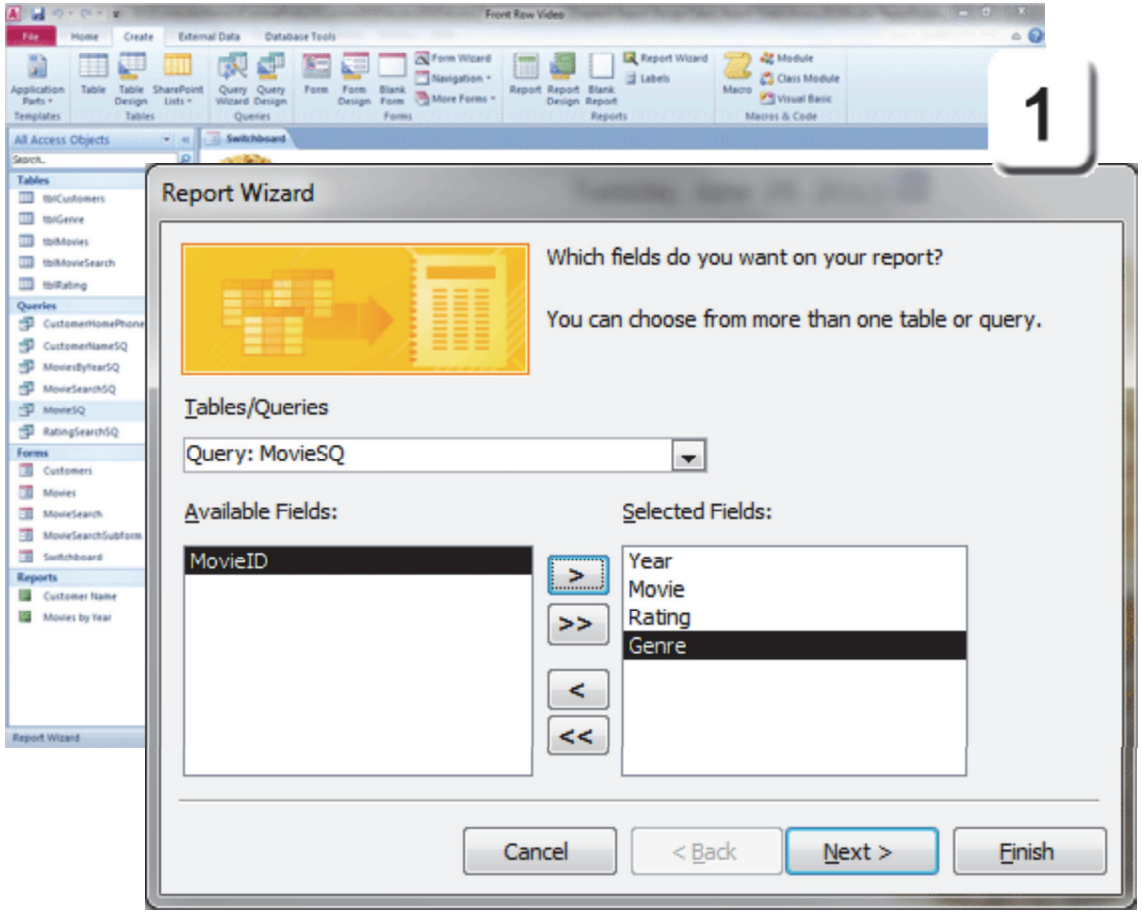
After we complete the Wizard, we will edit the Report in Design View and make a few changes.

1. Try This: Begin the Report Wizard
Go to **Create->Reports->Report Wizard**.
The Wizard will prompt your through the steps to design a Report.

Try This, Now: Choose a Record Source
Select a Query: MovieSQ.
All of the Available Fields are selected except the MovieID.

Click **Next**. Keep going...

Create->Reports->Report Wizard



Exam 77-885: Microsoft Access 2010
5. Designing Reports
5.1. Create reports: Use the Report Wizard

Take One

Report Wizard: Grouping

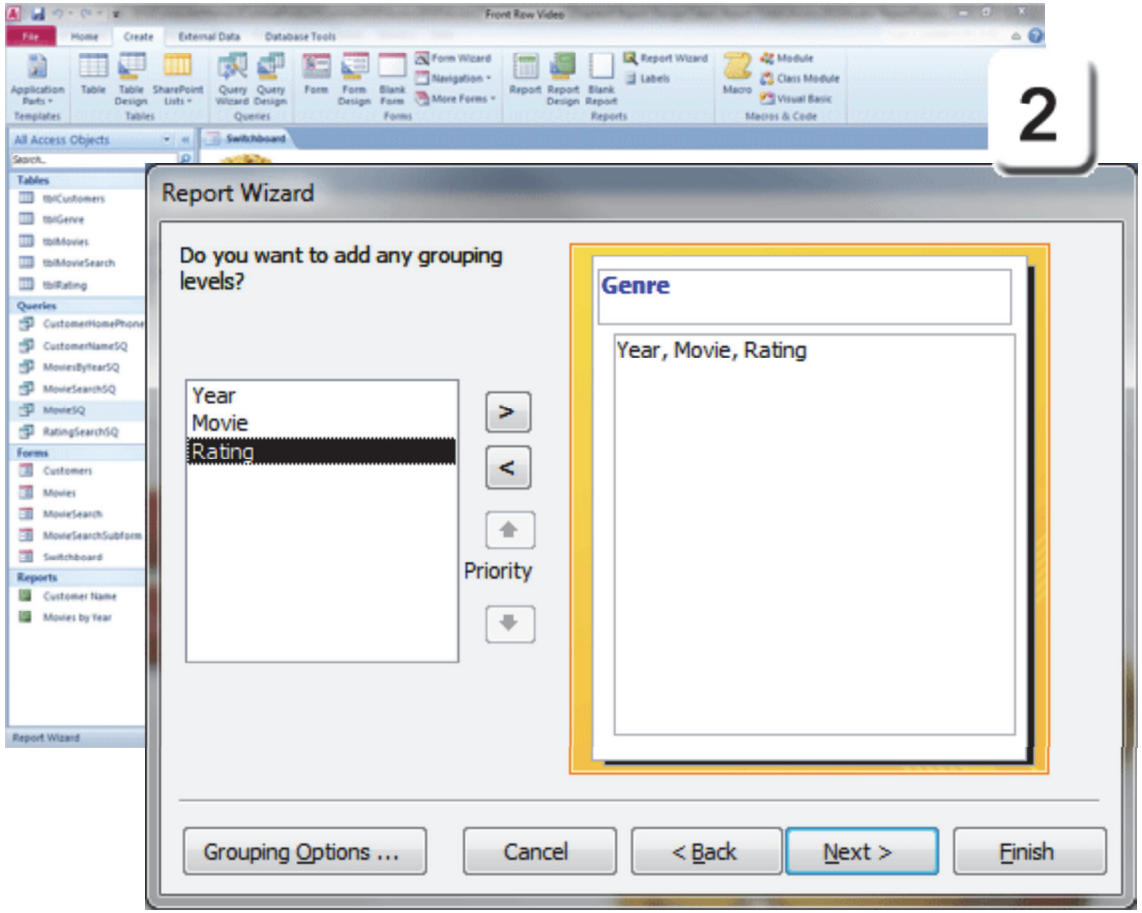
Grouping lets you represent one-to-many. In this Report, one Genre has many Movies.

2. Try it: Select the Grouping
Select a Grouping Level: Genre.

What Do You See? The Genre will be placed in a separate Group Header on the Report.

Click **Next**. Keep going...

Create->Reports->Report Wizard



Exam 77-885: Microsoft Access 2010
5. Designing Reports
5.1. Create reports: Use the Report Wizard

Take One

Report Wizard: Sorting

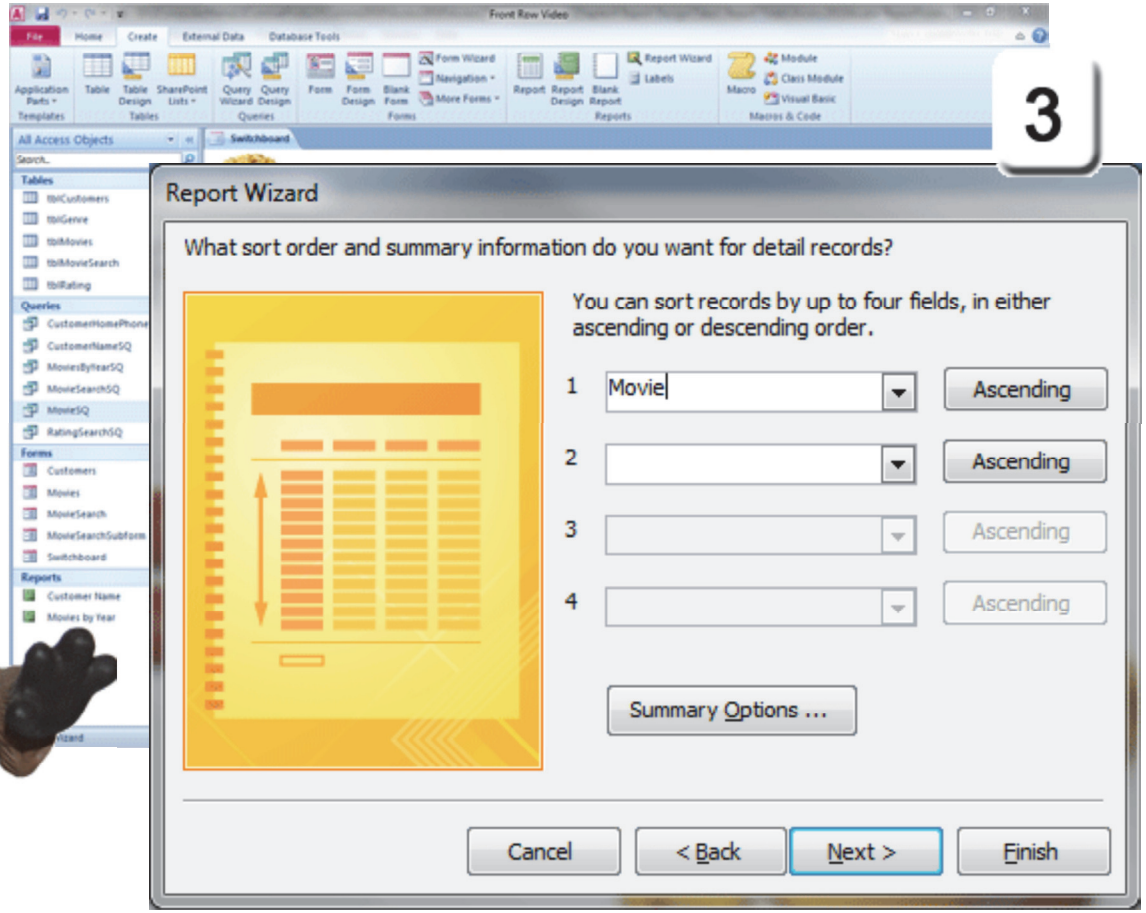
A Report can **Sort** by more than one Field.

3. Try it: Select the Sorting
First Sort: Movie.
Sort: Ascending.

What Do You See? The Fields can be sorted Ascending or Descending if you wish.

Keep going...

Create->Reports->Report Wizard



Exam 77-885: Microsoft Access 2010
5. Designing Reports
5.1. Create reports: Use the Report Wizard

Take One

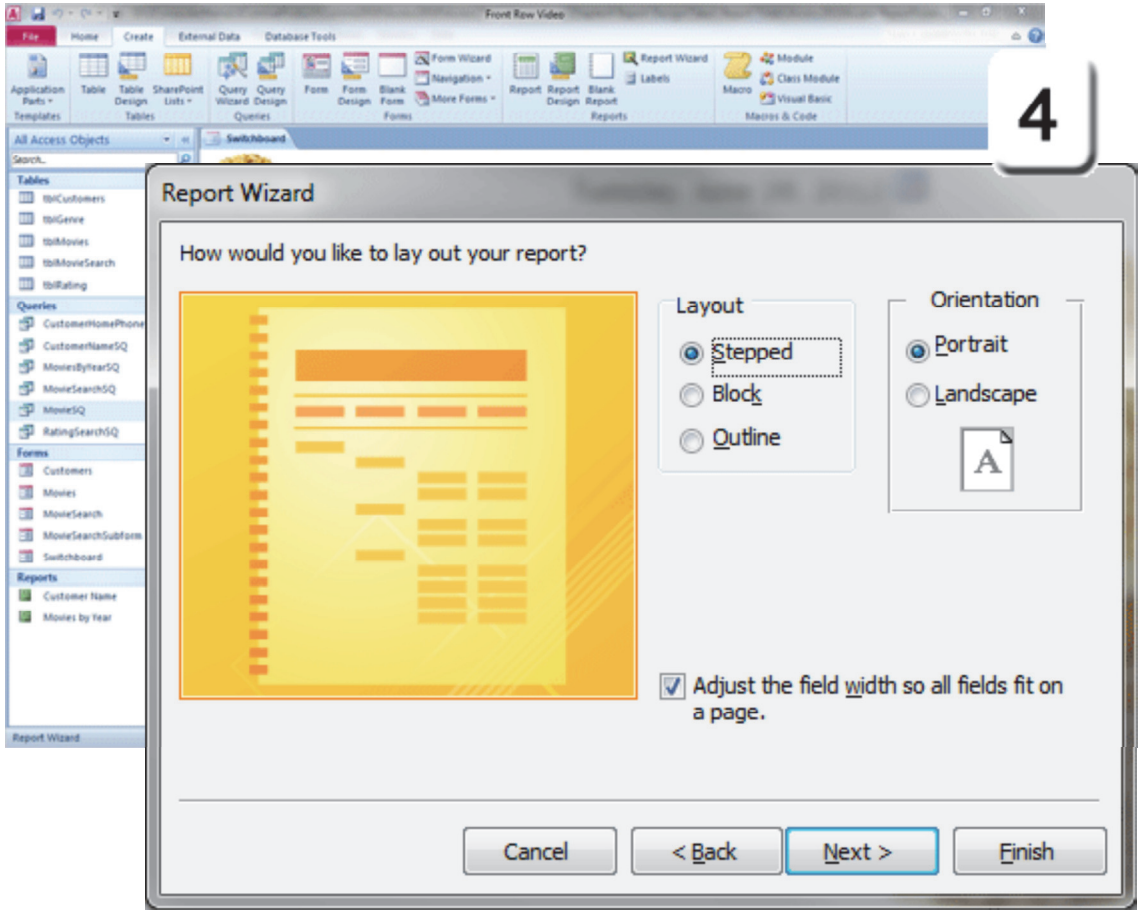
Report Wizard: Layout

4. Try it: Select the Layout Options

Layout: Stepped
Orientation: Portrait

Keep going...

Create->Reports->Report Wizard



Exam 77-885: Microsoft Access 2010
5. Designing Reports
5.1. Create reports: Use the Report Wizard

Take One

Create->Reports->Report Wizard

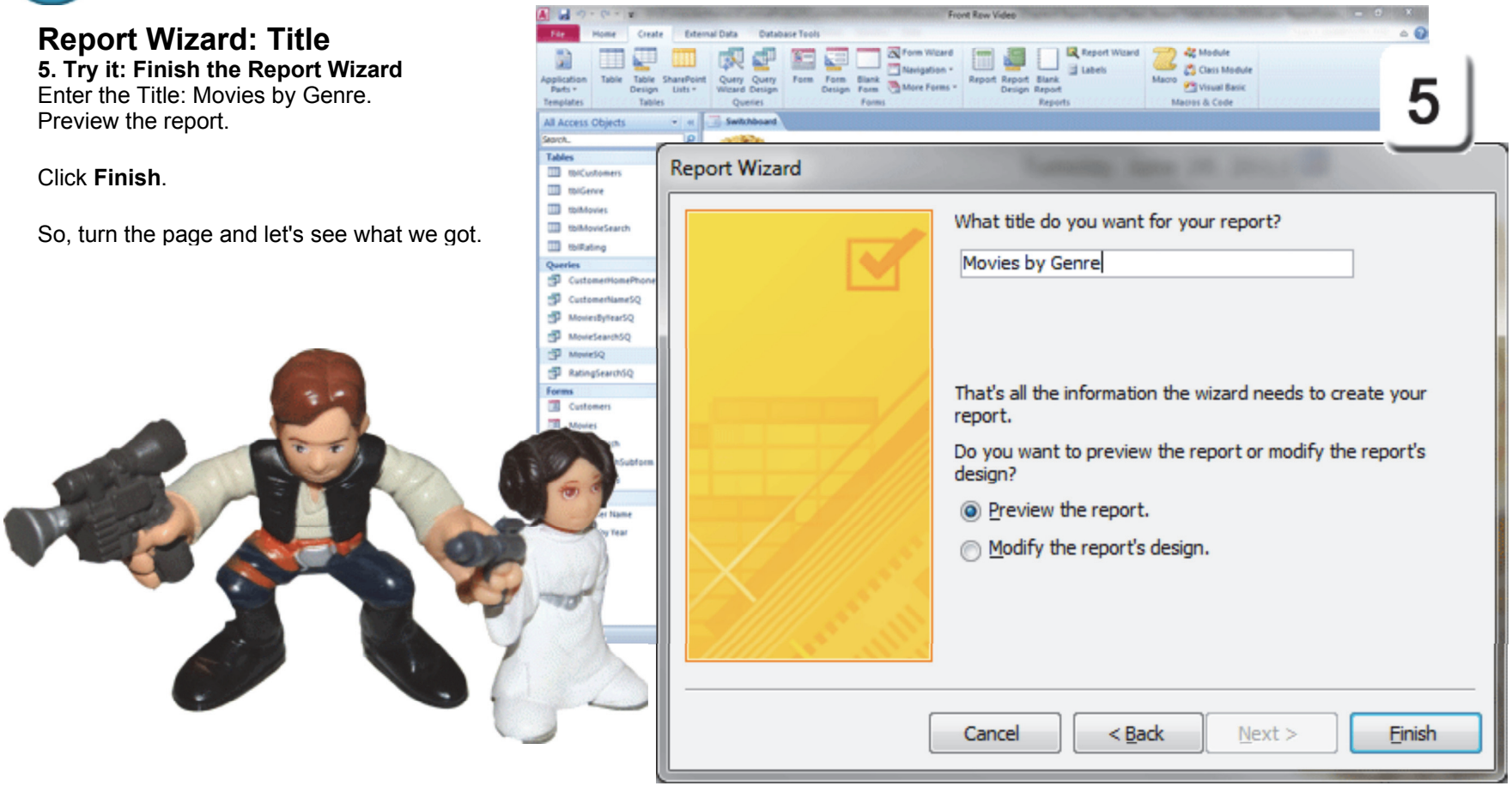
Report Wizard: Title

5. Try it: Finish the Report Wizard

Enter the Title: Movies by Genre.
Preview the report.

Click **Finish**.

So, turn the page and let's see what we got.



Exam 77-885: Microsoft Access 2010
5. Designing Reports
5.1. Create reports: Use the Report Wizard

Take One

Create->Reports->Report Wizard

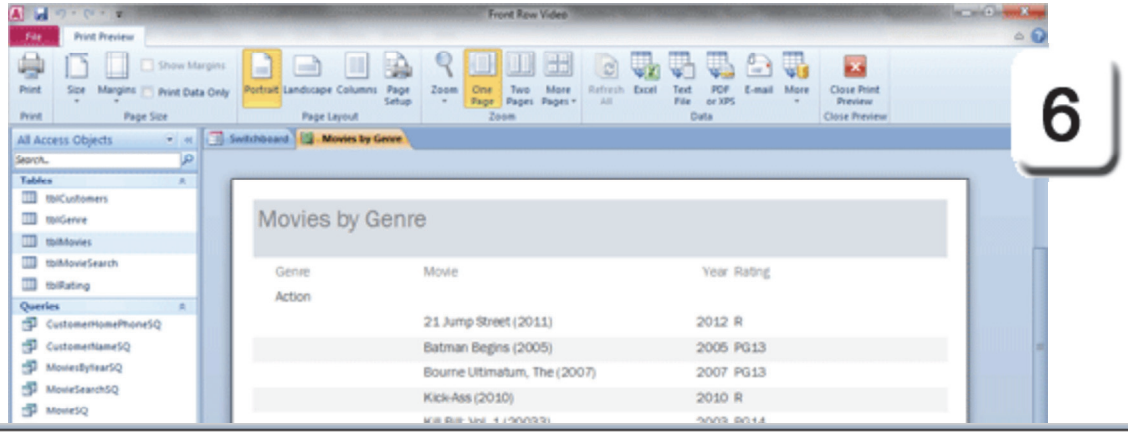
Report Wizard: Print Preview

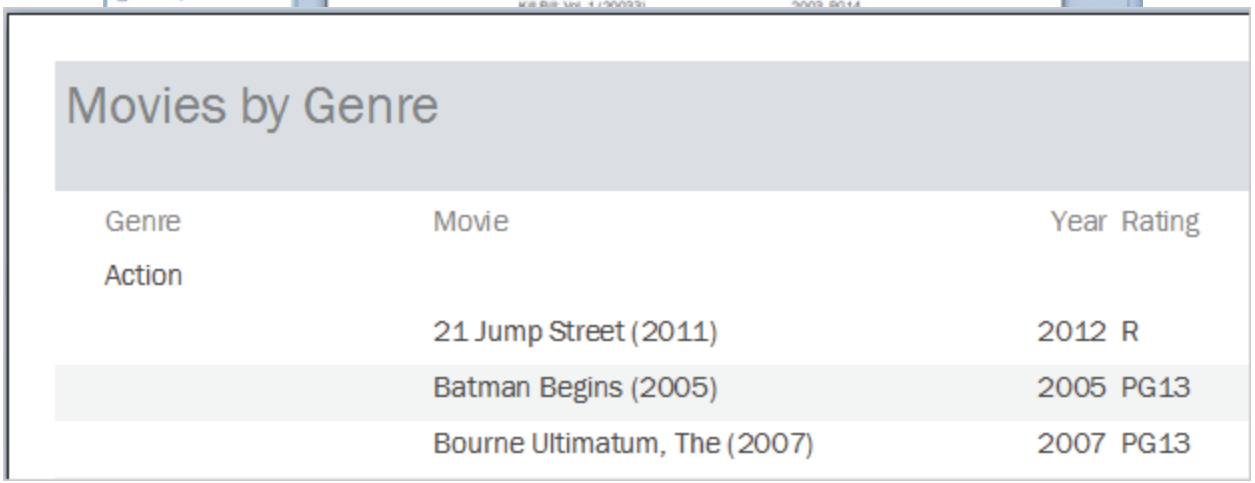
6. Try it: Review the Print Preview

The Report Wizard is finished and the Report is open in **Print Preview**.

What Do You See? The Report, *Movies by Genre*, is grouped by Genre and sorted by the Movie within each Group.

The next step is to review the Groups in Design View and add Totals to the Group.





