Tutorial 6
Using Form Tools and Creating Custom Forms

Microsoft® Access® 2013
Objectives

• Session 6.1
  – Change a lookup field to a Short Text field
  – View and print database documentation
  – Create datasheet, multiple item, and split forms
  – Modify a form and anchor form controls in Layout view
Objectives (Cont.)

• Session 6.2
  – Plan, design, and create a custom form in Design view and in Layout view
  – Select, move, align, resize, delete, and rename controls in a form
  – Add a combo box to a form
  – Add headers and footers to a form
Objectives (Cont.)

• Session 6.3
  – Add a combo box to a form to find records
  – Add a subform to a form
  – Add calculated controls to a form and a subform
  – Change the tab order in a form
  – Improve the appearance of a form
Designing Forms

• Case - *Chatham Community Health Services*

*Creating Forms for Chatham Community Health Services*

• User wants to create new forms for Chatham Community Health Services using many Access form customization features, such as:
  – Adding controls and a subform to a form
  – Using combo boxes and calculated controls
  – Adding color and special effects to a form
Designing Forms  (Cont.)

STARTING DATA FILES

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<thead>
<tr>
<th>Access2</th>
<th>Tutorial</th>
<th>Review</th>
<th>Case1</th>
</tr>
</thead>
<tbody>
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<td>Supplier.accdb (cont.)</td>
<td>Task.accdb (cont.)</td>
<td></td>
</tr>
<tr>
<td>Case2</td>
<td>Case3</td>
<td>Case4</td>
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<td>Rosemary.accdb (cont.)</td>
<td>Ecotour.accdb (cont.)</td>
<td></td>
</tr>
</tbody>
</table>
Designing Forms (Cont.)
Designing Forms (Cont.)

Form Design Guidelines

The users of your database should use forms to perform all database updates because forms provide better readability and control than do table and query recordsets. When you plan a form, you should keep in mind the following form design guidelines:

- Determine the fields and record source needed for each form. A form's Record Source property specifies the table or query that provides the fields for the form.
- Group related fields and position them in a meaningful, logical order.
- If users will refer to a source document while working with the form, design the form to match the source document closely.
- Identify each field value with a label that names the field, and align field values and labels for readability.
- Set the width of each text box to fully display the values it contains and also to provide a visual cue to users about the length of those values.
- Display calculated fields in a distinctive way, and prevent users from changing and updating them.
- Use default values, list boxes, and other form controls whenever possible to reduce user errors by minimizing keystrokes and limiting entries. A control is an item, such as a text box or command button, that you place in a form or report.
- Use colors, fonts, and graphics sparingly to keep the form uncluttered and to keep the focus on the data. Use white space to separate the form controls so they are easier to find and read.
- Use a consistent style for all forms in a database. When forms are formatted differently, with form controls in different locations from one form to another, users must spend extra time looking for the form controls.
Designing Forms (Cont.)

- Changing a Lookup Field to a Short Text field
  - A **text box** is a control that lets users type an entry
  - A **combo box** is a control that combines the features of a text box and a list box; it lets users either choose a value from a list or type an entry
  - A text box should be used when users must enter data, while a combo box should be used when there is a finite number of choices
Printing Database Relationships and Using the Documenter

• The **Documenter** is used to create detailed documentation of all, or selected, objects in a database.

• For each selected object, the Documenter lets you print documentation, such as the object’s properties and relationships, and the names and properties of fields used by the object.

**Using the Documenter**

- Start Access and open the database you want to document.
- In the Analyze group on the DATABASE TOOLS tab, click the Database Documenter button.
- Select the object(s) you want to document.
- If necessary, click the Options button to select specific documentation options for the selected object(s), and then click the OK button.
- Click the OK button, print the documentation, and then close the Object Definition window.
Printing Database Relationships and Using the Documenter (Cont.)

Figure 6-3  Relationships for Clinic report
Printing Database Relationships and Using the Documenter (Cont.)

Figure 6-4  Documenter dialog box

- Click to display all database objects in the box
- Click to select all objects in the box
- Click to display more options for the selected object type

Figure 6-5  Print Table Definition dialog box

- Table documentation options
- Field documentation options
- Index documentation options
Printing Database Relationships and Using the Documenter (Cont.)

Figure 6-6  Object Definition report for the tblVisit table

[Image of Object Definition report for the tblVisit table]

New Perspectives on Microsoft Access 2013
Creating Forms Using Form Tools

Creating a Form Using the Datasheet Tool

- The Datasheet tool creates a form in a datasheet format that contains all the fields in the source table or query.

Figure 6-7 Form created by the Datasheet tool
Creating a Form Using the Multiple Items Tool

- The **Multiple Items tool** creates a customizable form that displays multiple records from a source table or query in a datasheet format.
Creating Forms Using Form Tools (Cont.)

Creating a Form Using the Split Form Tool

- The Split Form tool creates a customizable form that displays the data in a form in both Form view and Datasheet view at the same time.
- The two views are synchronized with each other at all times.
- Selecting a record in one view selects the same record in the other view.
- You can add, change, or delete data from either view.
- Typically, you’d use Datasheet view to locate a record, and then use Form view to update the record.
Creating Forms Using Form Tools (Cont.)

Figure 6-11  Form created by the Split Form tool

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Modifying a Split Form in Layout View

• Use the options on the DESIGN tab on the Ribbon to add controls and make other modifications to the form but not to the datasheet.

• You can also modify forms using options on the FORMAT tab.

• Other powerful options are available on the ARRANGE tab.
Creating Forms Using Form Tools (Cont.)

Figure 6-12 Control layout selected in the form

- Layout selector
- Label controls
- All controls in the control layout are selected
- Text box controls
Creating Forms Using Form Tools (Cont.)

Figure 6-13 After resizing the text boxes in the control layout

- Options for creating a control layout
- Resized text boxes
Creating Forms Using Form Tools (Cont.)

Figure 6-14 After moving and resizing the Reason and Comments controls

- controls in a stacked layout
- controls removed from the layout and positioned under the stacked layout controls
- text boxes resized
Creating Forms Using Form Tools (Cont.)

Anchoring Controls in a Form

• You can design forms that use the screen dimensions effectively when all the users of a database have the same sized monitors and use the same screen resolution.

• If you design a form to fit on large monitors using high screen resolutions, then only a portion of the controls in the form fit on smaller monitors with lower resolutions, forcing users to scroll the form.

• If you design a form to fit on smaller monitors with low screen resolutions, then the form displays on larger monitors in a small area in the upper-left corner of the screen, making the form look unattractively cramped.

• As a compromise, you can anchor the controls in the form.
Creating Forms Using Form Tools (Cont.)

Figure 6-15  Displaying the Anchoring gallery

Figure 6-16  Anchored controls in a resized form
Planning and Designing a Custom Form

To move selected controls to the next nearest grid dot, hold down the Ctrl key and press the appropriate arrow key.

The larger handle in a control’s upper-left corner is its move handle, which you use to move the control.

You can click the Detail section bar to select the entire Detail section.

The grid is the area with dotted and solid lines that helps you position controls precisely in a form.

The Comments text box is a bound control, which is a control that is connected, or bound, to a field in the database.

The Form Header section contains a title object and can contain other objects that will appear at the top of the form.

The Detail section is the main section of the form.

The Form Footer section contains objects that will appear at the bottom of the form.

The Design View button displays the form with the grid.
Planning and Designing a Custom Form (Cont.)

Figure 6-17  Raj’s design for the custom form

- combo box
- subform
- calculated controls

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Creating a Custom Form in Design View

- Creating forms in Design view allows you more control and precision, and provides more options than creating forms in Layout view.
- Switch between Design view and Layout view because some design modifications are easier to make in one of the two views than in the other view.

The Form Window in Design View

- Use the Form window in Design view to create and modify forms.
Creating a Custom Form in Design View (Cont.)