Exam 77-885: Microsoft Access 2010
5. Designing Reports
5.1. Create reports: Use the Report Wizard

Take One

Review the Grouping

In the Report Wizard, we selected one Grouping Level: Genre. Let's find that Group now.

Before You Begin: Change the View
Close the **Print Preview**.
When you close the Print Preview, the Report should be open in Design View, as shown on this page.

1. Try it: Review the Grouping Levels
The Report, *Movies by Genre*, is open in Design View and the Report Design Tools are available.

What Do You See? This Report has Sections:
Report Header: There is a label.

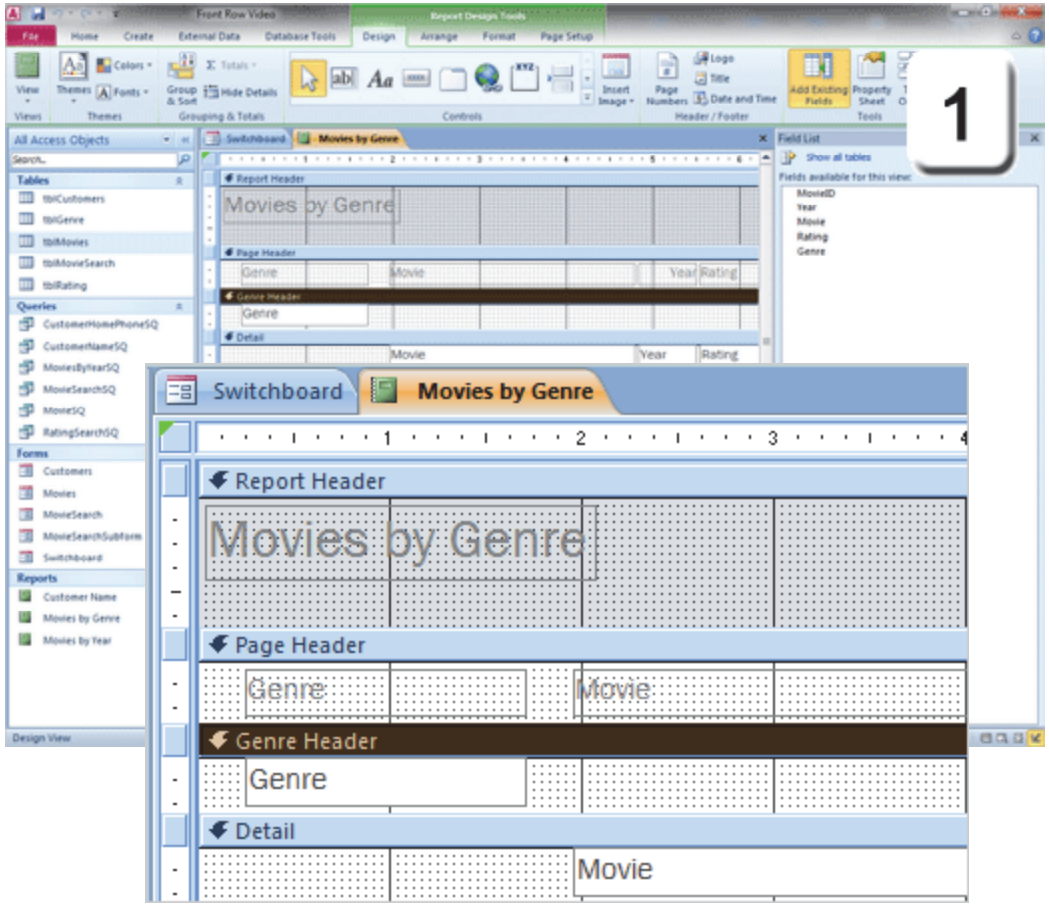
Page Header: The labels repeat on top of each page.

Genre Header: Only the Genre Field.
This is the One in the One-to-Many.

Detail: The Movie and Rating Records.
This is the Many in the One-to-Many.

Page Footer: The Date and Page Number repeat at the bottom of every page.

Home->View->Views->Design View



Exam 77-885: Microsoft Access 2010
5. Designing Reports
5.2. Apply Report Design options: Group Report Records

Take One

Grouping and Totals

This Report has a Group Header. There is one Field: Genre. Group Totals are placed in the Group Footer. Here are the steps to show or hide the Group Footer.

2. Try it: Add the Group Footer
The Report, Movies by Genre, is still open in Design View and the Report Design Tools are available.

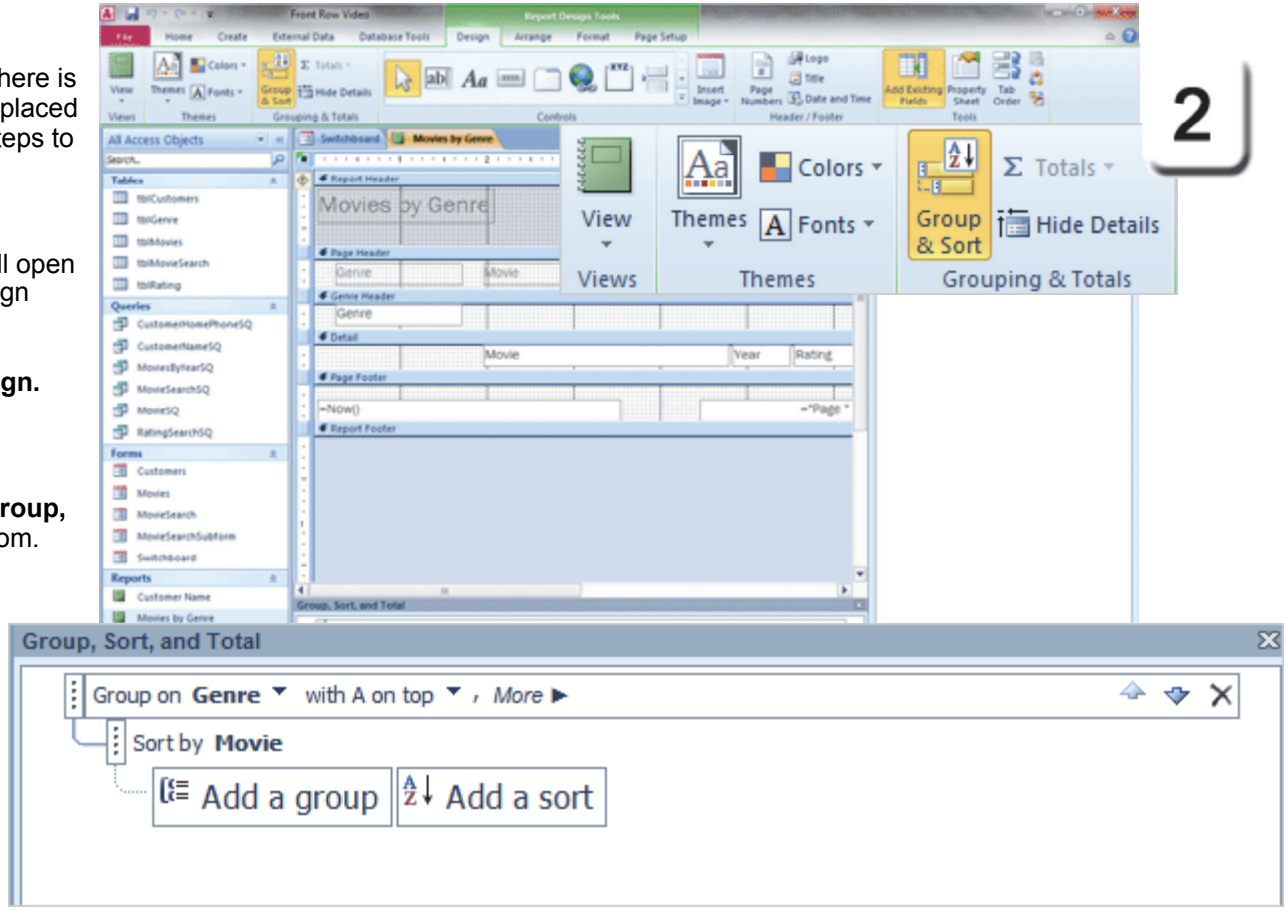
Go to **Report Design Tools ->Design.**
Go to **Grouping and Totals.**
Click on **Group & Sort**.

What Do You See? A new pane, **Group, Sort and Total** will open at the bottom.

Group On: Genre.
Sort by: Movie.

Keep going...

Report Design Tools ->Design-> Grouping and Totals->Group &Sort



Exam 77-885: Microsoft Access 2010
5. Designing Reports
5.2. Apply Report Design options: Group Report Records

Take One

Add the Group Footer

Our Report is Grouped on Genre. It is the first Grouping in the **Group, Sort and Total** box at the bottom of this Report in Design View.

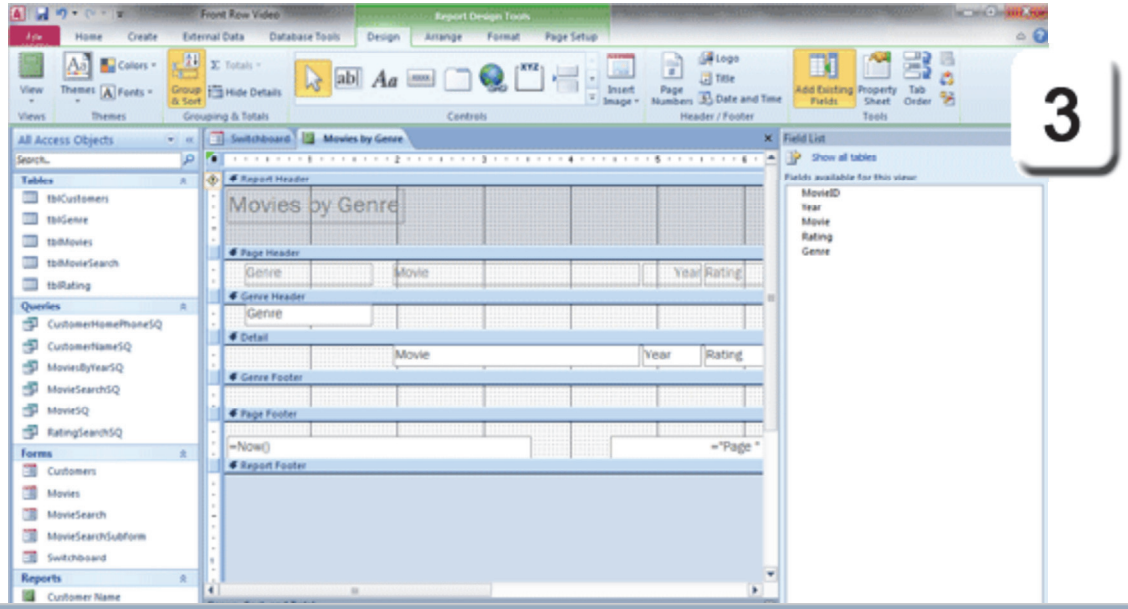
3. Try it: Add the Group Footer
Go to **Group, Sort and Total.**
Select a **Group: Genre**.
Click on **More.**

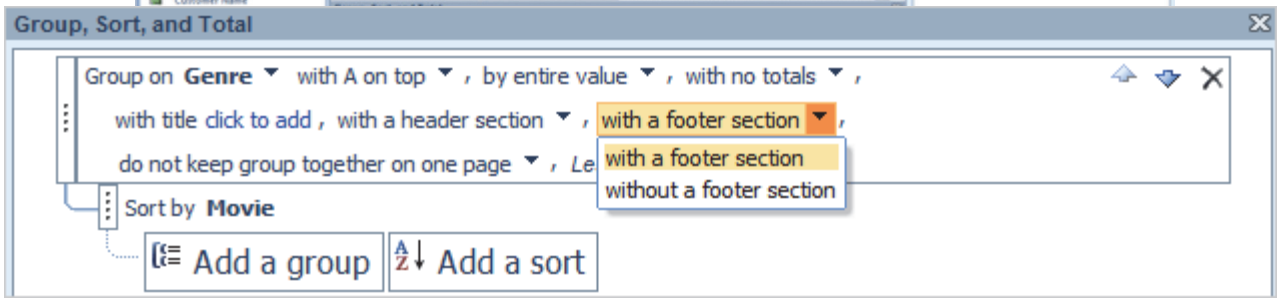
What Do You See? A library of options will drop down for the Grouping and Totals.
Select a **Footer: With a Footer Section**.

What Else Do You See? There should be another Section in the Report under the Detail Section: Genre Footer.

Nice. Keep going...

Report Design Tools ->Design-> Grouping and Totals->Group &Sort





Exam 77-885: Microsoft Access 2010
5. Designing Reports
5.2. Apply Report Design options: Add a Calculated Control

Take One

Add a Calculated Control

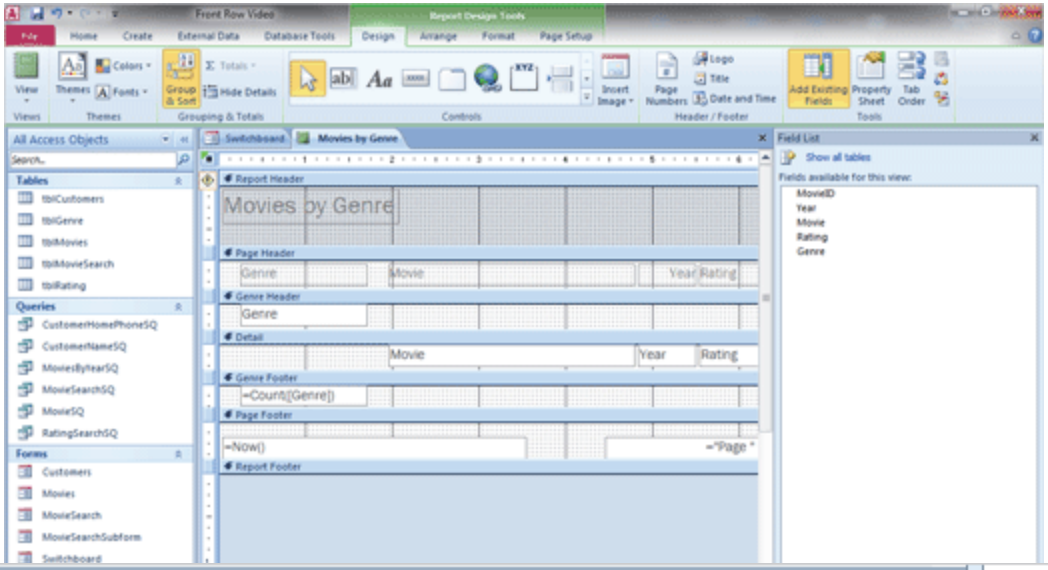
Our goal is to add Totals for each Group as well as for the entire Report. Basically, a Total is a Text Box that has an expression instead of a Control Source.

It is a **Calculated Control**: an Expression that Counts the Records in each Group.

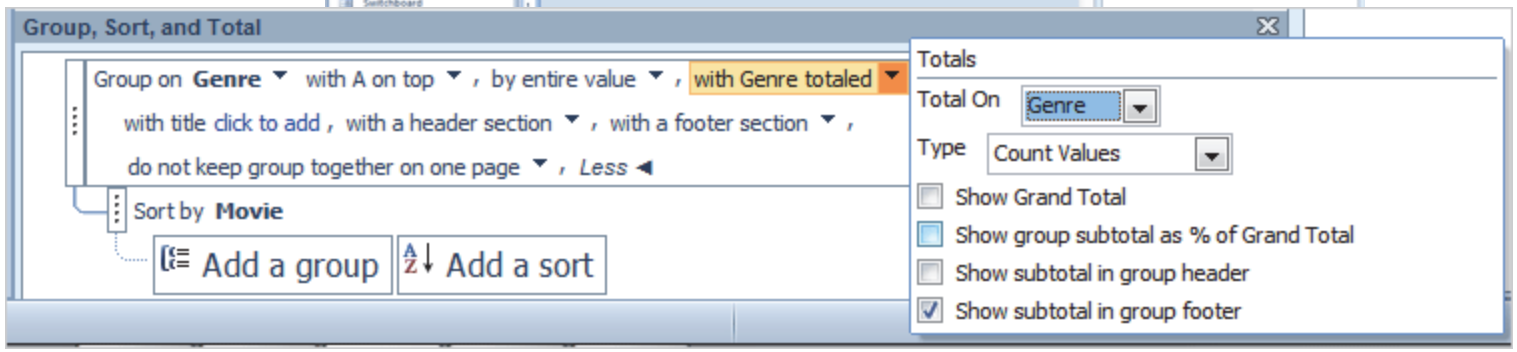
4. Try it: Create a Calculated Control
Go to **Group, Sort and Total.**
Select a **Group: Genre.**
Edit the **Totals** as follows:
Total on: Genre.
Type: Count Values
Show subtotal in Group Footer.

Keep going...

Report Design Tools ->Design-> Grouping and Totals->Group &Sort



4



Exam 77-885: Microsoft Access 2010
5. Designing Reports
5.2. Apply Report Design options: Add a Calculated Control

Take One

Preview the Group Totals

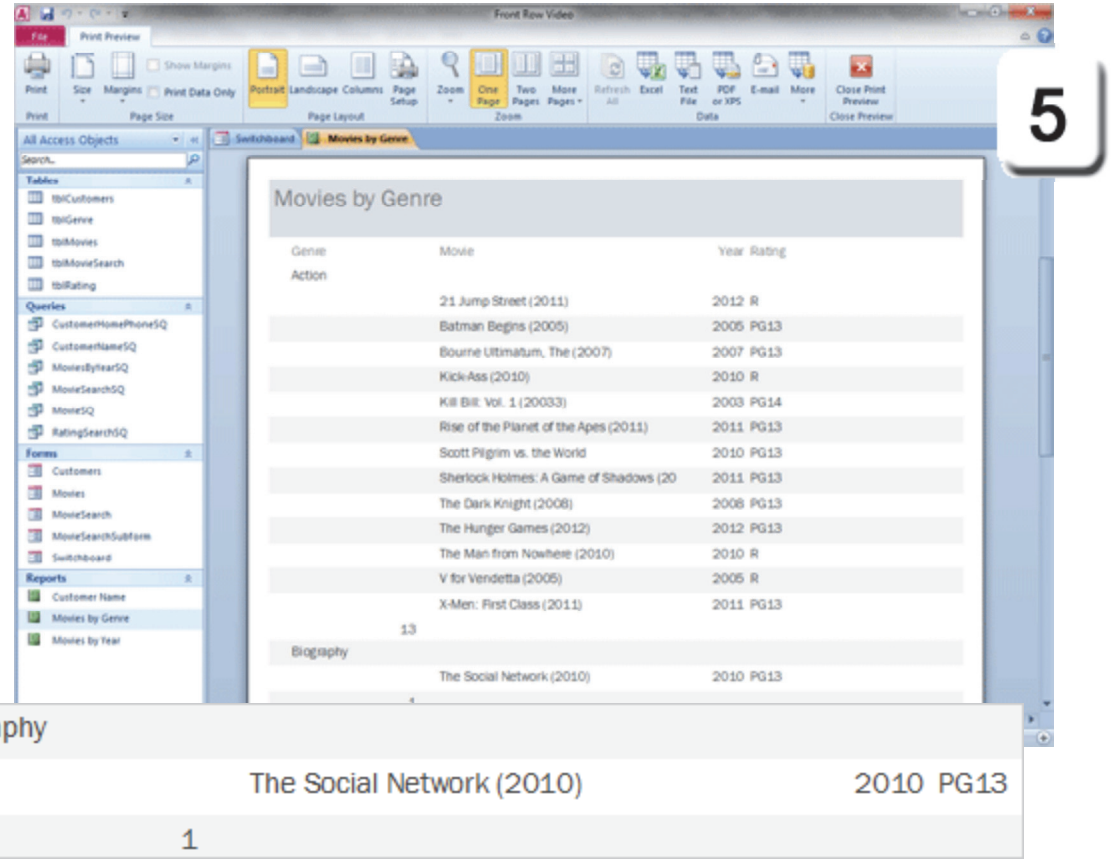
5. Try it: Preview the Group Totals
Go to **Report Design Tools ->Design->Views.**
Select a **View: Print Preview**.

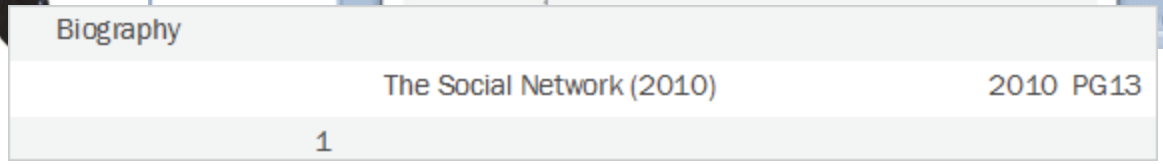
What Do You See? The Count for each Genre is calculated in the Genre Footer.

In the example on this page, the Genre is Biography and the Count is 1.

Keep going...let's take a look at this.

Report Design Tools ->Design->Views-> View->Print Preview





Exam 77-885: Microsoft Access 2010
5. Designing Reports
5.2. Apply Report Design options: Add a Calculated Control

Take One

Review the Totals for the Group

The previous page shows what the Calculated Control looks like in Print Preview, as a User would see it. What does it look like to a Programmer, in Design View?

Before You Begin: Change the View
Close the **Print Preview**, please.
When you close the Print Preview, the Report should be open in Design View, as shown.

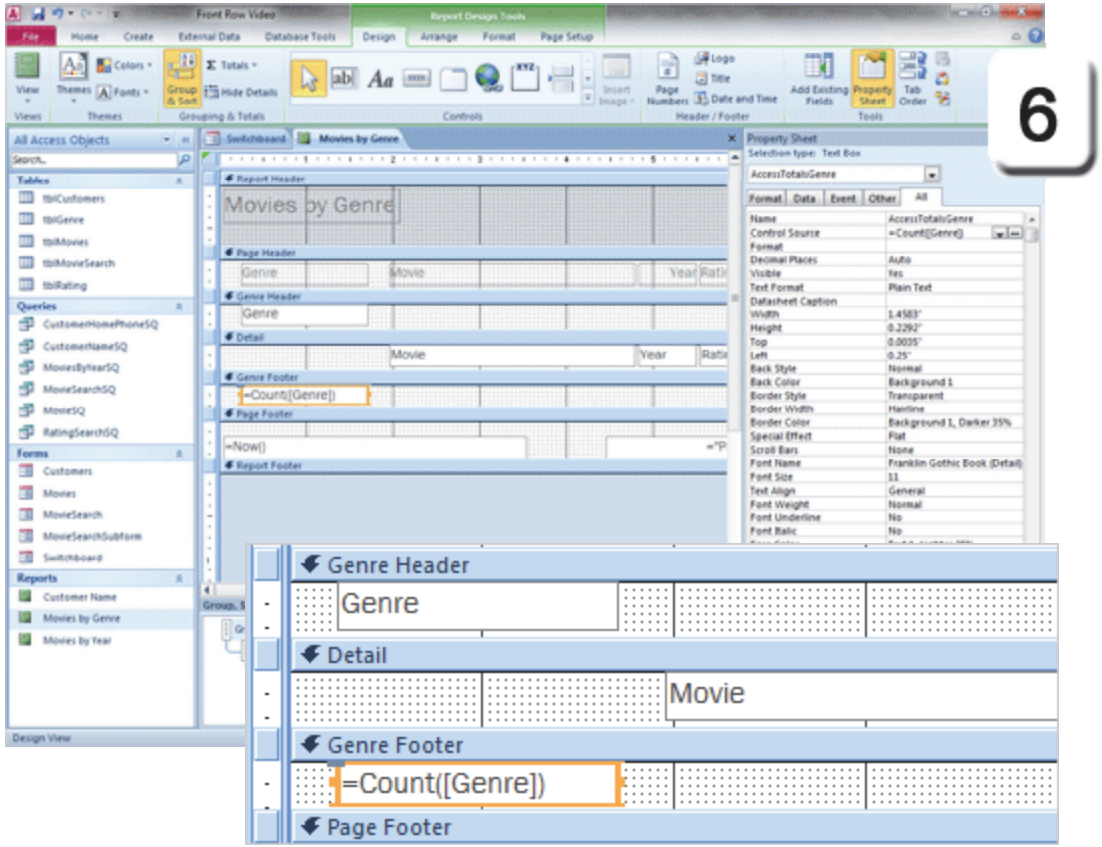
6. Try it: Review the Totals in Group Footer
This Control is an expression that Counts in Genre. It can be found in the Group Footer.

Go to the **Genre Footer**.
Select the Calculated Control:
=Count([Genre])

Where **Count** is the function,
[Genre] is the Field from MovieSQ.

Keep going...

Home->View->Views->Design View



Exam 77-885: Microsoft Access 2010
5. Designing Reports
5.2. Apply Report Design options: Total Report Records

Take One

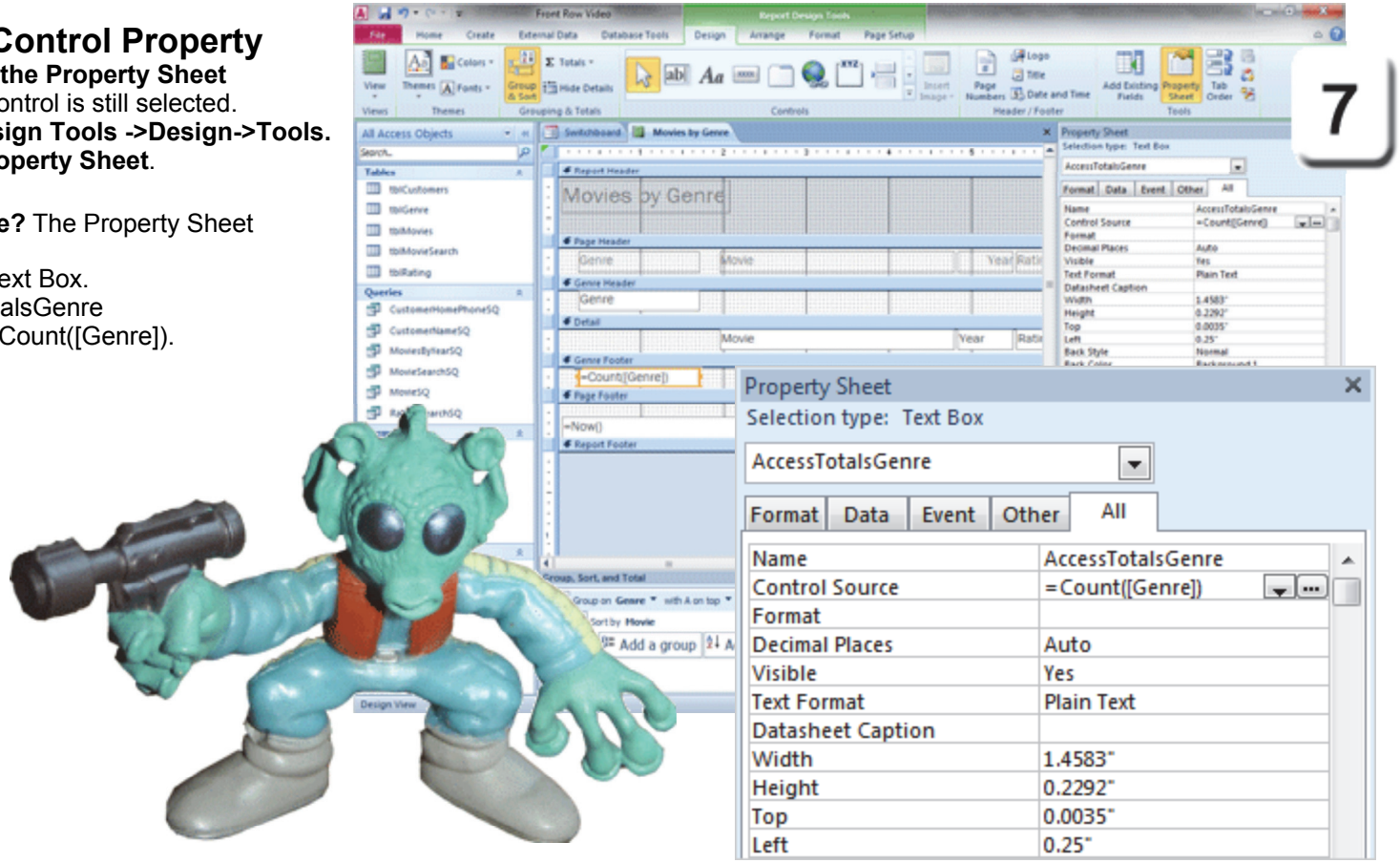
Review the Control Property

7. Try it: Review the Property Sheet
The Calculated Control is still selected.
Go to **Report Design Tools ->Design->Tools.**
Select a **Tool: Property Sheet**.

What Do You See? The Property Sheet shows:
Selection Type: Text Box.
Name: AccessTotalsGenre
Control Source: =Count([Genre]).

Keep going...

Report Design Tools ->Design->Tools->Property Sheet



Exam 77-885: Microsoft Access 2010
5. Designing Reports
5.2. Apply Report Design options: Total Report Records

Take One

Add an Unbound Control

The Count works, but it would be easier to understand this Report if there was a Label that said what that number meant. A Label, like the Calculated Control, is **Unbound**: it does not look up the data in a Table or Query.

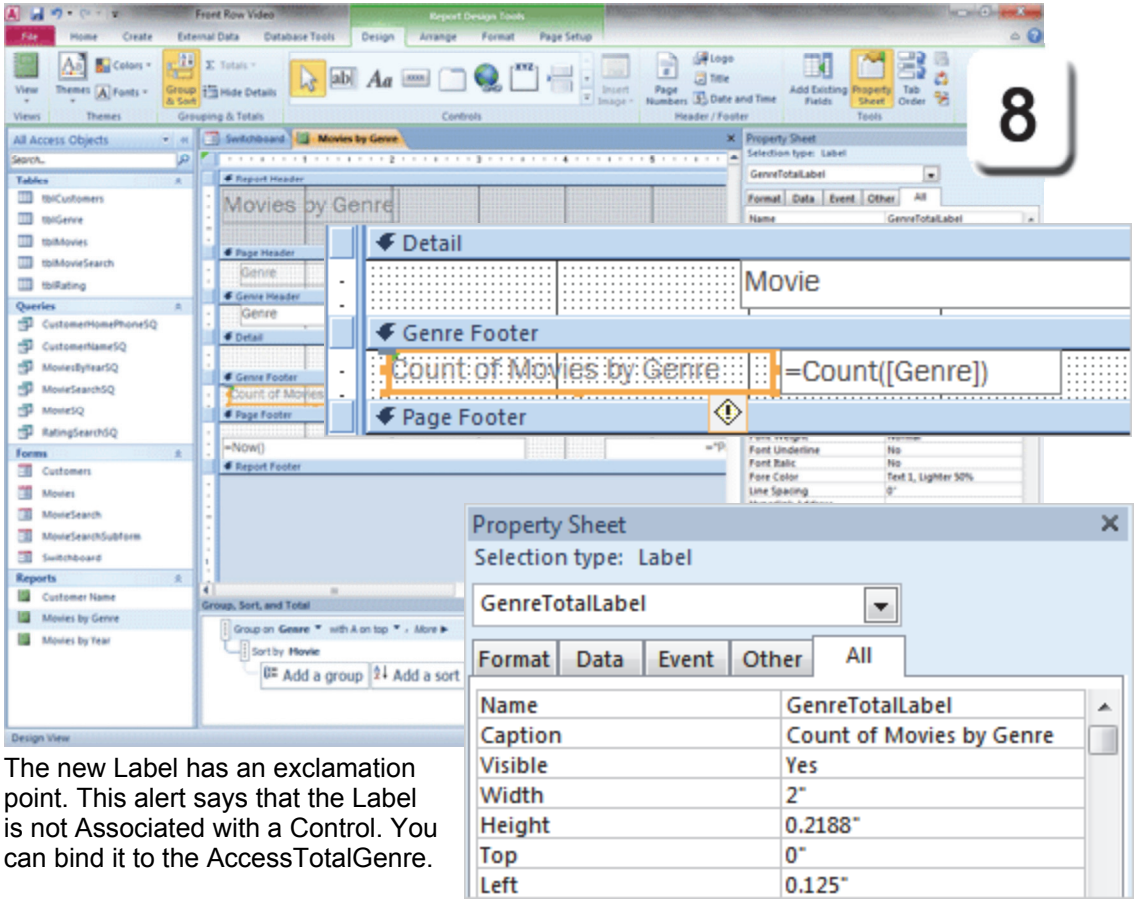
Before you Begin: Move the Control
Select the Control in the Genre Footer.
Move the Control to make room for the Label.

8. Try it: Add a Label to the Group Footer
Go to **Report Design Tools ->Design->Controls.**
Choose a **Control: Label**.
Go to the Genre Footer.
Click and Draw a Label.

Try This, Too: Edit the Label Properties
Name: GenreTotalLabel
Caption: Count of Movies by Genre.
Width: 2'
Height: 0.2188 (that is default for this type size).
Top: 0"
Left: 0.125

Keep going...

Report Design Tools ->Design->Controls->Label



The new Label has an exclamation point. This alert says that the Label is not Associated with a Control. You can bind it to the AccessTotalGenre.

Exam 77-885: Microsoft Access 2010
5. Designing Reports
5.2. Apply Report Design options: Add Bound and Unbound Controls

Take One

Preview the Results

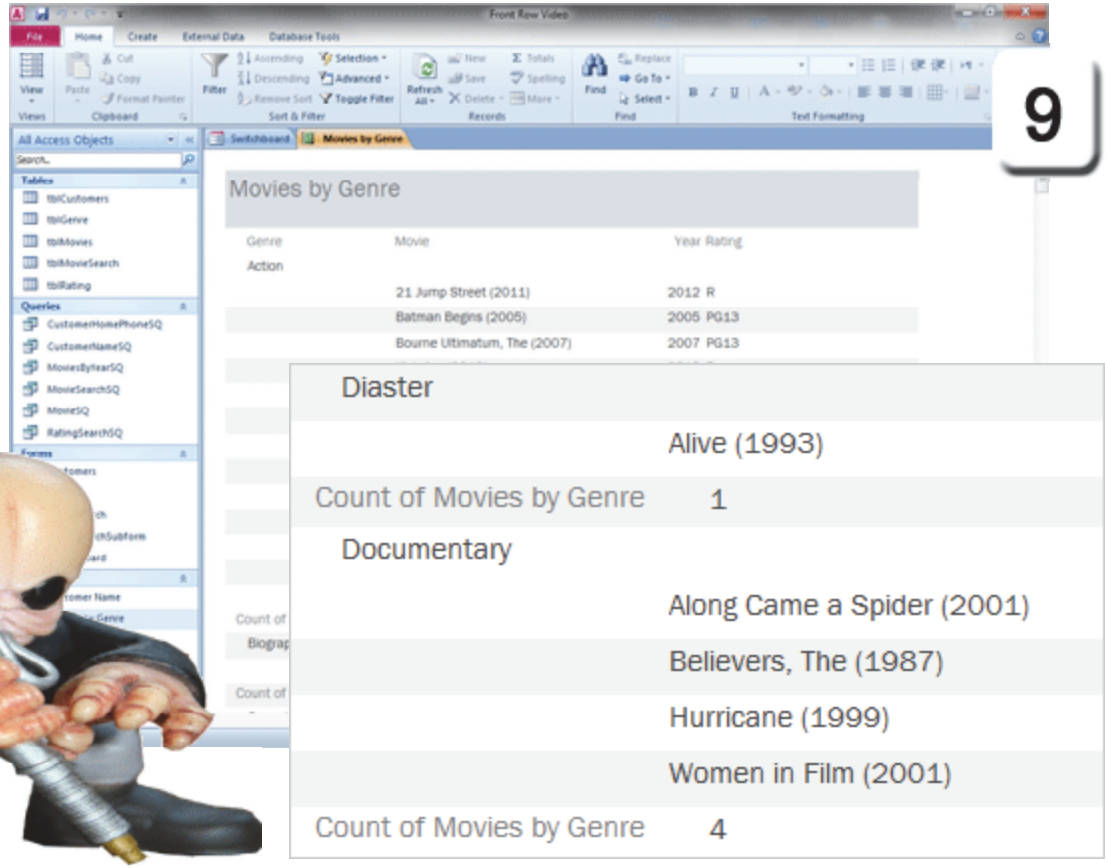
9. Try it: Preview the Report
Go to **Report Design Tools ->Design->Views.**
Select a **View: Print Preview.**

What Do You See? The Label is visible in the Genre Footer, next to the Count of the Genre.

Do This, Now: Save the Report.
Go to **File->Save**.

Keep going...Let's add a Total for the Report.

Report Design Tools ->Design->Views-> View->Print Preview



Exam 77-885: Microsoft Access 2010
5. Designing Reports
5.2. Apply Report Design options: Add Bound and Unbound Controls

Take One

Edit the Report Footer

Each Group has a separate Footer. We added a Calculated Control to the Group Footer to Count the Records in that Group. The Report Totals are added to the Report Footer. Here are the steps.

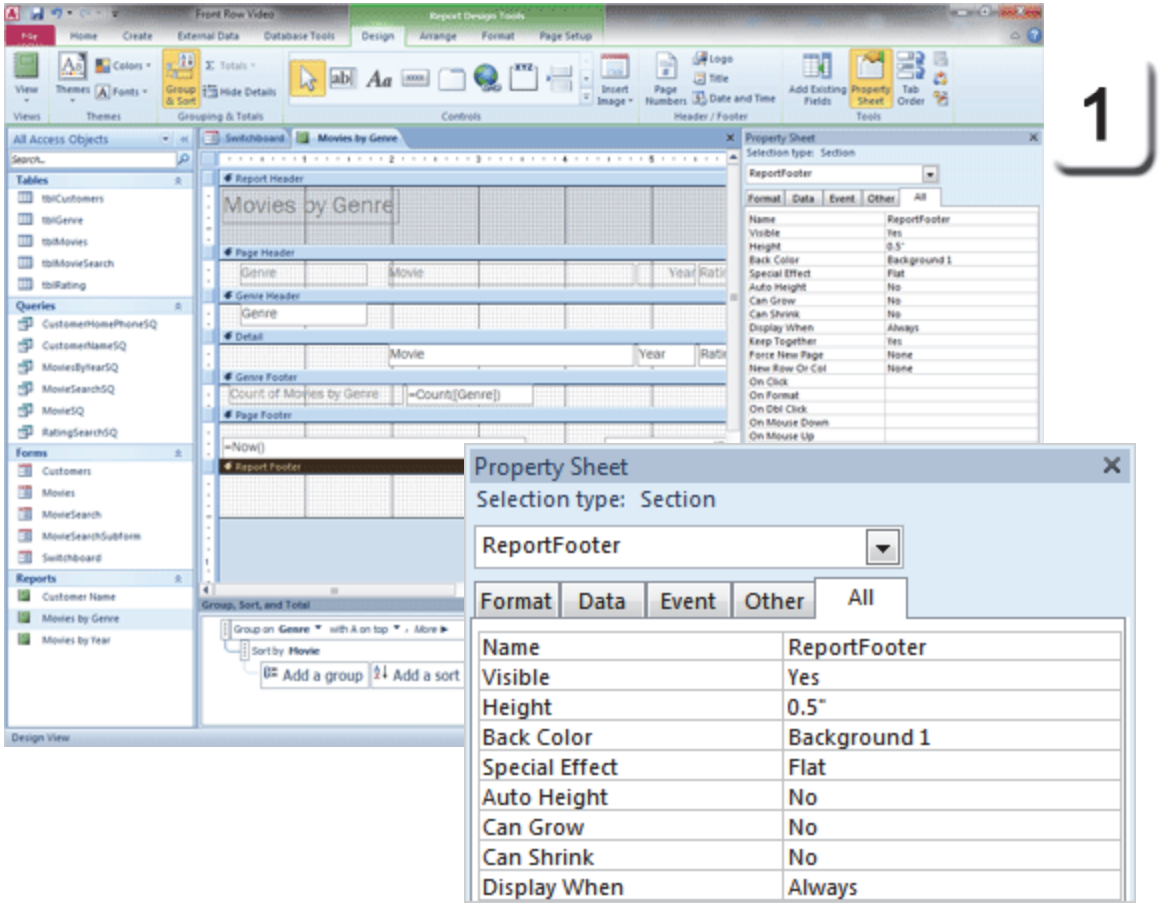
Before You Begin: Change the View
Close the **Print Preview**, please. The Report should be open in Design View.

1. Try it: Edit the Report Footer
Select the Report Footer.
Edit the Following Property:
Height: 0.5"

What Do You See? There should be a Report Footer at the bottom.

Keep going...

Report Design Tools ->Design->Tools->Property Sheet



Exam 77-885: Microsoft Access 2010
5. Designing Reports
5.2. Apply Report Design options: Total Report Records

Take One

Add a Text Box to the Footer

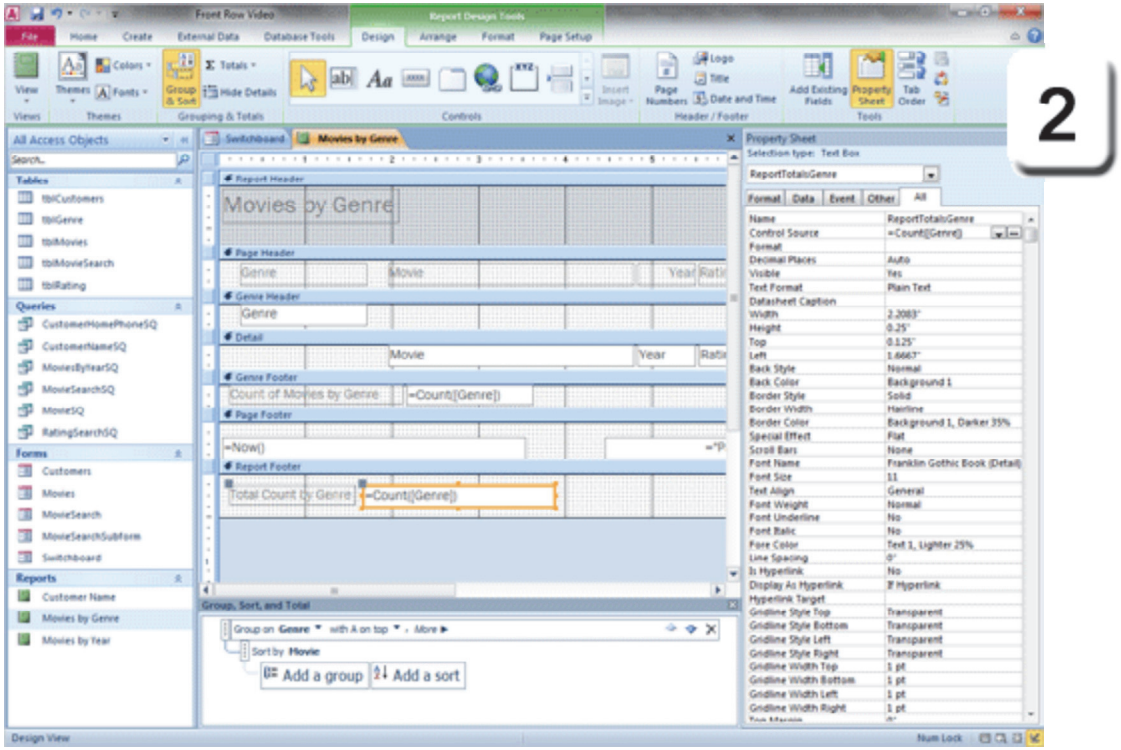
A Calculated Control is a Text Box with an Expression for the Control Source.

2. Try it: Add a Text Box to the Footer
Movies by Genre is still open in Design View.
Go to **Report Design Tools ->Design.**
Select a **Control: Text Box**.
Click in the Report Footer.
Draw a Text Box.

What Do You See? There should be a new, unbound Control in the Report Footer.

Keep going...

Report Design Tools ->Design->Controls->Text Box



Exam 77-885: Microsoft Access 2010
5. Designing Reports
5.2. Apply Report Design options: Add Bound and Unbound Controls

Take One

Edit the Text Box Properties

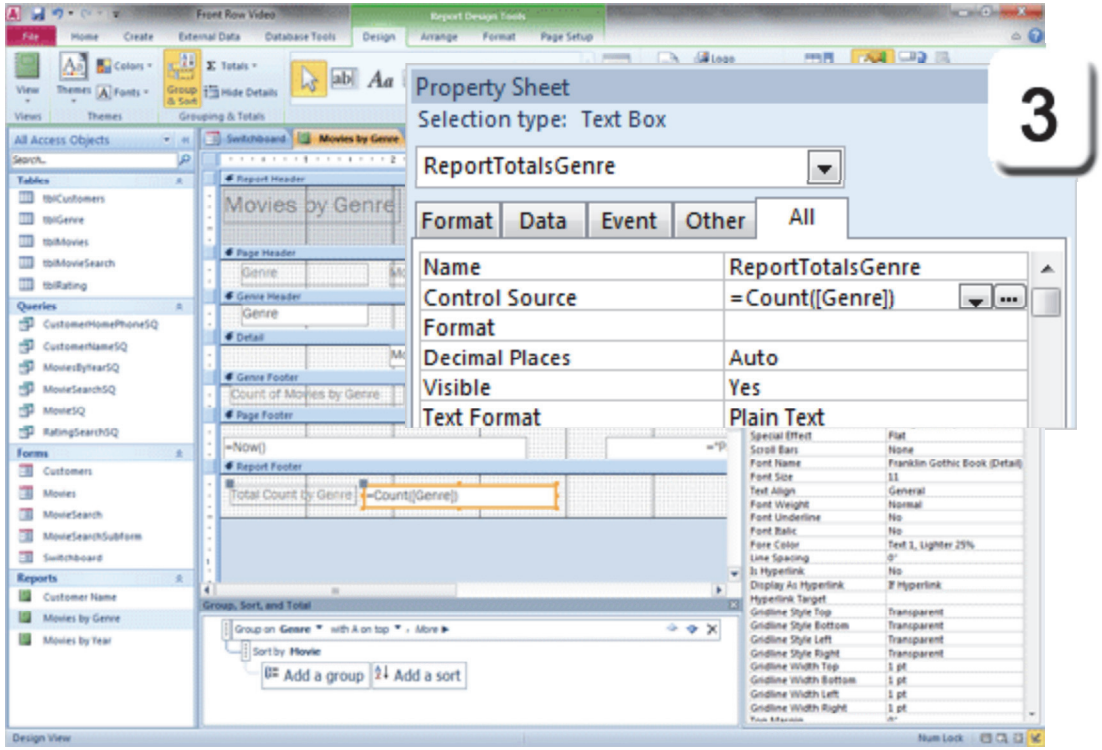
3. Try it: Edit the Text Box Properties
The unbound Text Box is still selected.
Edit the following Properties:
Name: ReportTotalsGenre
Control Source: =Count([Genre])

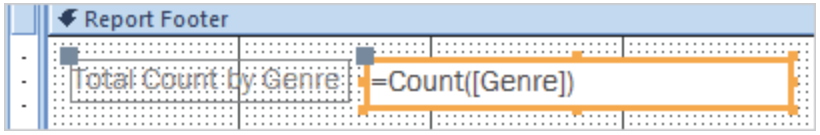
Try This, Too: Edit the Label
Select the Text Box Label.
Edit the following Properties:
Name: ReportTotalsLabel.
Label: Total Count by Genre.

What Do You See? This Calculated Control looks likes it is ready. Let's see if it sings.

Keep going...

Report Design Tools ->Design->Tools->Property Sheet





Exam 77-885: Microsoft Access 2010
5. Designing Reports
5.2. Apply Report Design options: Total Report Records

Take One

See the Report in Print Preview

The Report Totals are placed at the end of the Report. Let's see how this worked.

4. Try it: Preview the Report
Go to **Report Design Tools ->Design->Views.**
Select a **View: Print Preview.**
Use the Record Selectors to go to the last page of this Report to see the Report Totals.

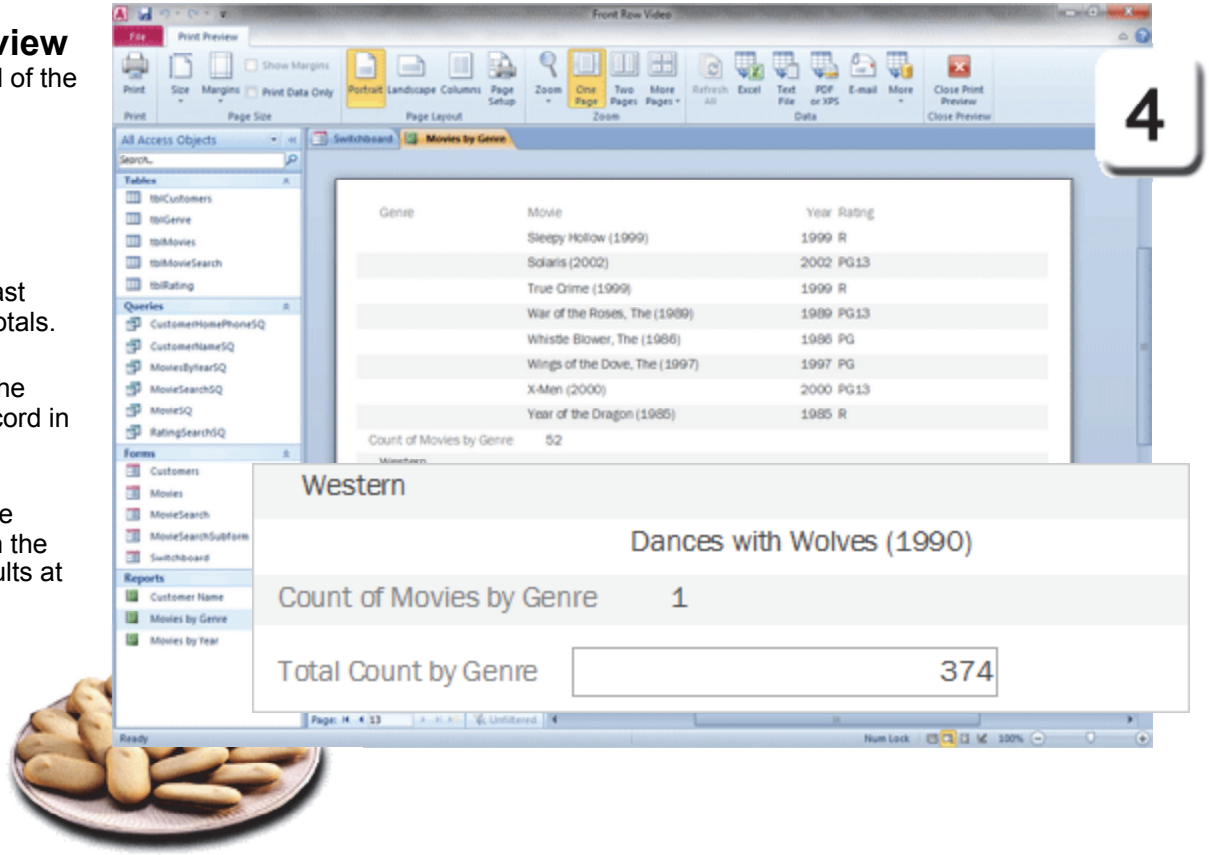
What Do You See? The last Group in the Report is Westerns. There is only 1 Record in the Western Group.

The Total Count is 374. That is the same number of Records we got when we ran the Query, MovieSQ, and reviewed the results at the beginning of this lesson.

Do This, Now: Save the Report.
Go to **File->Save.**

OK, get a cookie!

Report Design Tools ->Design->Views-> View->Print Preview



Exam 77-885: Microsoft Access 2010
5. Designing Reports
5.2. Apply Report Design options: Total Report Records

Practice Activities

Lesson 9: One to Many in Report Design

Try This: Do the following steps

1. Open the Brown Bag Lunch database you have been working on.
Or, you may download **Brown Bag Lunch ver9.accdb**.

2. Begin the Report Wizard. Choose the record source: ItemSQ Query.

3. Select all available fields EXCEPT ProductID.

4. Select Grouping by Specialty, then Grouping by Type.

5. Sort Items in Ascending Order.

6. Select Layout: Stepped.

7. Enter the Title: Products by Specialty. Finish the Wizard and Preview the Report.

8. Close the Preview and go to Design View.

9. Use the Group & Sort command. Add the option With a Footer Section.

10. Edit the options for totals:
Total on: Specialty
Type: Count Value
Show Subtotals in Group Footer

11. In the Group Footer (ie. Specialty Footer)' add an Unbound label next to the Control. Change the text to say Count of Products by Specialty. In the Property Sheet, change the name to SpecialtyTotalLabel.

12. Select the Report Footer. Add an Unbound control. Add the control =COUNT([Specialty])

13. In the Property Sheet, change the name to ReportTotalLabel. Change the caption to Total County by Specialty.

14. Preview the Report. Save the Report.

15. Save and Close the database.

Test Yourself

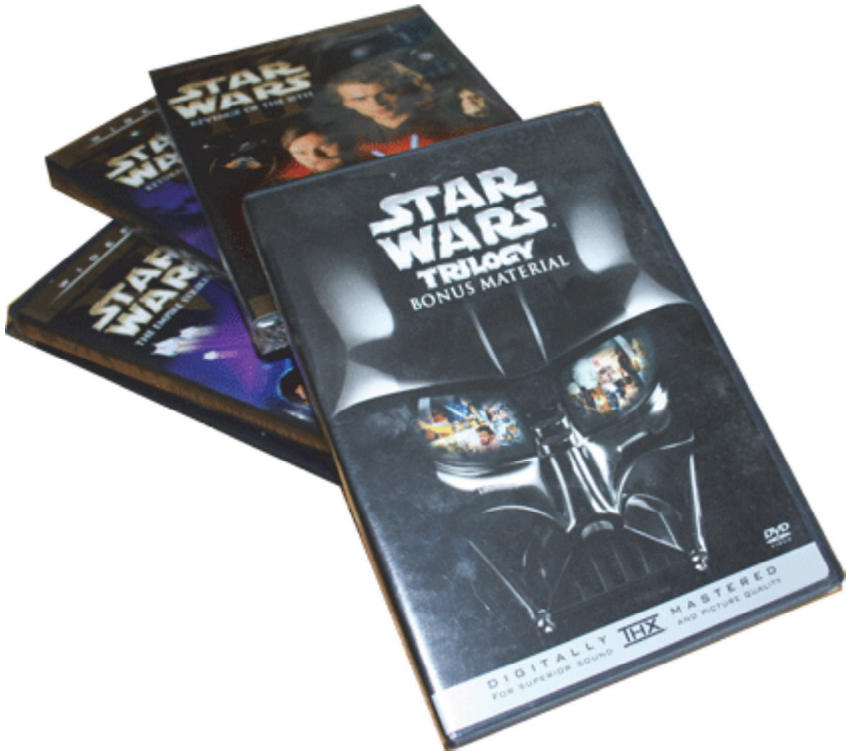
1. Which criteria Filters out all blank records for that Field?
A. Is Not Null
B. No Blanks
C. Is Not Empty
Tip: Intermediate Access, page 228

2. Which Report Options let you represent the one-to-many relationship?
A. Options
B. Grouping
C. Header
D. Priority
Tip: Intermediate Access, page 231

3. Which of the following is a part of an Access Report? (Give all correct answers.)
A. Report Header
B. Page Header
C. Group Header (i.e. Genre Header)
D. Detail
E. Page Footer
F. Report Footer
G. Group Footer
Tip: Intermediate Access, page 237

4. Which is true about Access Reports? (Give all correct answers.)
A. The Group, Sort and Total shows Group Totals
B. The Group Footer includes the Group, Sort and Total command
Tip: Intermediate Access, page 237, 238

5. A Label must always be attached to a Field and a Record Source.
A. True
B. False
Tip: Intermediate Access, page 243



Take Two

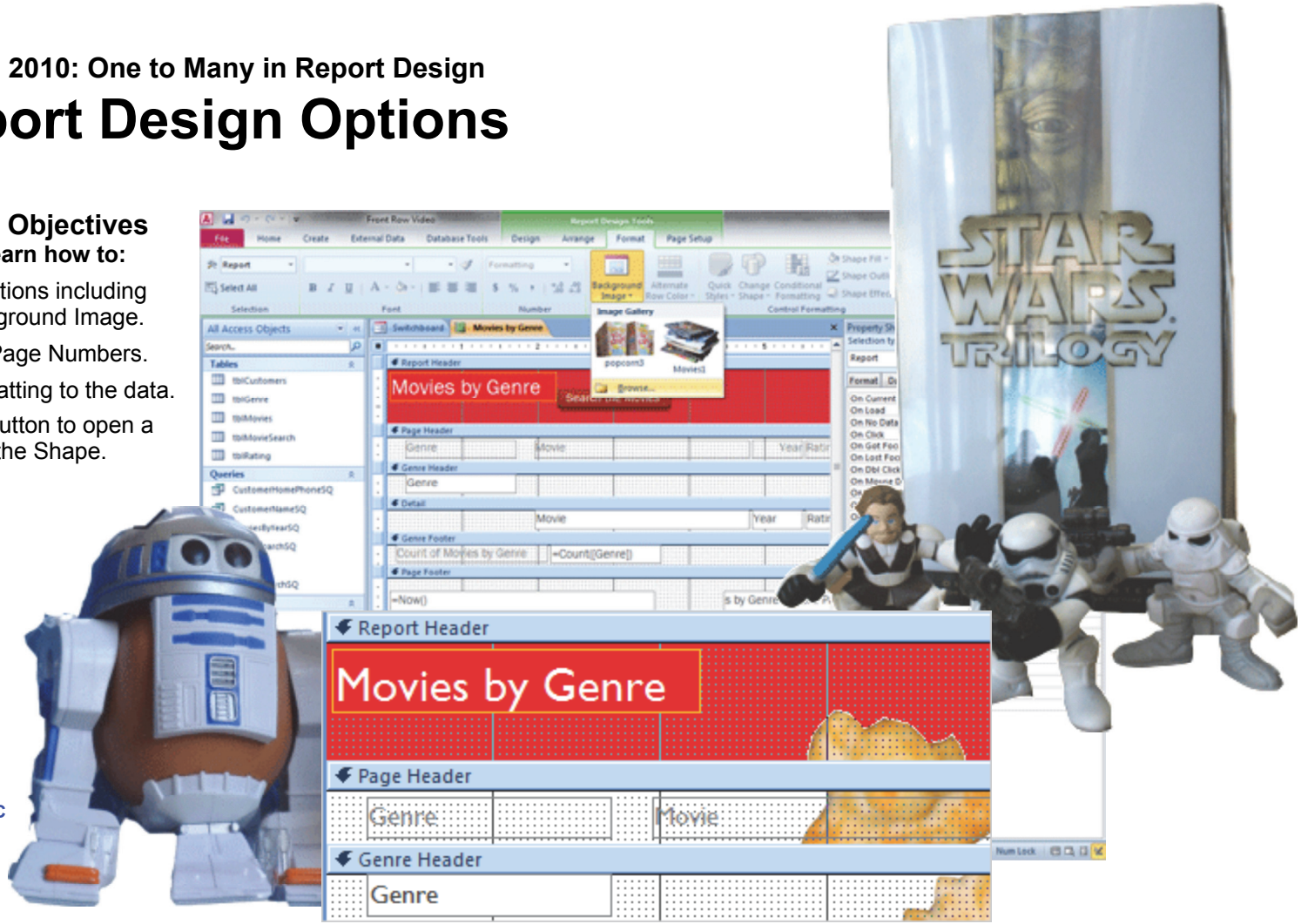
Access 2010: One to Many in Report Design

Report Design Options

Intermediate Access Objectives

In this lesson, you will learn how to:

1. Apply Report Design options including Theme, Logo, and a Background Image.
2. Add Page Breaks and Page Numbers.
3. Apply Conditional Formatting to the data.
4. Program a Command Button to open a Form OnClick and format the Shape.



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Lesson 10 : Report Design and Formatting

1. Readings
Read Lesson 10 in the Intermediate Access guide, page 251-275.

Project
A Report with Conditional Formatting as well as a Command Button that opens a Form with an OnClick Event.

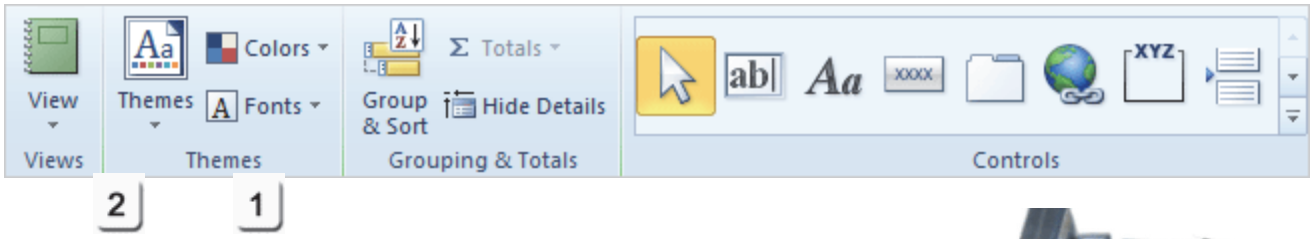
Downloads
FrontRowVideo Int10.accdb
popcorn1.gif, popcorn2.gif, popcorn3.gif, opcorn4.gif, movies1.gif.

BBL Int ver10.accdb
BB Customers Logo.jpg
Brown Bag Logo.jpg
Lunch1.gif, Lunch2.gif, Lunch3.gif, Lunch4.gif

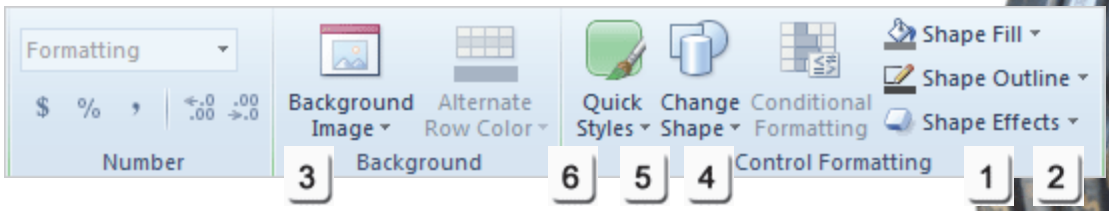
2. Practice
Do the Practice Activity on page 276.

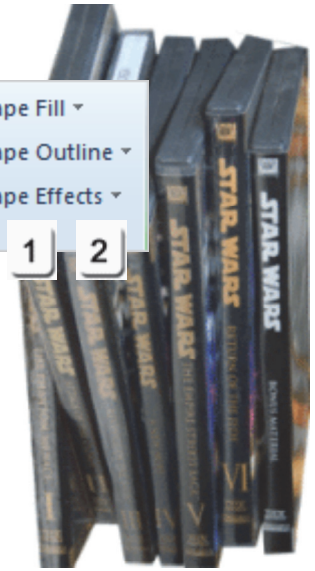
3. Assessment
Review the Test questions on page 277.

Report Design Tools->Design



Report Design Tools->Format





Menu Maps

From the **Report Design Tools->Design Ribbon**
1. Report Design Tools->Design->Themes, page 257
2. Report Design Tools ->Design->Views-> View->Print Preview, page 262

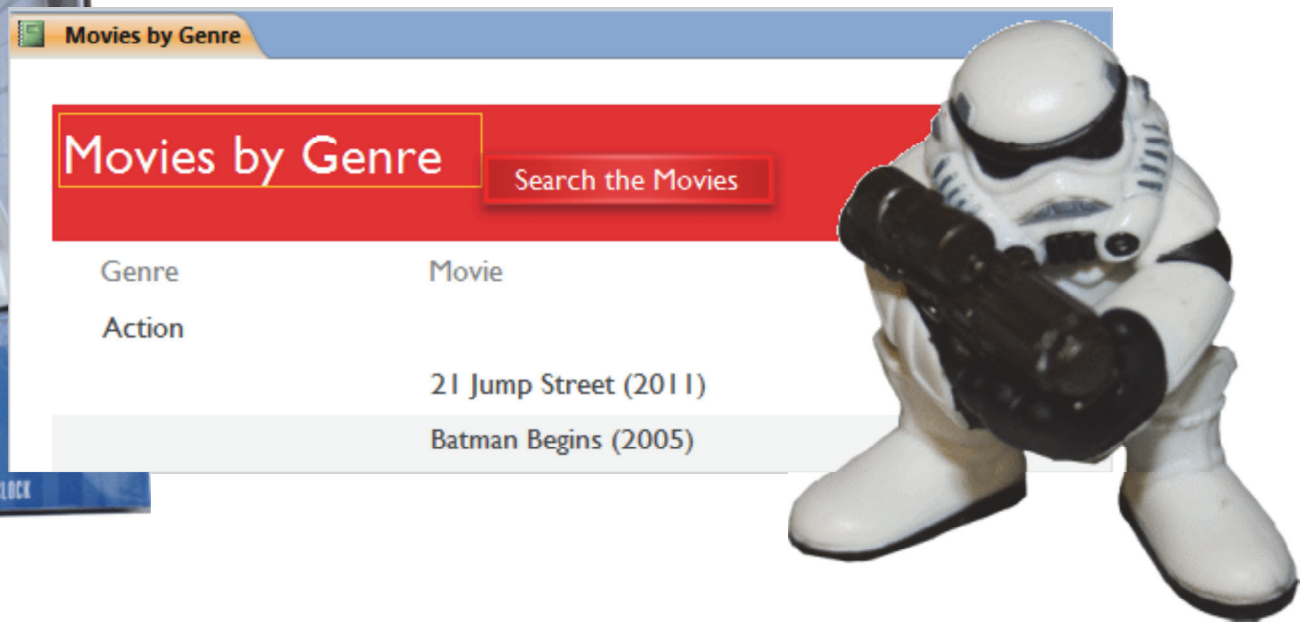
From the **Report Design Tools->Format**
1. Report Design Tools->Format->Conditional Formatting->Shape Fill, page 258
2. Report Design Tools->Format->Conditional Formatting->Shape Outline, page 258
3. Report Design Tools->Format->Background->Background Image, page 263
4. Report Design Tools->Format->Control Formatting->Conditional Formatting, page 264
5. Report Design Tools ->Format->Control Formatting->Change Shape, page 272
6. Report Design Tools ->Format->Control Formatting->Quick Styles, page 273

Report Design and Formatting

Designing Reports

The Report may be the only part of your Mighty Access database that your customers ever see. Like a stage play, most of the database is "backstage." This lesson uses the Report Tools to format your printouts. Many of the options are similar to the ones we used earlier in the Form Design. Reports, like Forms, can have Command Buttons, too. Our report will have a Command Button that opens a Form.

Microsoft Access 2010: Example of a Microsoft Access Report



Take Two

What Are the Objectives?

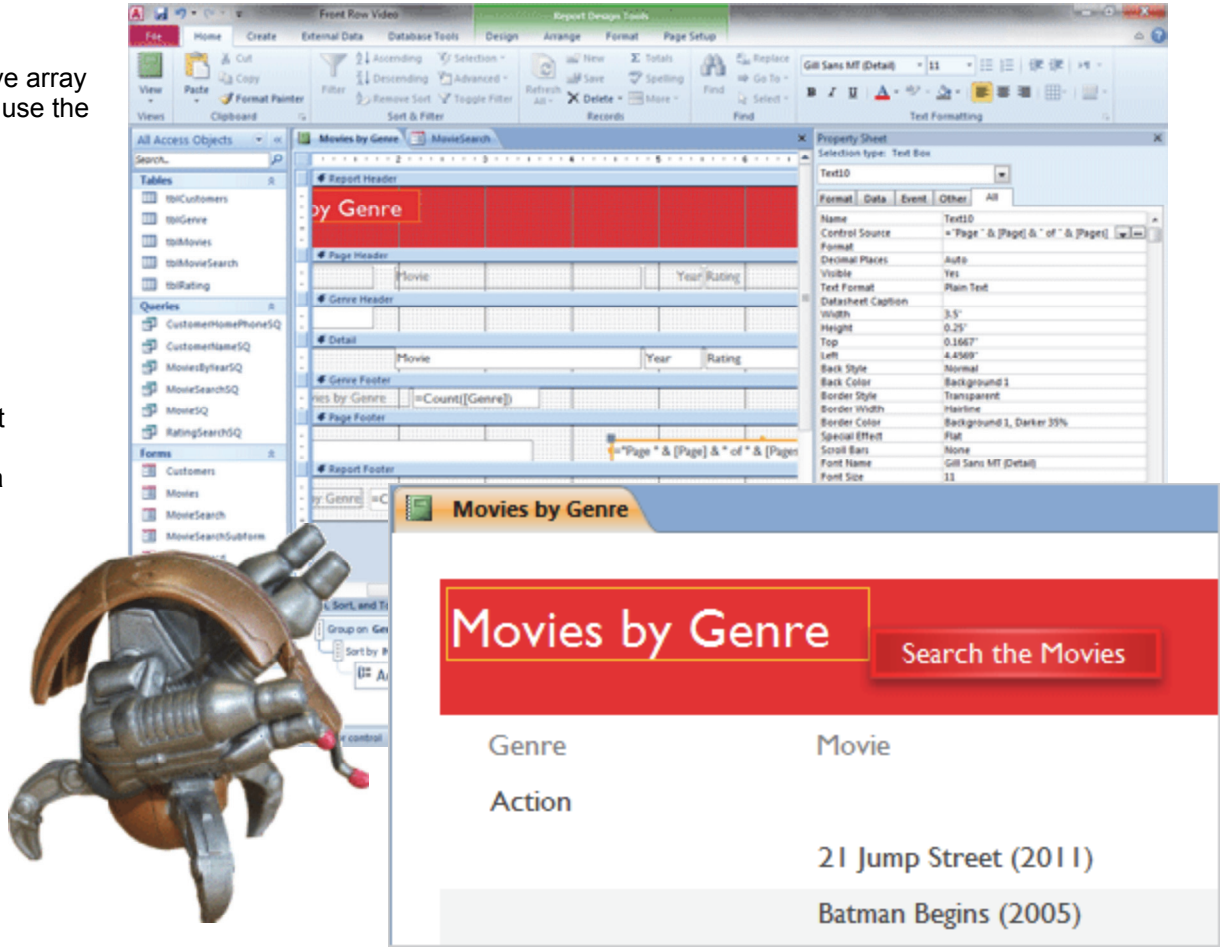
Microsoft Access 2010 has an impressive array of Report Design Tools. This lesson will use the Design and Format Ribbons.

Apply Report Design Options:
Apply a Theme to the Report
Edit the Color and Fonts
Insert a Page Break
Format the Page Numbers

Apply Report Format Options:
Apply a background image to the Report
Add a Shape
Apply Conditional Formatting to the data

That's the plan.

Microsoft Access 2010: Example of a Microsoft Access Report



Before You Begin

Before You Begin: Open the Sample Database
Go to **Start -> All Programs ->Microsoft Office**. Click on **Microsoft Office Access 2010**.

Access will prompt you to open a database. This lesson uses the database that was programmed in the previous lesson. You can continue with the same database if you wish.

The **FrontRowVideo Int10.accdb** database has: Five Tables: tblCustomers, tblGenre, tblMovies, tblMovieSearch and tblRating.

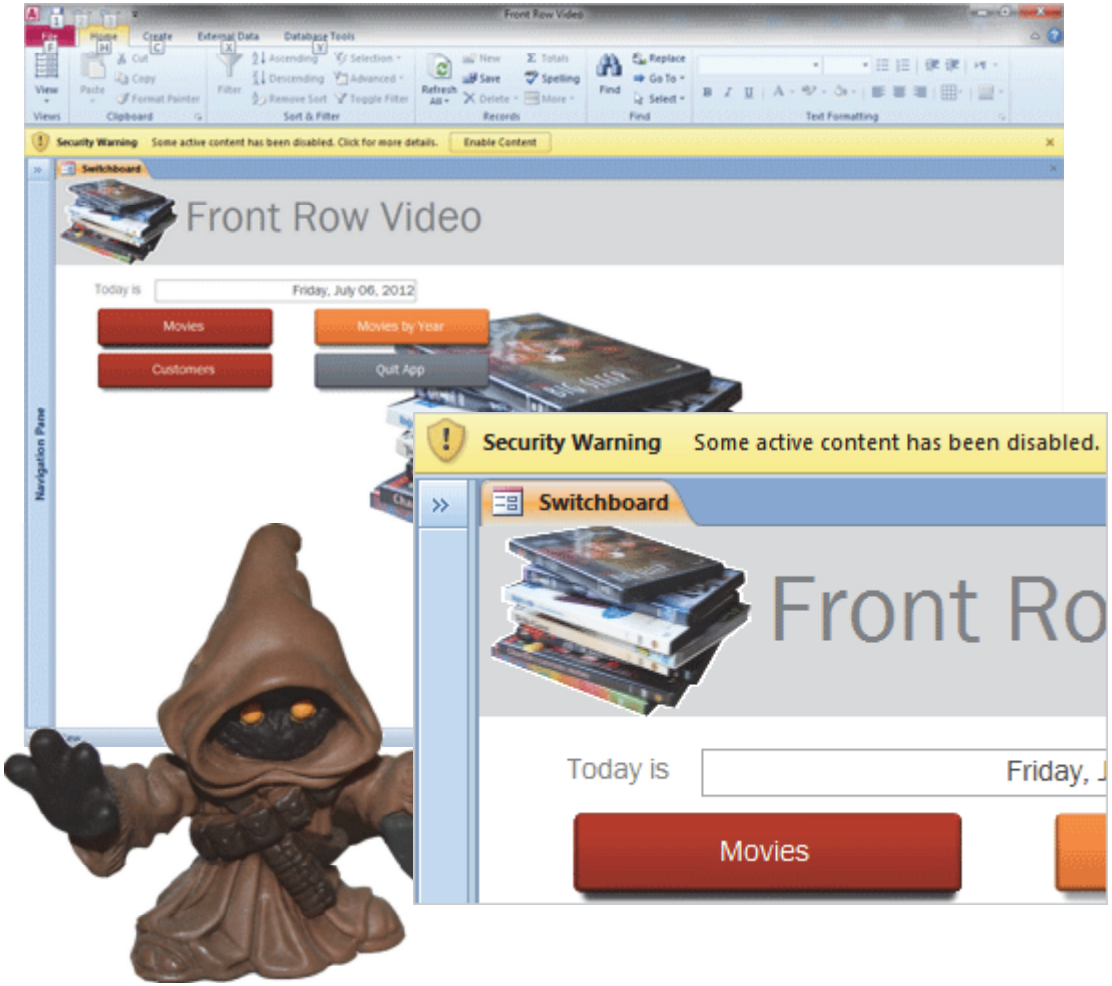
Six Queries: CustomerHomePhoneSQ, CustomerNameSQ, MoviesByYearSQ, MovieSQ, MovieSearchSQ and RatingSearchSQ.

Five Forms: Customers, Movies, MovieSearch, MovieSearchSubform and the Switchboard.

Three Reports: Customer Name. Movies by Genre, and Movies by Year.

Memo to Self: Click **Enable Content** if you see the Security Warning.

Start -> All Programs ->Microsoft Office-> Microsoft Office Access 2010



Take Two

Review the Report

The last time we left our hero, the **Movies by Genre Report**, the basic design was complete.

1. Try it: Review the Report Design
Go to **All Access Objects->Reports**.
Select a Report: Movies by Genre.

Try This, Now: Change the View:
Go to **Home ->Views->View->Design View.**
The **Report Design Tools** should be available.

What Do You See? This Report has Sections:
Report Header: There is a label.

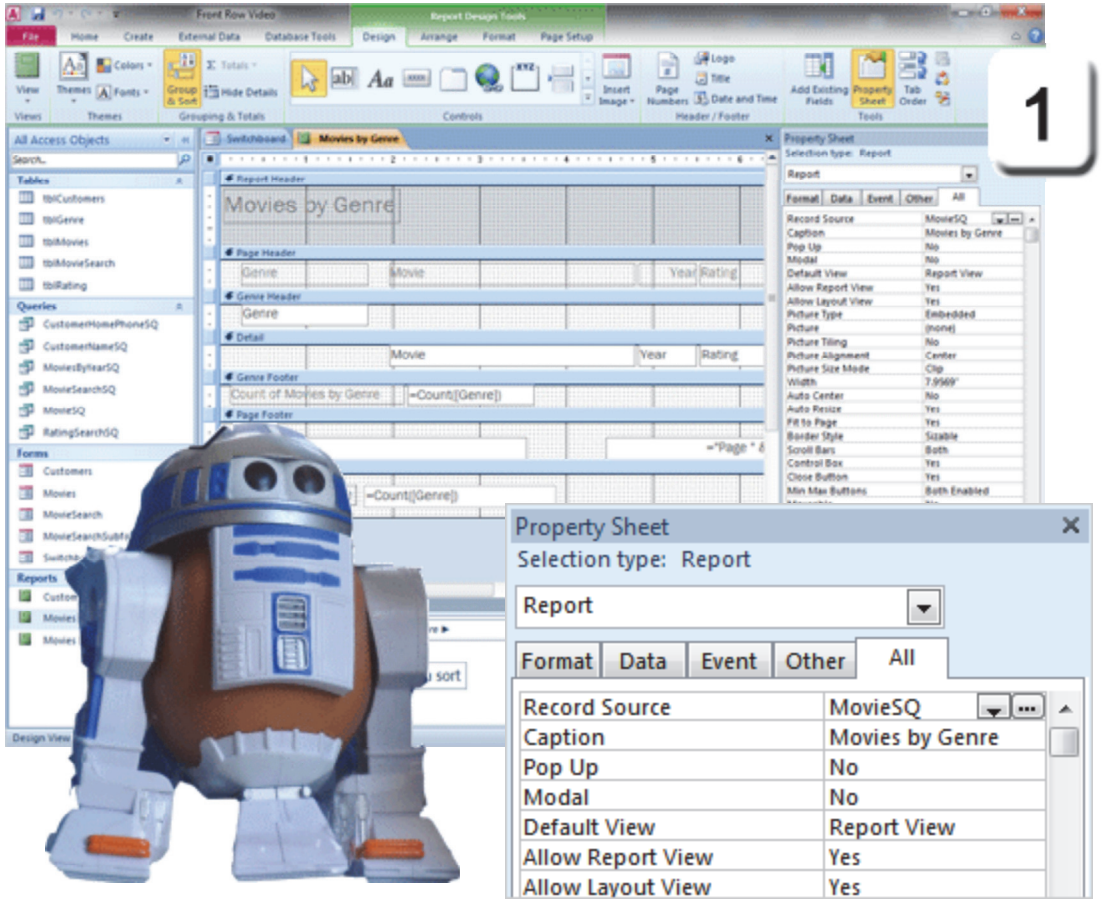
Page Header: These labels repeat at the top of every page.

Genre Header: Only the Genre Field.
This is the One in the One-to-Many.

Detail: The Movie and Rating Records.
This is the Many in the One-to-Many.

Page Footer: The Date and Page Number repeat at the bottom of every page.

Home ->Views->View->Design View



Exam 77-885: Microsoft Access 2010
5. Designing Reports
5.1. Create reports: Use Report Design Tools

Apply A Theme

2. Try it: Apply a Theme to a Report
Go to **Report Design Tools->Design->Themes**
Select a **Theme: Solstice**

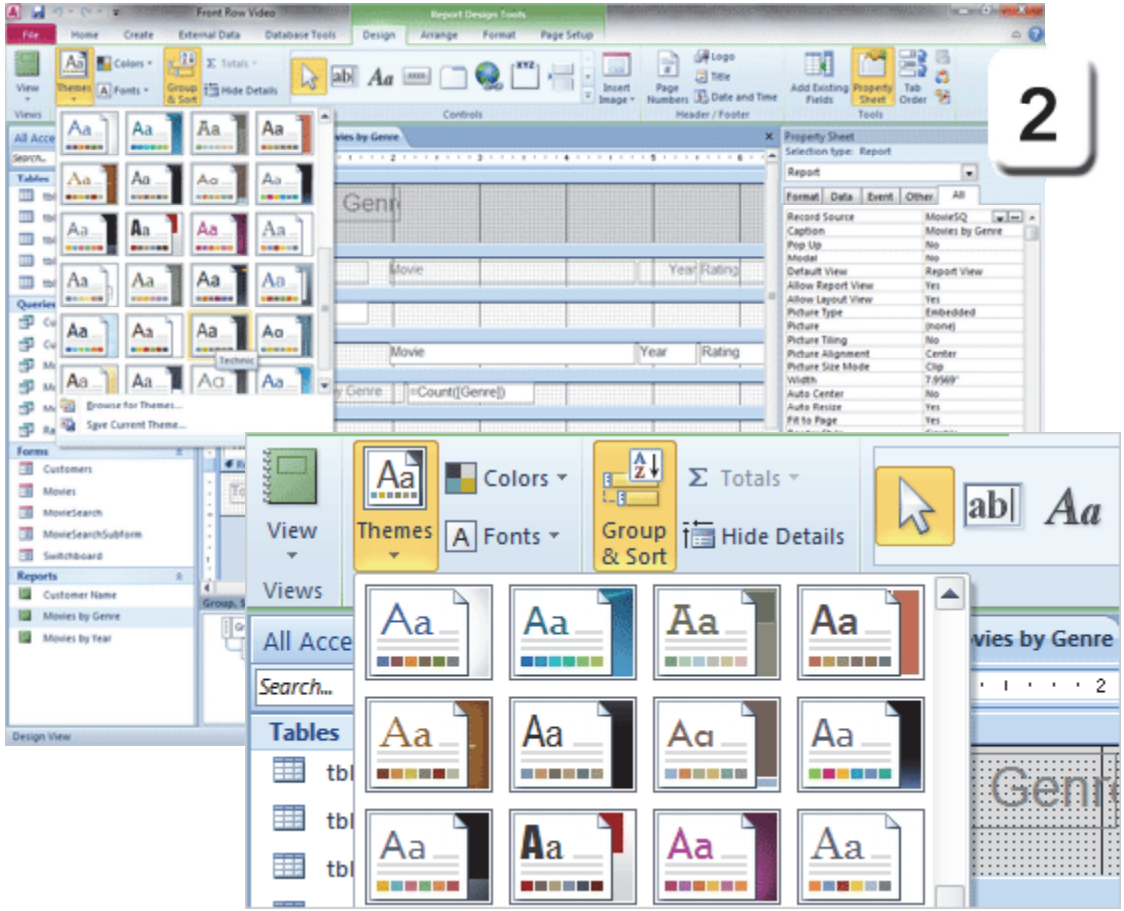
What Do You See? A **Theme** formats the Color as well as the Fonts for the Report.

What Else Do You See? Some Fonts may make the Text in the Labels too large to fit. You can resize the Labels if you wish.

Made You Look: The Theme will be applied to the Switchboard Form as well as the Report. Each Theme has a different way of formatting the Command Buttons.

Keep going...

Report Design Tools->Design->Themes



Exam 77-885: Microsoft Access 2010
5. Designing Reports
5.2. Apply Report Design options: Apply a Theme

Modify a Theme

3. Try it: Modify the Theme Colors

The Report is still open in Design View.

Select the **Report Header.**
Go to **Report Design Tools->Format.**
Go to **Conditional Formatting->Shape Fill.**
Select a **Fill Color**: red.

Select the **Label** in the Report Header.
Go to **Report Design Tools->Format**.
Go to **Conditional Formatting->Shape Fill.**
Select a **Fill Color:** red.

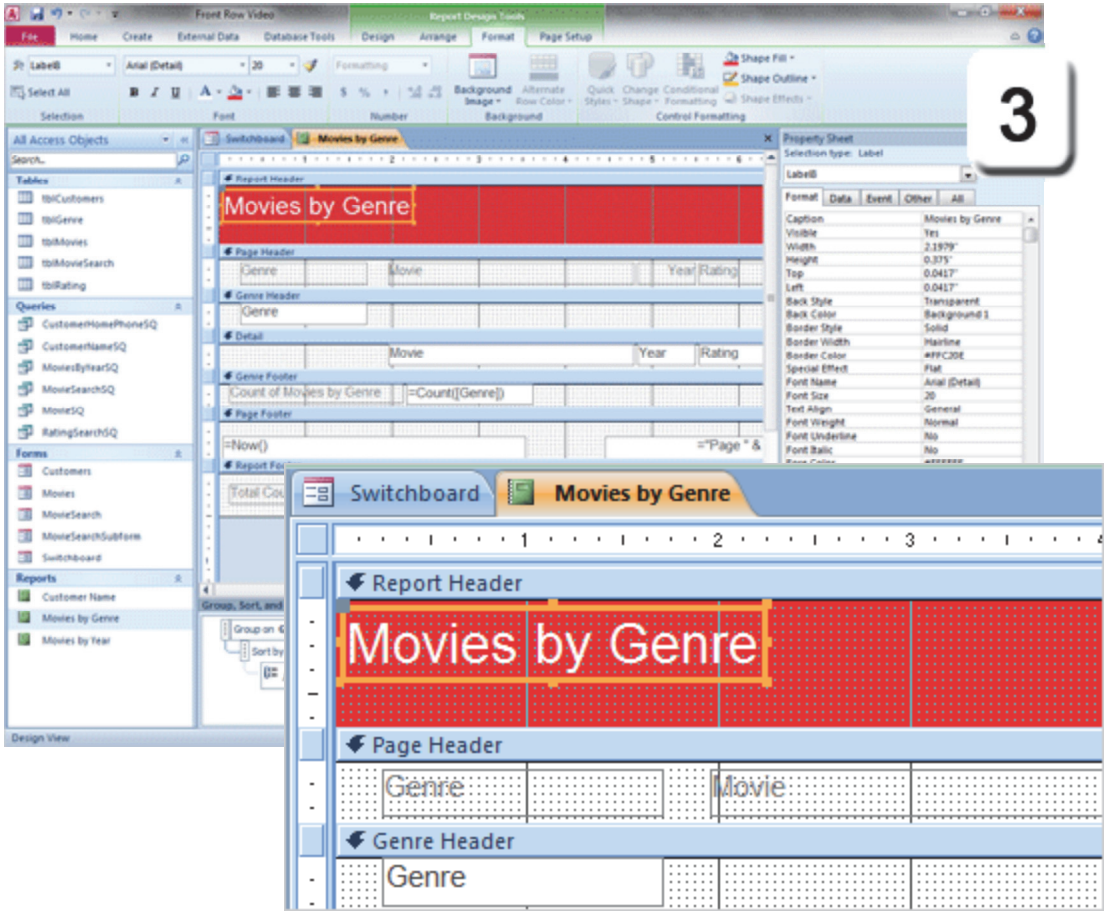
The Label in the Report Header is selected.
Go to **Report Design Tools->Format.**
Go to **Conditional Formatting->Shape Outline.**

Select an **Outline Color:** orange**.**

The Label in the Report Header is selected.
Go to **Report Design Tools->Format->Font.**
Select a **Font Color:** white**.**

Keep going...

Report Design Tools->Format->Conditional Formatting->Shape Fill



Exam 77-885: Microsoft Access 2010
5. Designing Reports
5.2. Apply Report Design options: Format the Header/Footer

Find the Page Numbers

Page Numbers were added to the Page Footer as we walked through the Report Wizard.

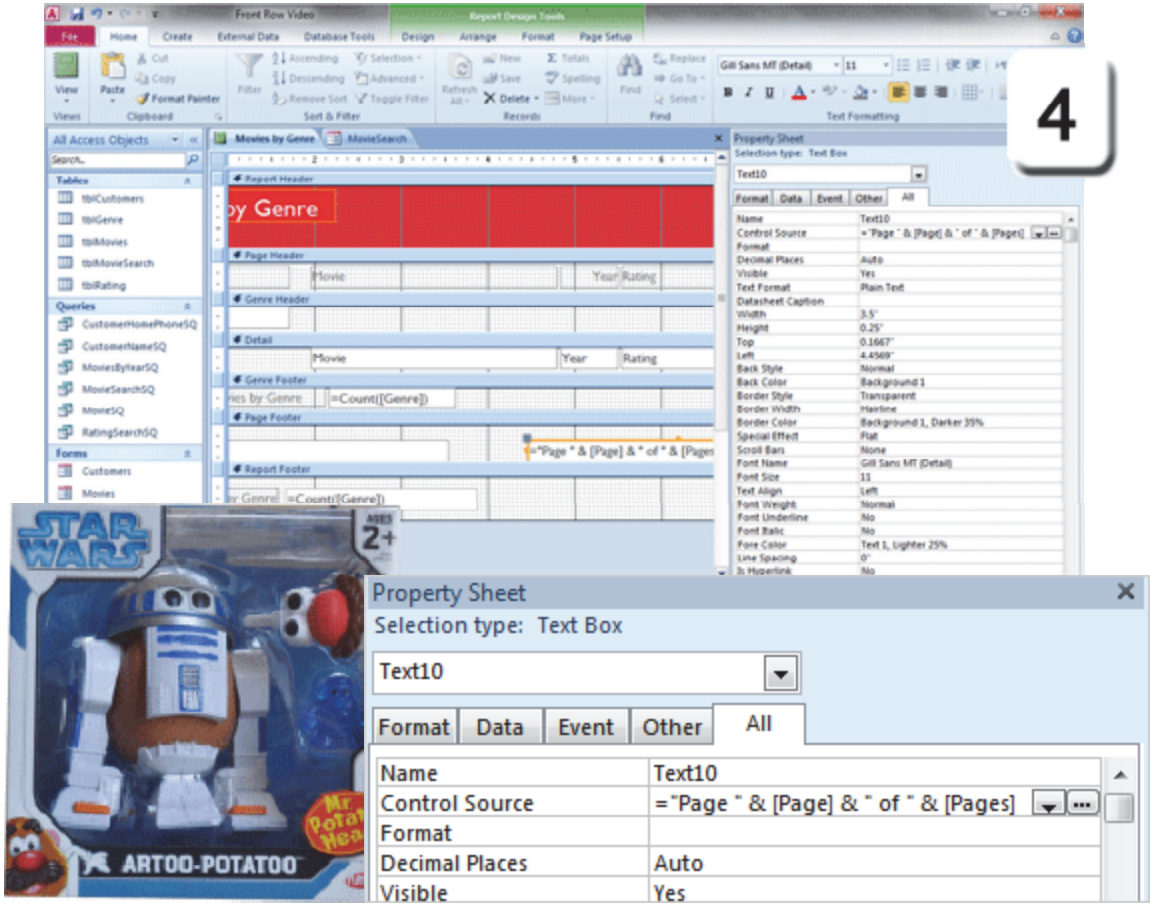
4. Try it: Find the Page Numbers
The Report is still open in Design View.
Select the Page Number Control in the Page Footer. It is a Text Box.
Go to **Report Design Tools->Design->Tools.**
Go to **Property Sheet->All->Control Source.**

What Do You See? The Page Numbers are displayed in a Text Box that has an Expression for the Control Source.

The Expression for the Pages Numbers is:
="Page " & [Page] & " of " & [Pages]

Keep going...

Report Design Tools->Design->Tools->Property Sheet



Exam 77-885: Microsoft Access 2010
5. Designing Reports
5.2. Apply Report Design options: Edit the Page Numbers

Take Two

Edit the Expression

This Expression is similar to ones we created earlier in various Select Queries. You can edit the text between the quotation marks if you wish.

5. Try it: Find the Page Number Properties
The Movies by Genre Report is in Design View and the Page Number Control is selected.
Go to **Property Sheet->All.**
Click on **Control Source**.
Click on the **3-Dot Builder**.
The Code Builder should open.

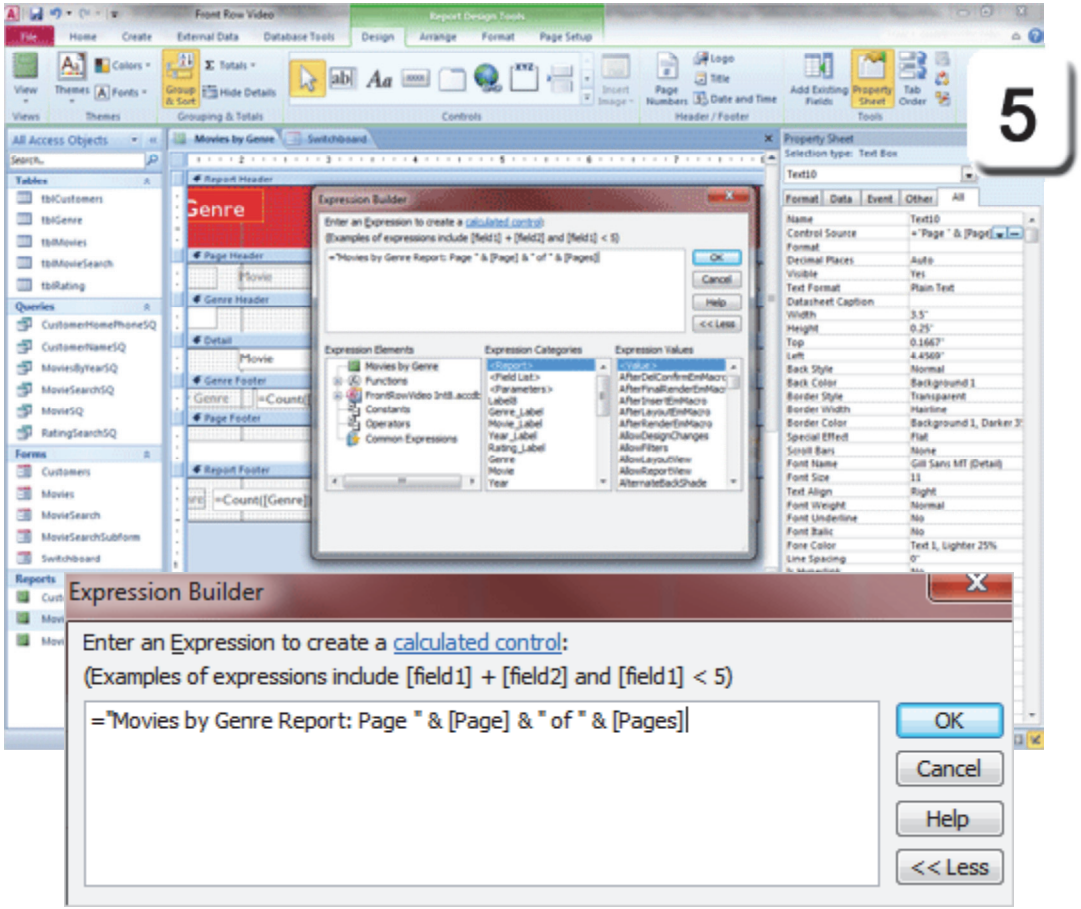
Try This, Too: Edit the Expression
Type **Movies by Genre Report** between the quote marks as follows:

="Movies by Genre Report: Page " & [Page] & " of " & [Pages]

Where the Expression is one sentence without line breaks as may be printed in the preceding paragraph, above.

Click **OK** to close the Expression Builder.
You should return to the Report in Design View.

Report Design Tools->Design->Tools->Property Sheet



Exam 77-885: Microsoft Access 2010
5. Designing Reports
5.2. Apply Report Design options: Insert a Page Break

Add a Page Break

You can use a Page Break to make each new Genre begin at the top of the next Section. There are two ways to add a Page Break to a Report: a Page Break Control or selecting that option in the Property Sheet.

This example will use the Property Sheet to add a Page Break AFTER the Genre Footer Section.

6. Try it: Add a Page Break
The Movies by Genre Report is in Design View.
Select a Section: Genre Footer.
The Genre Footer bar should be black.

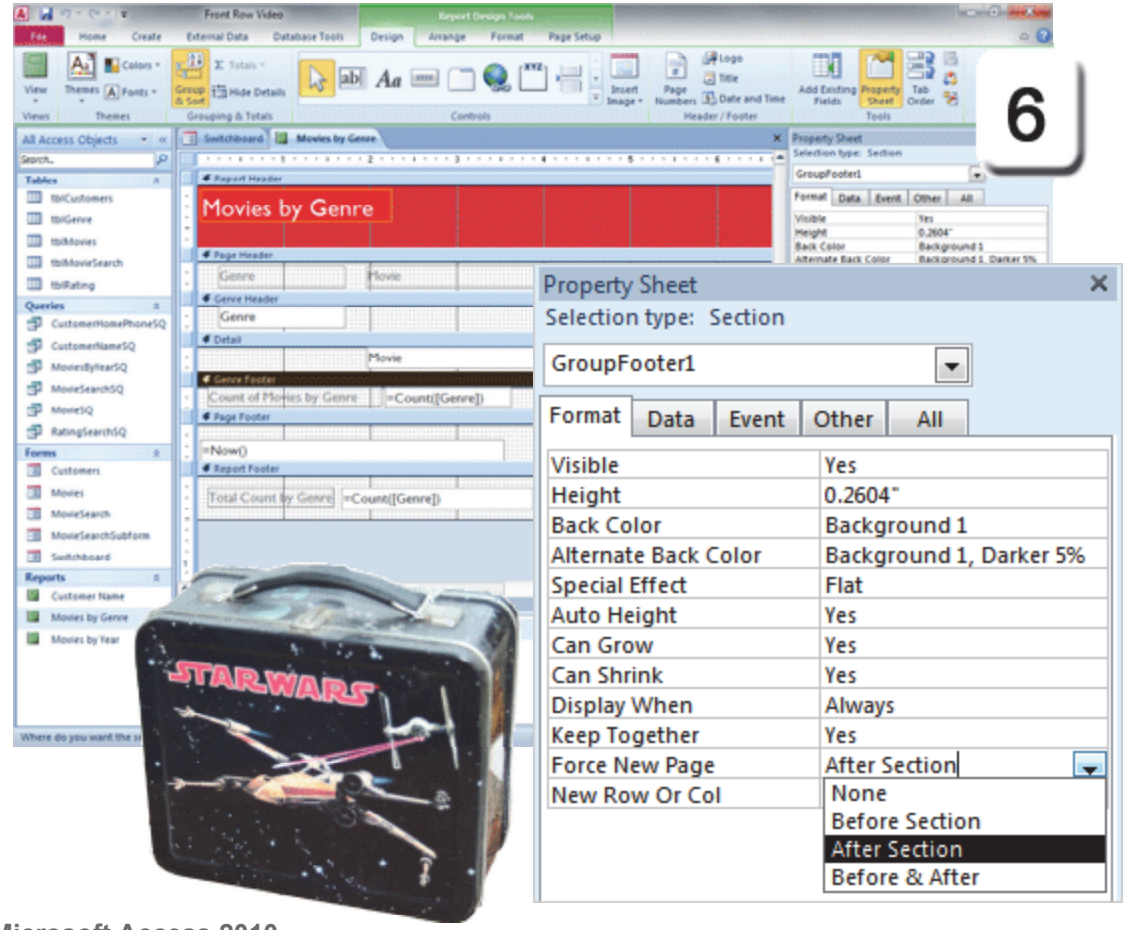
Go to **Property Sheet->Format**.
Edit **Force New Page: After Section**.

That should do it.

Do This, Now: Save the Report
Go to **File->Save**.

Keep going...

Report Design Tools->Design->Tools->Property Sheet



Exam 77-885: Microsoft Access 2010
5. Designing Reports
5.2. Apply Report Design options: Insert a Page Break

Take Two

Preview the Report

The proof is in the pudding. Let's look at this Report as a User would see it: Print Preview.

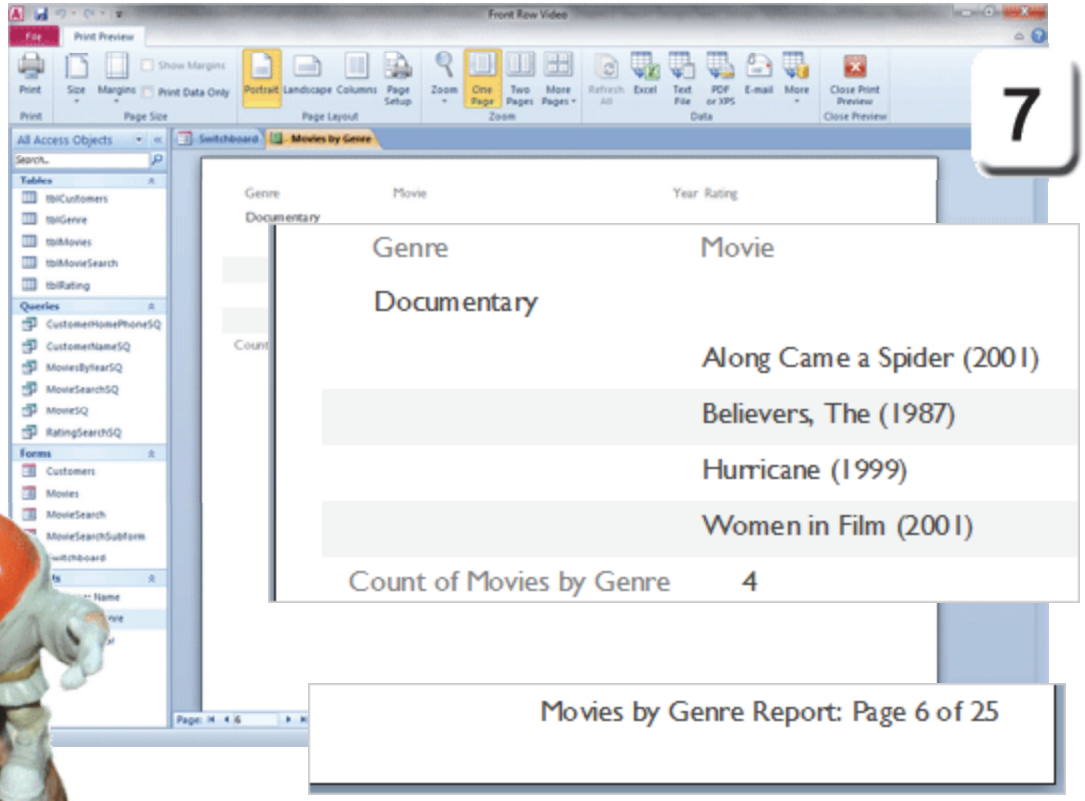
7. Try it: Preview the Report
Go to **Report Design Tools ->Design->Views.** Select a **View: Print Preview**.

What Do You See? Each Genre begins a new Section at the top of a page.

What Else Do You See? The Page Number in the Genre Footer should include our edits.

Not bad. Not bad.

Report Design Tools ->Design->Views-> View->Print Preview



Exam 77-885: Microsoft Access 2010
5. Designing Reports
5.2. Apply Report Design options: Add Page Numbers

Add a Background Image

As we mentioned at the beginning of this lesson, the Report may be the only part of your Mighty Access Database that your customers or coworkers see. Dress it up!

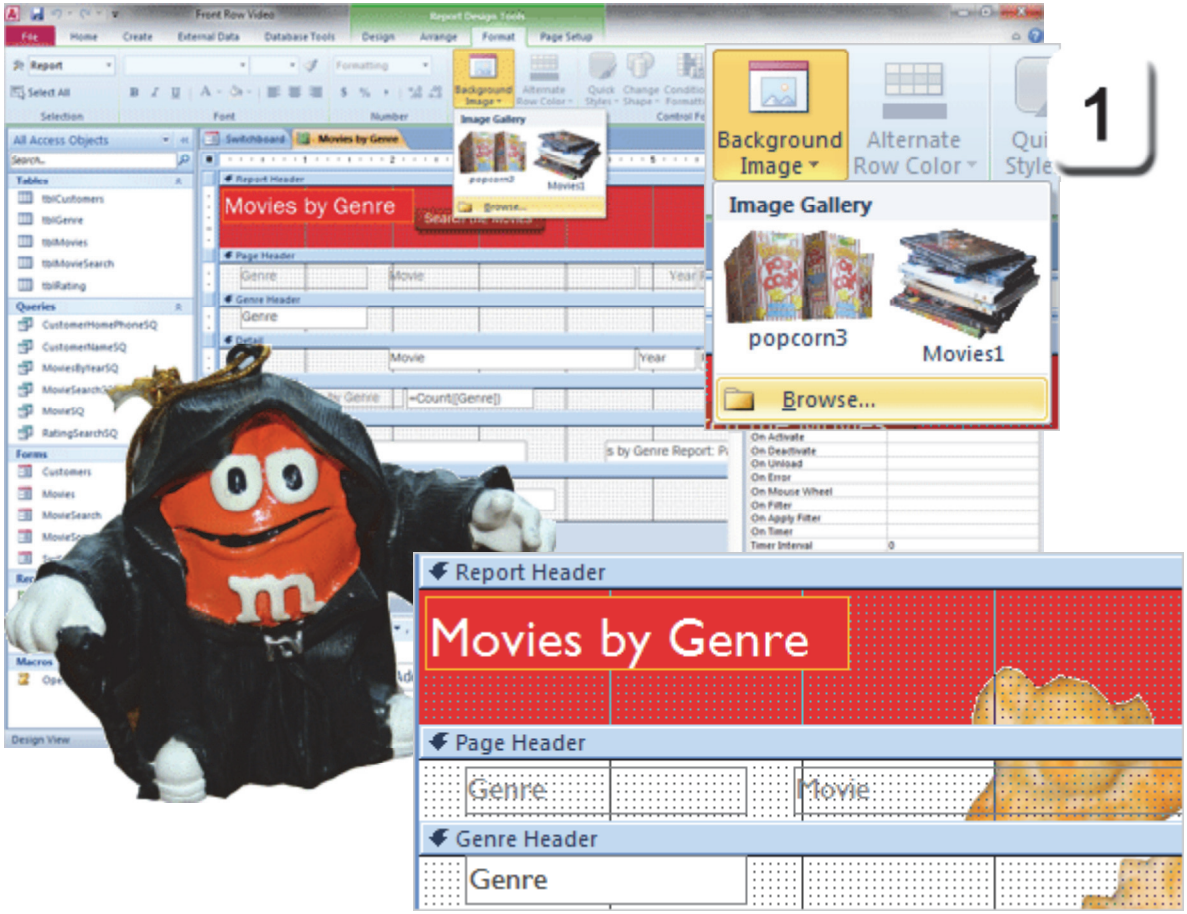
Reports, like Forms, can be branded with images. Here are the steps to add a Background Image to this Report.

Before You Begin: Change the View
Close the **Print Preview**, please.
The Report should be in Design View, now.

1. Try it: Add a Background Image
Go to **Report Design Tools->Format.**
Go to **Background->Background Image.**
Browse for an Image: popcorn4.jpg.
Click **OK**.

What Do You See? The popcorn image should be behind the Controls and Labels.

Report Design Tools->Format->Background->Background Image



Exam 77-885: Microsoft Access 2010
5. Designing Reports
5.4. Apply Report Format options: Apply a Background Image to a Report

Use Conditional Formatting

Conditional Formatting changes the Font Color of the Control depending on the Rules that you set up. You can use Conditional Formatting in a Report as well as in a Form.

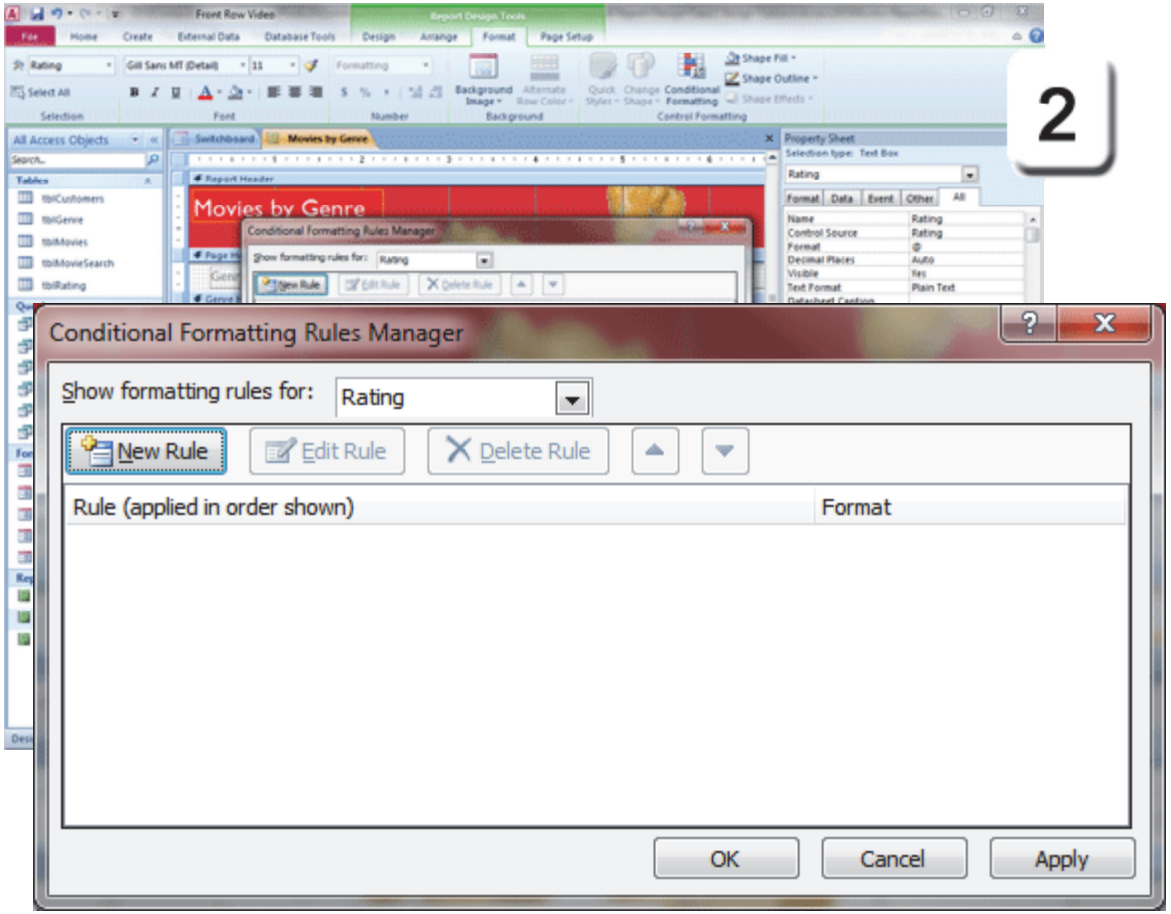
This Rule will be applied to the Rating data, as we did earlier on the MovieSearchSubform.

2. Try it: Use Conditional Formatting
The Report is still open in Design View.
Select the Rating Control in the Detail Section.
Go to **Report Design Tools->Format.**
Go to **Control Formatting.**
Click on **Conditional Formatting.**

What Do You See? The **Conditional Formatting Rule Manager** will prompt you to create a New Rule.

Keep going...

Report Design Tools->Format->Control Formatting->Conditional Formatting



Exam 77-885: Microsoft Access 2010
5. Designing Reports
5.4. Apply Report Format options: Use Conditional Formatting

Take Two

Edit the Formatting Rule

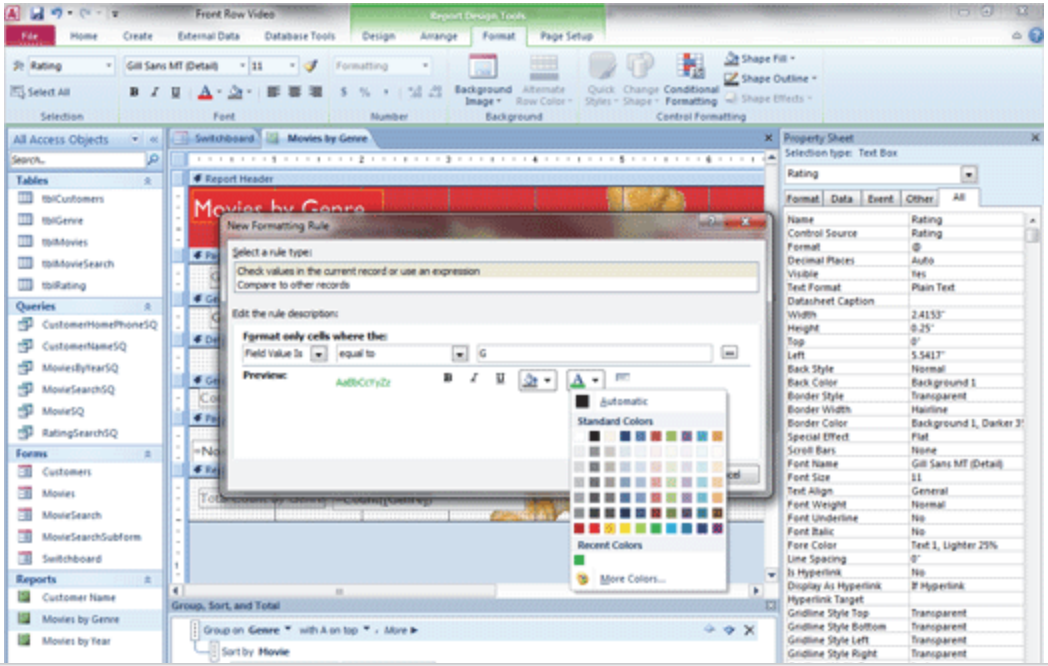
Each value in the Rating data will be assigned a different color.

3. Try it: Edit the Formatting Rule
Field Value is: equal to
Enter the Rating: G
Format the color: green

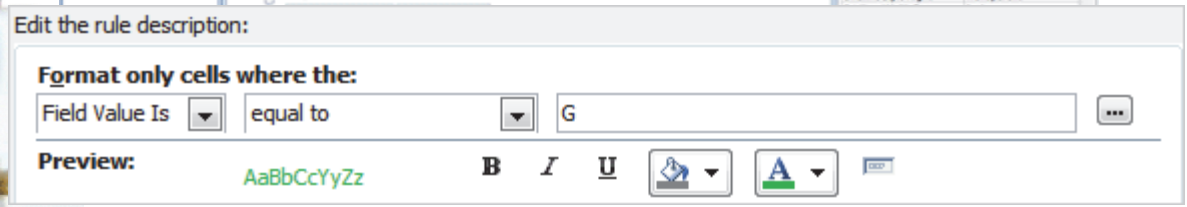
Keep going...

Memo to Self: Be consistent. We used Conditional Formatting in the Movie Search Subform. It is OK to match the colors in the Report.

Report Design Tools->Format->Control Formatting->Conditional Formatting



3



Exam 77-885: Microsoft Access 2010
5. Designing Reports
5.4. Apply Report Format options: Use Conditional Formatting

Add More Rules

4. Try it: Add More Rules

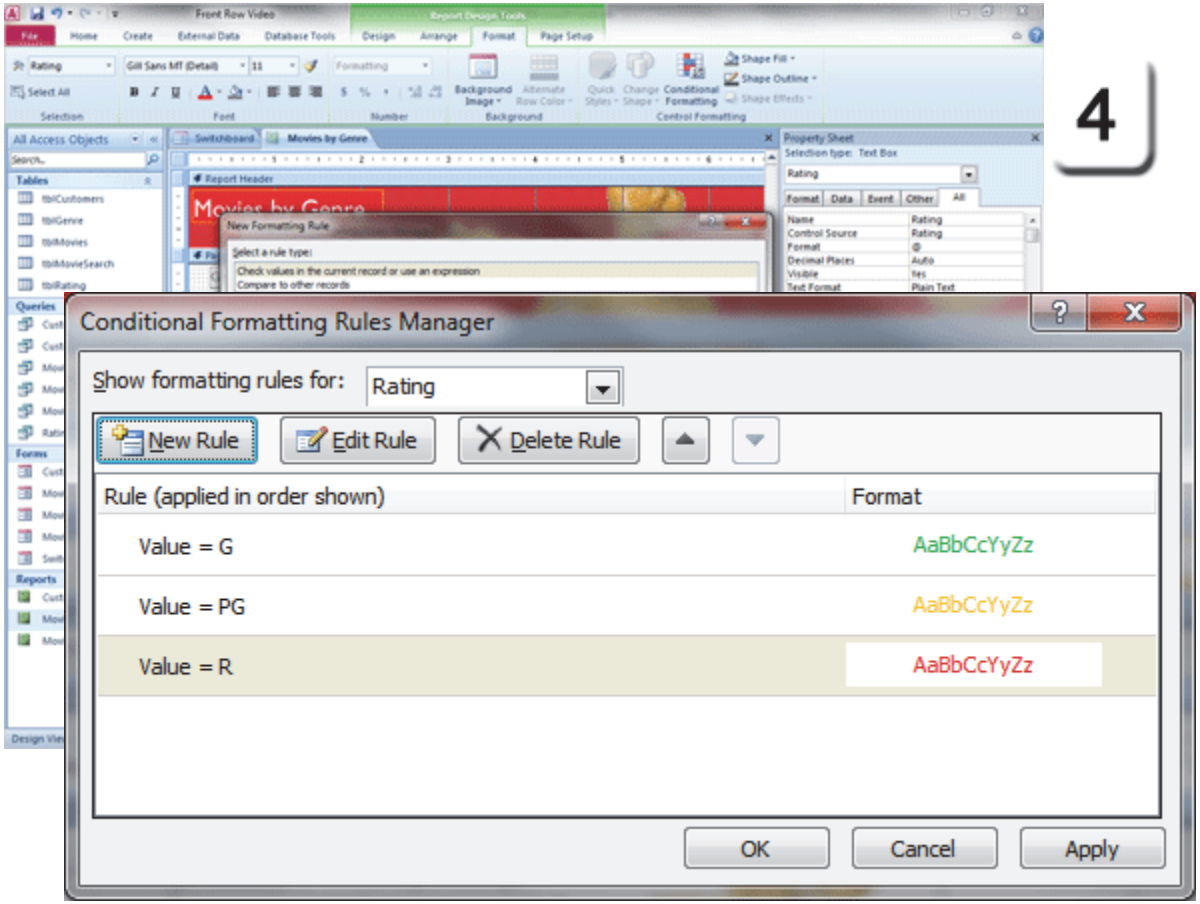
Add a Rule for the PG Rating
Click on **New Rule**.
Field Value is: equal to
Enter the Rating: PG
Format the color: orange

Add a Rule for the R Rating
Click on **New Rule**.
Field Value is: equal to
Enter the Rating: R
Format the color: red

Show formatting rule for Rating:
There should be three rules.

Click **OK.** Keeeeeep going.

Report Design Tools->Format->Control Formatting->Conditional Formatting



Exam 77-885: Microsoft Access 2010
5. Designing Reports
5.4. Apply Report Format options: Use Conditional Formatting

Take Two

Print Preview the Formatting

5. Try it: Preview the Report

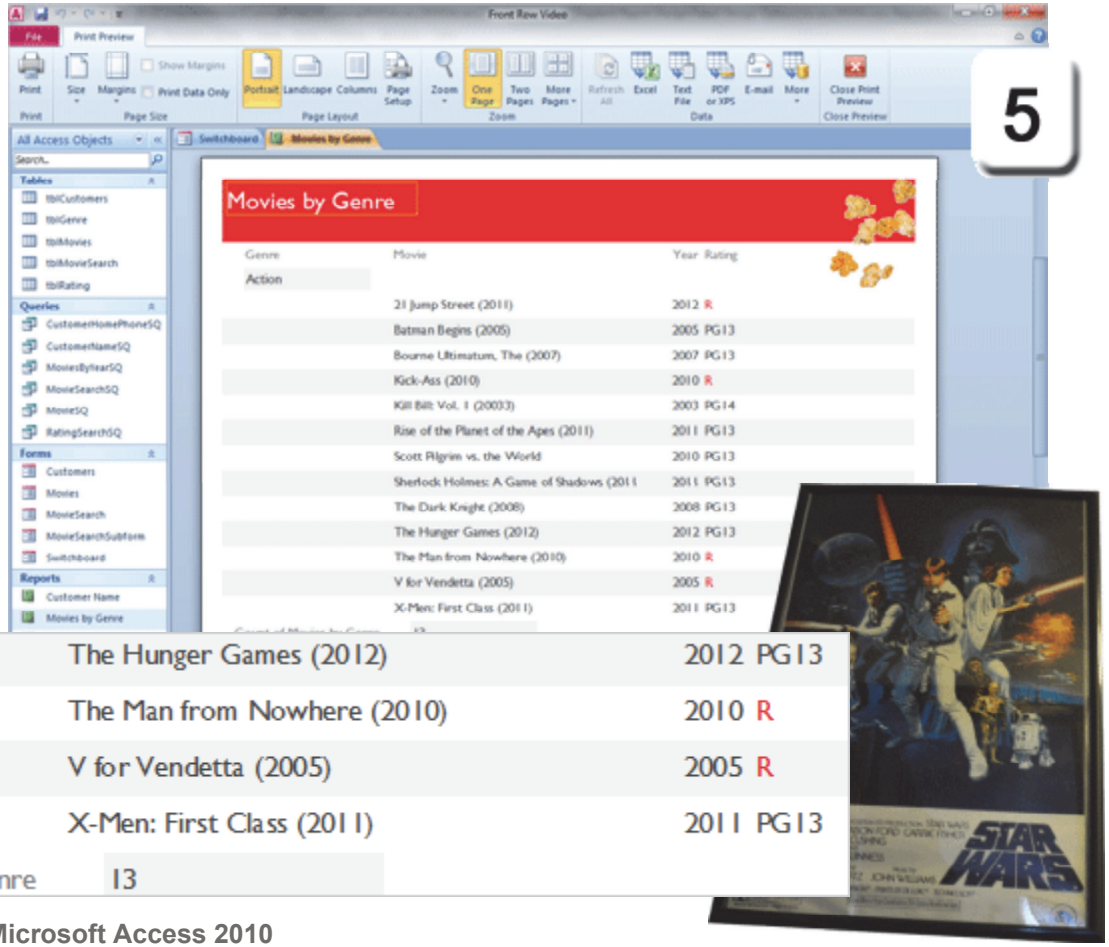
Go to **Report Design Tools ->Design->Views.** Select a **View: Print Preview.**

What Do You See? Each Genre begins a new Section at the top of a page. The Count in each Section is shown in the Genre Footer.

What Else Do You See? The Rating data is formatted according to the Conditional Formatting Rules: G is green, R is red.

Please **Close** the Print Preview.

Report Design Tools ->Design->Views-> View->Print Preview



Exam 77-885: Microsoft Access 2010
5. Designing Reports
5.4. Apply Report Format options: Use Conditional Formatting

Designing for Users

A Report is a snapshot, at best, of the data.

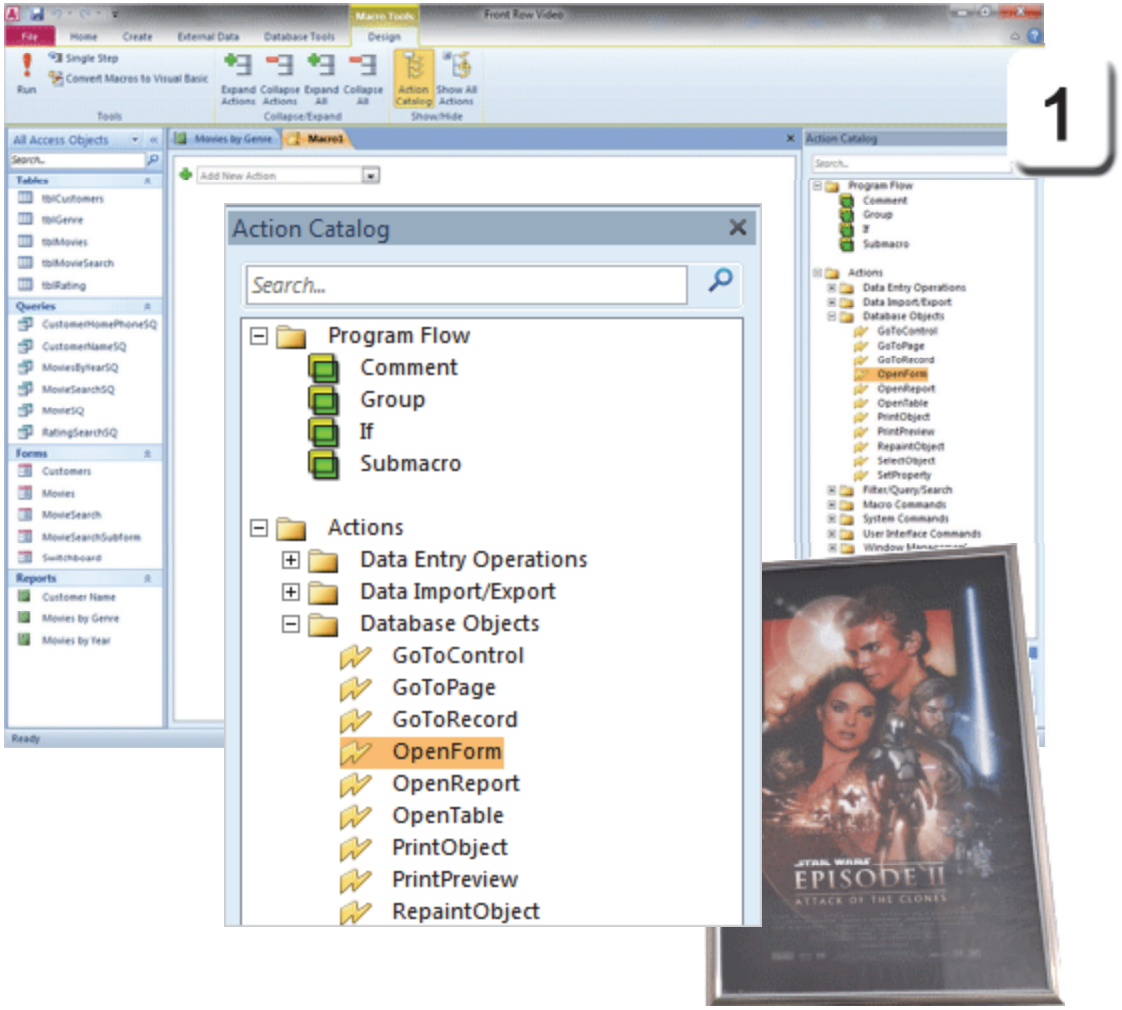
A Command button can open the Movie Search Form so that Users can look up the answer. The Command Button in this example will use a Macro to open the MovieSearch Form. We will also format the Command Button with Quick Styles.

1. Try it: Create a Macro
Go to **Create ->Macros and Code->Macro.**

What Do You See? The Macro Window should open. The **Action Catalog** is on the left. It lists many things you can program:
Data Entry Operations
Data Import/Export
Database Objects
Filter Query Search
Macro Commands
System Commands
User Interface Commands
Windows Management

Keep going...

Create ->Macros and Code->Macro



Program the Macro

2. Try This: Program the Macro
Go to the **Action Catalogue**.
Go to **Database Objects**.
Double Click an **Action: OpenForm**

The **OpenForm Action** will prompt you to select the following from the list:
Form Name: MovieSearch

Do This, Now: Save the Macro
Go to **File->Save**.
Enter a name: OpenSearchMovie

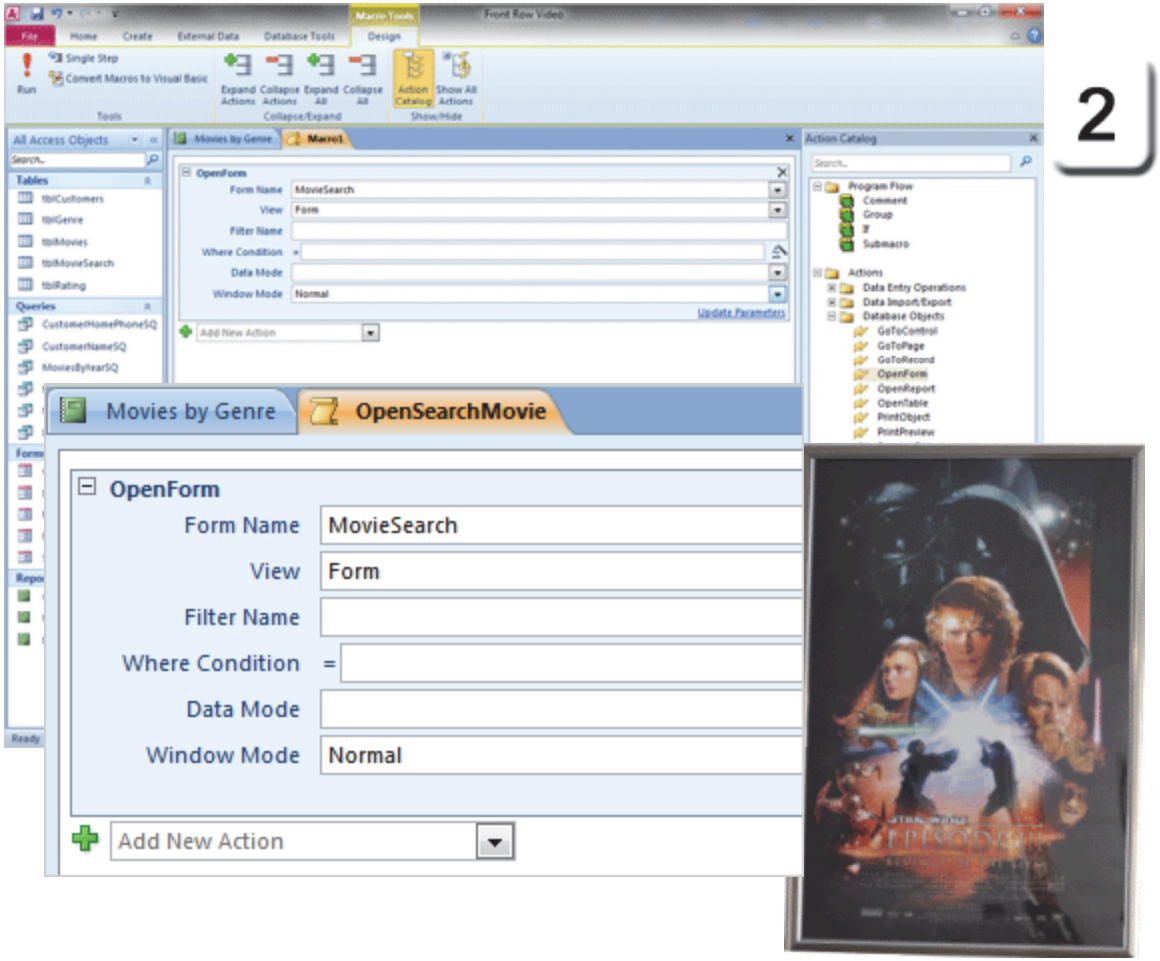
Now, Try This: Run the Macro
Go to **Macro Tools ->Design->Tools.**
Click on **Run (!)**

What Do You See? Did the Movie Search Form open? Then it worked.

Please **Close** the Movie Search Form.
Close the Macro

Keep going...

Macro Tools ->Design->Tools->Run



2

Add a Command Button

This **Command Button** will be added to the Report Header. In the Properties, the new Macro will be added to the **OnClick Event**.

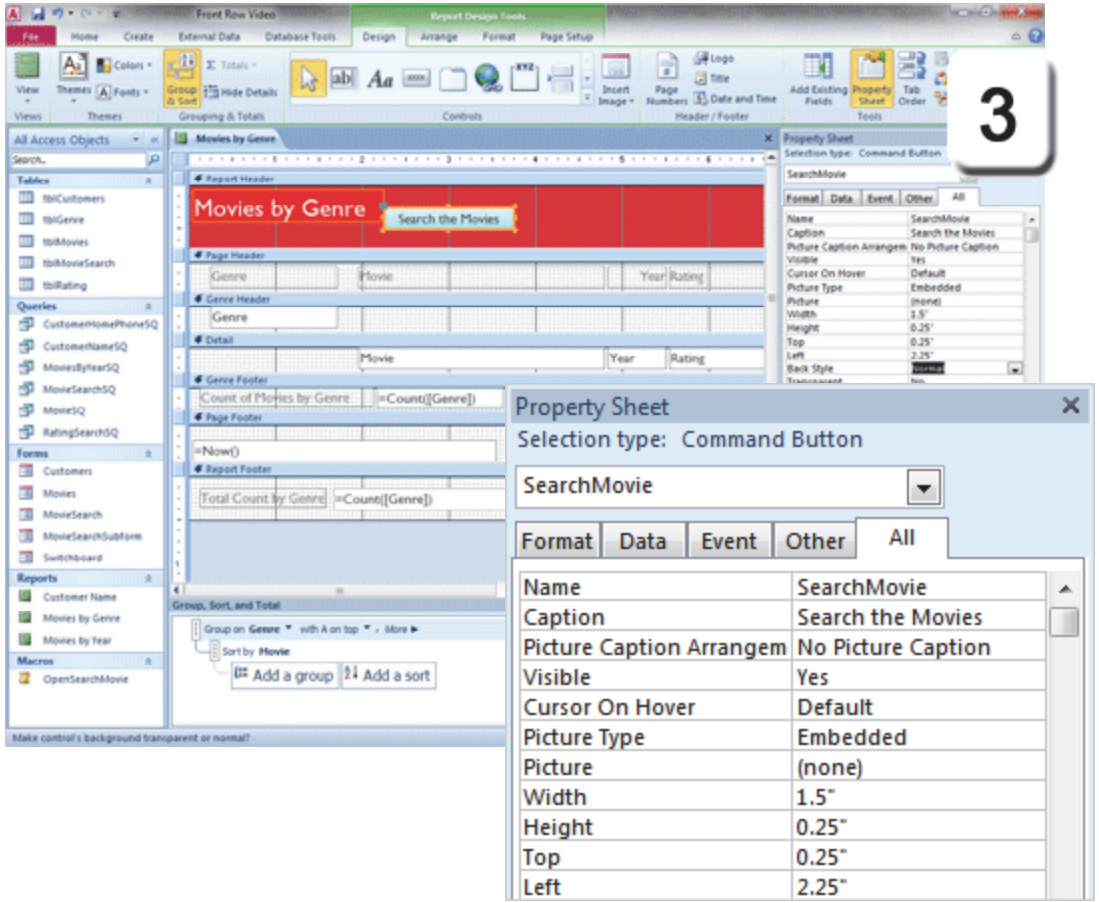
Before You Begin: The Movies by Genre Report is in Design View. The Report Tools are available.

3. Try This: Add a Command Button
Go to **Report Design Tools ->Design->Controls.**
Click on **Command Button**.
Click in the Report Header.
You should see a new, unbound Button.

Try This, Too: Edit the Command Button
The Command Button is selected.
Go to **Property Sheet->All**. Edit the following:
Name: SearchMovie
Caption: Search the Movies
Width: 1.5
Height:0.25
Top: 0.25
Left: 2.25

Keep going...

Report Design Tools ->Design->Tools->Property Sheet



Exam 77-885: Microsoft Access 2010
5. Designing Reports
5.2. Apply Report Design options: Add Bound and Unbound Controls

Add the OnClick Event

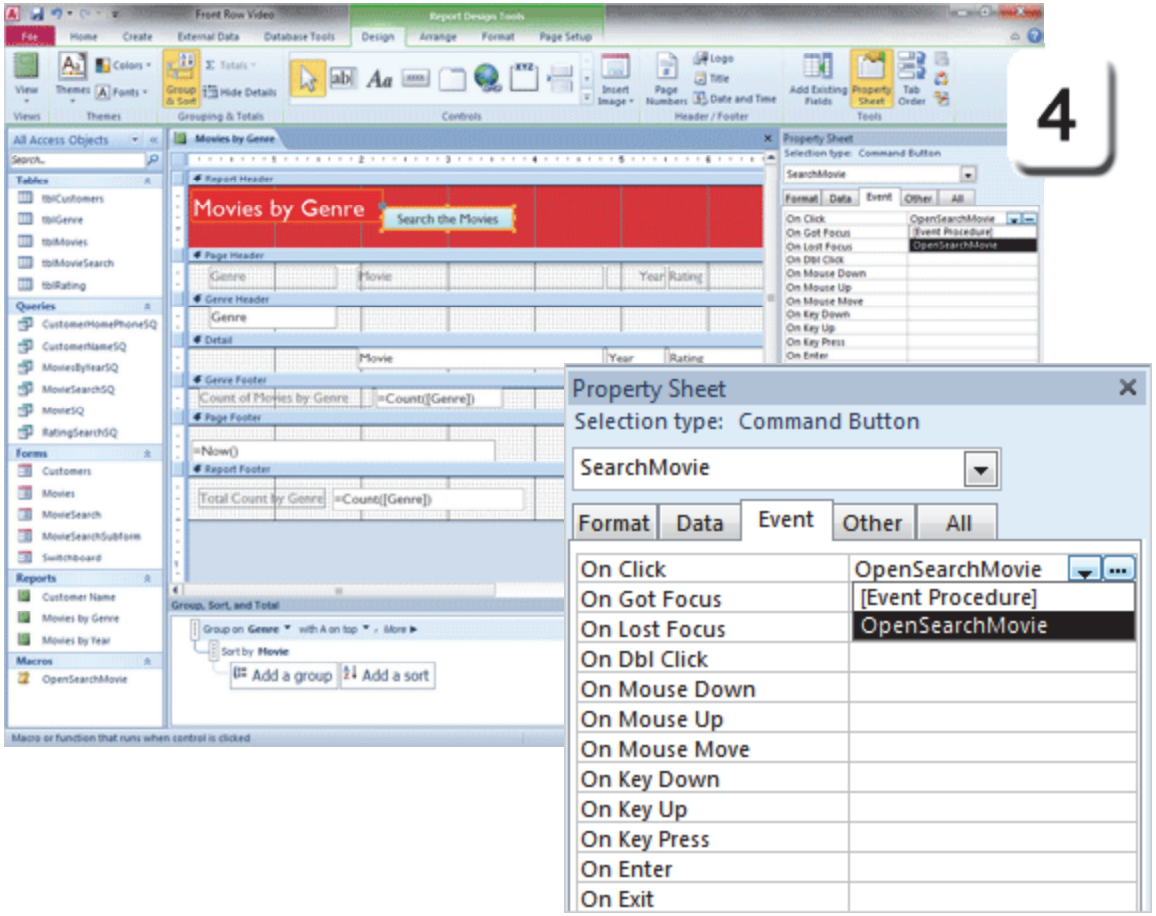
4. Try it: Add the OnClick Event
The Command Button is selected.
Go to **Property Sheet->Event.**
Click on: **On Click**.

What Do You See? The OpenSearchMovie Macro is on the list.

Select a Macro: OpenSearchMovie.

Do This, Now: Save, Save, Save.
Go to **File->Save**.

Report Design Tools ->Design->Tools->Property Sheet->Event



Exam 77-885: Microsoft Access 2010
5. Designing Reports
5.2. Apply Report Design options: Add Bound and Unbound Controls

Take Two

Change the Shape of the Button

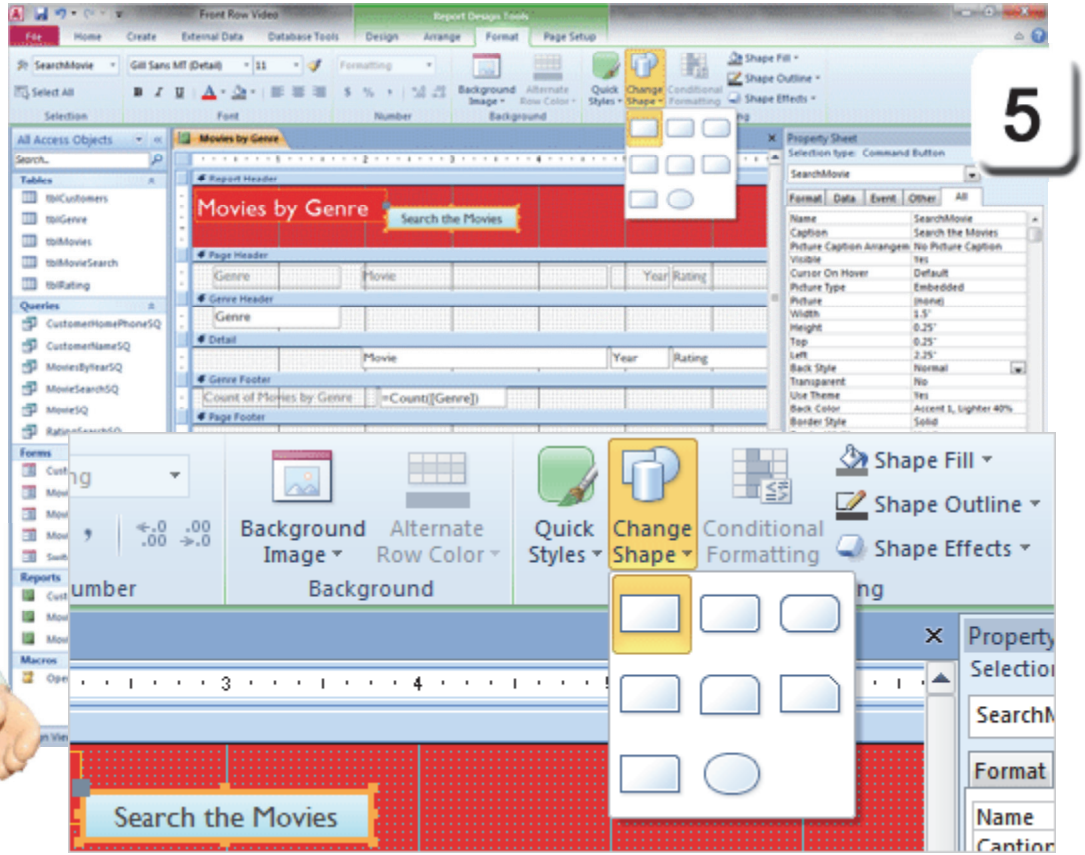
A Command Button is a Shape. The default Shape for a Command Button is a rectangle with rounded corners. The Shape can also be a circle or a rectangle with one corner snipped.

Look at the Label in the Report Header: it is a rectangle that is red with an outline. Let's format the Command to match it.

5. Try it: Change the Shape of the Button
The Command Button is selected.
Go to **Report Design Tools ->Format.**
Go to **Control Formatting->Change Shape.**
Choose a Shape: **Rectangle.**

Keep going...

Report Design Tools ->Format->Control Formatting->Change Shape



Exam 77-885: Microsoft Access 2010
5. Designing Reports
5.4. Apply Report Format options: Change Shape of a Control

Apply Quick Styles to a Shape

Microsoft Office 2010 has a rich gallery of **Quick Styles** in Word, Excel, PowerPoint, Outlook and Access.

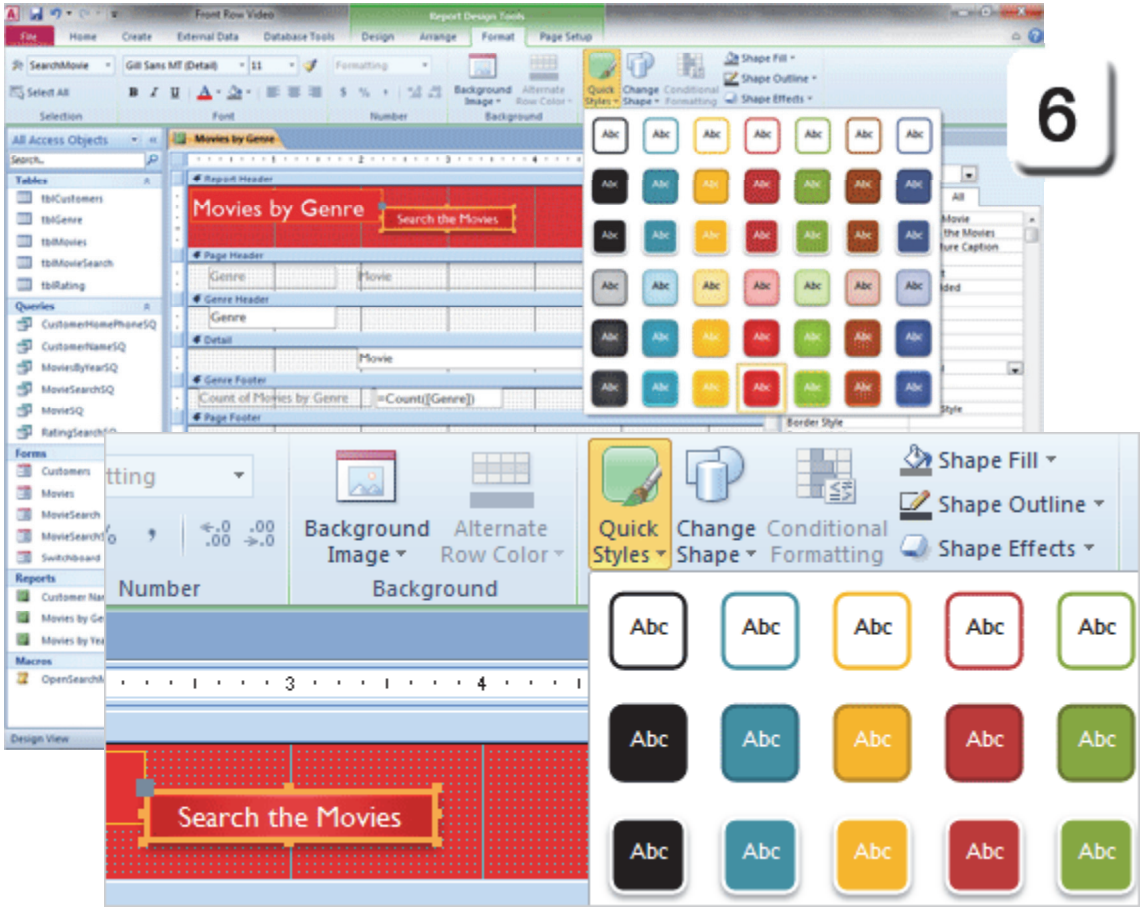
Quick Styles edit the Shape Outline, Fill and Effects. It is fun to find the Quick Styles and apply them to a Command Button in Access.

Here are the steps to format a Command Button with Quick Styles. Have fun!

6. Try it: Apply Quick Styles to a Shape
The Command Button is selected.
Go to **Report Design Tools ->Format.**
Go to **Control Formatting->Quick Styles.**
Choose a **Quick Style: Intense Effect-Red, Accent 3.**

Soooo, how does it look?

Report Design Tools ->Format->Control Formatting->Quick Styles



Exam 77-885: Microsoft Access 2010
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5.4. Apply Report Format options: Apply Quick Styles to a Shape

Take Two

Try the Command Button

Before You Begin: Change the View
This Command Button works in the Report View, not the Design View or the Print Preview.

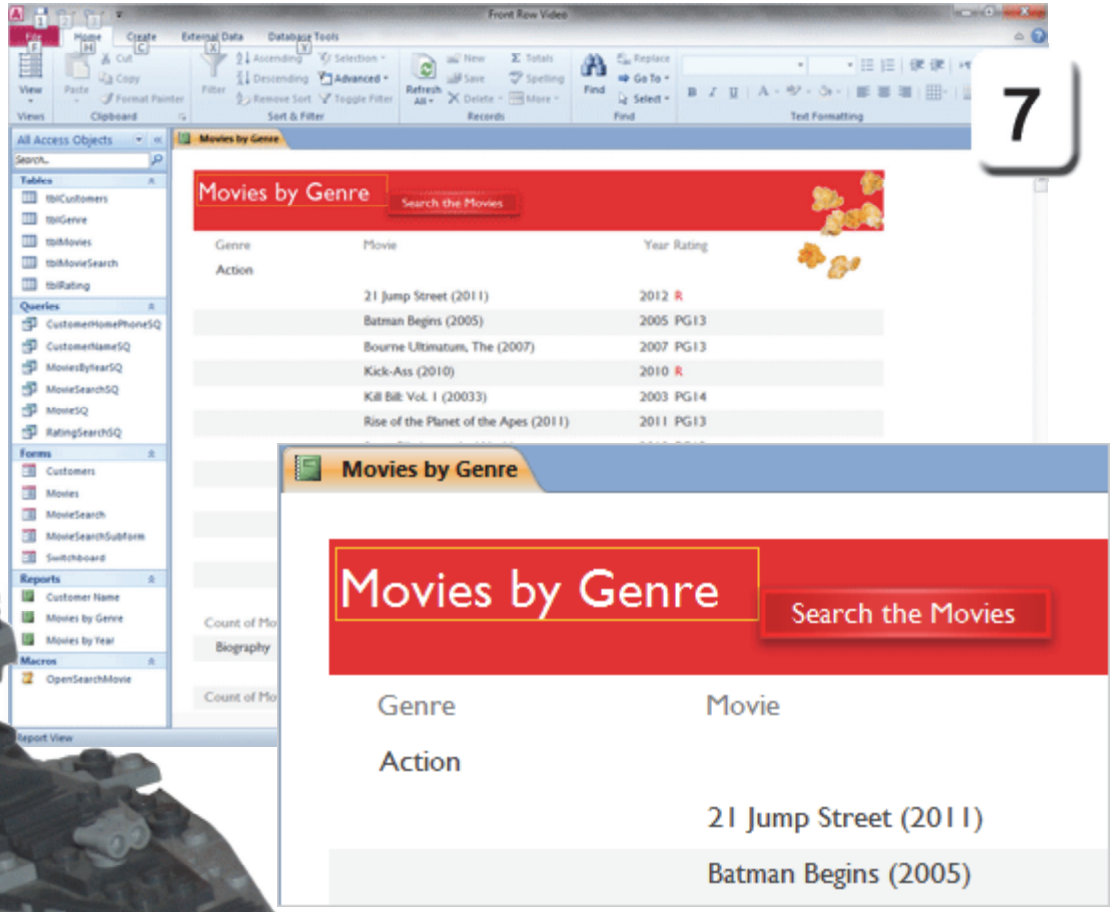
Go to **Report Design Tools ->Design->Views.**
Select a **View: Report View.**

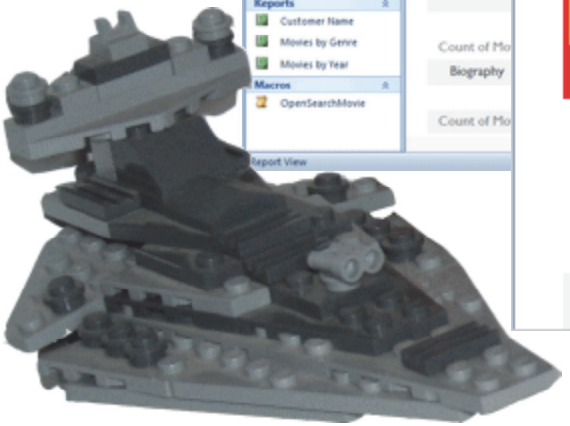
7. Try This: Open the Movie Search Form
The Report has a Command Button in the Header.
Click on: **Search the Movies.**

What Do You See? Did the Movie Search Form Open? Really?

Well, you might as well **Save** it if it worked.

Report Design Tools ->Design->Views-> View->Report View





One-to-Many Designs

The Intermediate Guide to Microsoft Access 2010 began with a simple Access database: two Tables, two Forms and Two Reports. In just ten lessons we have programmed:

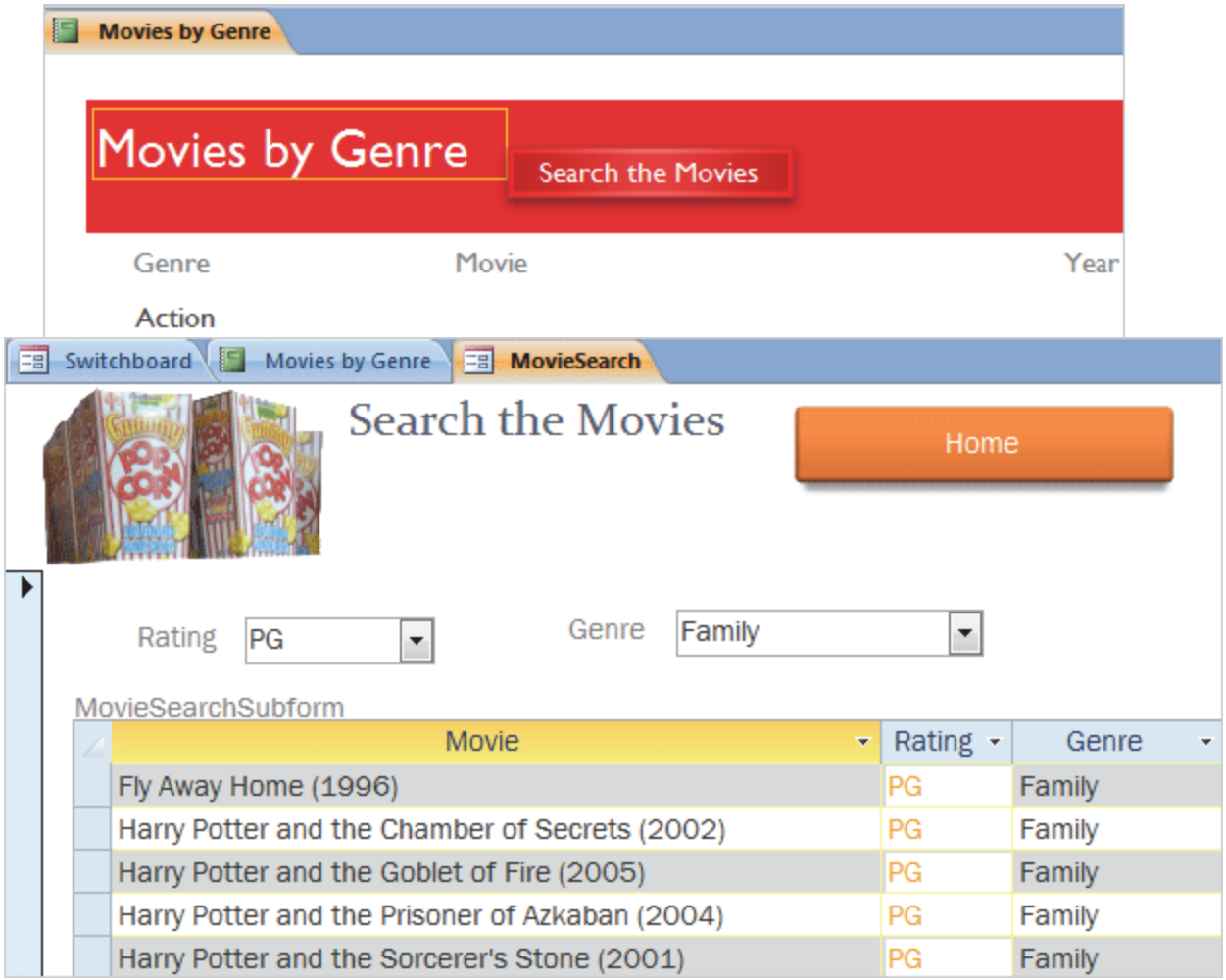
A Combo Box to filter the Movies (One Rating from Many in tblRating)

A Movie Search Form that uses two synchronized Combo Boxes to look up Movies. This Form has a Subform to represent the one-to-many relationship. (One Rating many Movies)

A Switchboard that uses Command Buttons to open Forms and Reports

Finally, many of the same options were designed into several Reports.

You done good. You get the cookie! Please join me for the Advanced Guide to Microsoft Access 2010 where we get down to business: working with money.



Practice Activities

Lesson 10: Report Design Options

Try This: Do the following steps

1. Open the Brown Bag Lunch database you have been working on. Or, you may download **BBL Int ver10.accdb**.

2. Open the Report Products by Specialty. Go to Design View.

3. Apply a Theme of your choice to the Report.

4. Modify the Theme by changing the following with colors of your choice:
Report Header back color
Fill color, outline color, and font (fore) color of the Report Header Label

5. Force a New Page after the Specialty Footer Section.

6. Add a background image: **Lunch2.gif**

7. Add Conditional Formatting to the Specialty column as follows:
Gluten Free has orange text
Vegetarian has green text
Low-Fat has pink text

8. Create a Macro that opens the Form Product Search. Name the Macro:
ProductSearchForm.

9. Add a Command Button to the Report Header with the text Search Products. Use the Macro ProductSearchForm.

10. Change the Search Products button's shape and apply a Quick Style of your choice.

11. Test the Command Button. Does it open the Product Search Form?

12. Save the Report.

13. Save and Close the database.

Test Yourself

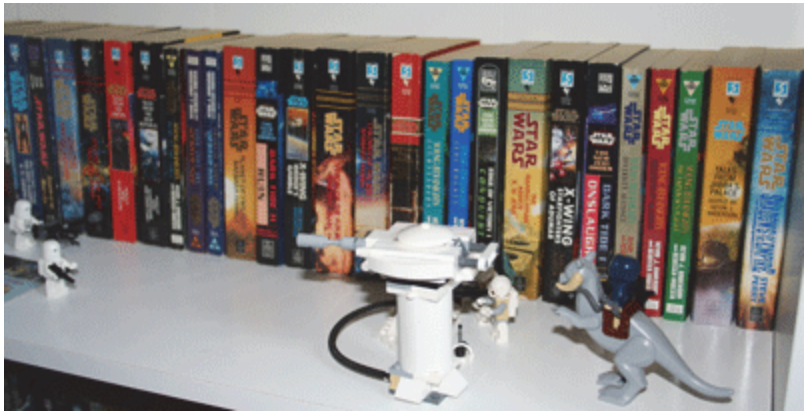
1. After applying a Theme, you cannot edit the colors of items on the Report.
A. True
B. False
Tip: Intermediate Access, page 258

2. Which are methods of adding a page break? (Give all correct answers.)
A. Insert a Page Break Control
B. Use the Property Sheet
Tip: Intermediate Access, page 261

3. Which Ribbon as the command for adding a background image?
A. Report Design Tools-> Design
B. Report Design Tools-> Arrange
C. Report Design Tools-> Page Set Up
D. Report Design Tools-> Format
Tip: Intermediate Access, page 263

4. Which tool is used to create a Command button on a Report that opens a Form?
A. Command Button editor
B. Report Controls
C. Macro Builder
Tip: Intermediate Access, page 268

5. Which is true about a Command Button on a Form? (Give all correct answers.)
A. You can change the Shape of the Button
B. You can apply a Quick Style to the Button
C. You can program a Macro for the Button
Tip: Intermediate Access, page 272, 273, 269



Intermediate Access Skill Test

Before You Begin: Download and open the sample database
Intermediate Access Skill Test.accdb

1. Open the Switchboard Form in Design View.
Add a Command Button that opens the MovieSearch Form.
Choose to show all Records
Use text on the Button: Search the Movies
Name the Button: OpenFormSearchMovies

2. Edit the Command Button Properties:
Left: 3”, Top 0.5”, Width 2”, and Height 0.4”.

3. Edit the Search Button On Click Event with the three-dot builder.
Edit the OpenFormSearchMovies Embedded Macro.
Add a new step to Close the Switchboard after the Movie Search Form is opened; Change Prompt to Don't Save. Save the Switchboard Form.

4. Return to Form View and test each command button.
Does the right Form open? Does the Switchboard close when the other Form opens?

5. Create a Report using the Report Wizard.
Select the Query MoviesSQ as the Record Source.
Select all available Fields EXCEPT MovieID.
Group by Year.
Sort the Movie Field in Ascending order.
Set the Layout to Stepped.
Name the Report as Movies by Year.
Finish the Report Wizard and Close the Print Preview.

6. Edit the Properties for the Label in the Header: Left: 2”, Top 0.25.

7. Add a Logo to the Header. Use the **movies1.gif**..
Edit the Properties for the Logo in the Header:
Left: 2”, Top 0.25, Width 1.5”, and Height 1.25”.

8. Format the Report with a Style: Pushpin.
Edit the Properties for the Header: Height: 1.5”.
Save the Report and test it in Print Preview. Close the Report.

9. Open the Switchboard Form in Design View.
Add a Command Button that opens the Movies by Year Report.
Choose Print Preview
Use text on the Button: Print Movies Report
Name the Button: PreviewMoviesReport
Edit the Button properties: Left: 3”, Top 1”, Width 2”, and Height 0.4”.
Save the Switchboard Form and test the Form in Normal View.

10.Close the Intermediate Access Skill Test.accdb.
Submit this database on

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