- A **bound form** is a form that has a table or query as its record source
  - Use bound forms for maintaining and displaying table data
- **Unbound forms** are forms that do not have a record source and are usually forms that help users navigate among the objects in a database

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**REFERENCE**

- Click the CREATE tab on the Ribbon.
- In the Forms group, click the Blank Form button.
- Click the Design View button on the status bar.
- Make sure the Field List pane is open, and then add the required fields to the form.
- Add other required controls to the form.
- Modify the size, position, and other properties as necessary for the fields and other controls in the form.
- Save the form.
Creating a Custom Form in Design View (Cont.)

Figure 6-18  Blank form in Design view

- Rulers
- Section bar
- Detail section
- Field List pane
- Design view button
Creating a Custom Form in Design View (Cont.)

• Three kinds of controls in a form:
  – A **bound control** is connected, or bound, to a field in the database
    • Use bound controls to display and maintain table field values
  – An **unbound control** is not connected to a field in the database
    • Use unbound controls to display text, lines, rectangles, etc.
    • An unbound control that displays text is called a label.
  – A **calculated control** displays a value that is the result of an expression
    • The expression usually contains one or more fields, and the calculated control is recalculated each time any value in the expression changes
Selecting, Moving, and Aligning Controls

**Selecting and Moving Controls**
- Click a control to select it. To select several controls at once, press and hold down the Shift key while clicking each control. Handles appear around all selected controls.
- To move a single selected control, drag the control's move handle, which is the handle in the upper-left corner, to its new position.
- To move a group of selected controls, point to any selected control until the pointer changes to a move pointer, and then drag the group of selected controls to its new position.
- To move selected controls in a small increment, press the appropriate arrow key.
- To move selected controls to the next nearest grid dot, hold down the Ctrl key and press the appropriate arrow key.

**Figure 6-20** Selecting the Walk-in? label control

- Move handles
- Sizing handles
Selecting, Moving, and Aligning Controls (Cont.)

Figure 6-21  After moving the Walk-in? label and associated bound control

selected label and associated bound control moved here
Selecting, Moving, and Aligning Controls (Cont.)

Figure 6-22  After top-aligning four controls in the Detail section

top-aligned controls
Selecting, Moving, and Aligning Controls

(Cont.)

Figure 6-23  Form displayed in Form view

Text boxes are too wide for the content

Text box is too narrow for the content
Resizing and Deleting Controls

Resizing a Control in Design View

- Click the control to select it and display the sizing handles.
- Place the pointer over the sizing handle you want to use, and then drag the edge of the control until it is the size you want.
- To resize selected controls in small increments, hold down the Shift key and press the appropriate arrow key on the keyboard. This technique applies the resizing to the right edge and the bottom edge of the control.

Figure 6-24  After resizing the Reason text box

width increased
Resizing and Deleting Controls (Cont.)

Figure 6-25  After resizing field value boxes in Layout view

width of field value boxes decreased in Layout view
Adding a Combo Box to a Form

• Use the **Combo Box tool** in Design view to add a combo box to a form

• A **Control Wizard** helps by asking a series of questions and then uses your answers to create a control in a form or report

• Access offers Control Wizards for the Combo Box, List Box, Option Group, Command Button, Subform/Subreport, and other control tools
Adding a Combo Box to a Form (Cont.)

Figure 6-26 Controls gallery

Controls gallery

combo box tool

Use Control Wizards tool
Adding a Combo Box to a Form (Cont.)

Figure 6-27  PatientID combo box and updated label added to the form
Adding a Combo Box to a Form (Cont.)

Figure 6-28  PatientID combo box in Form view

PatientID combo box with arrow
PatientID list box
Adding a Combo Box to a Form (Cont.)

**Figure 6-29** After resizing the PatientID combo box in Layout view

- resized PatientID list box
Using Form Headers and Form Footers

• The **Form Header** and **Form Footer sections** let you add titles, instructions, command buttons, and other controls to the top and bottom of your form, respectively.

• The **Visible property** determines if Access displays a control or section.

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**Adding and Removing Form Header and Form Footer Sections**

- In Design view, right-click the Detail section selector, and then click Form Header/Footer on the shortcut menu; or in Layout view or Design view, click a button on the DESIGN tab in the Header/Footer group to add a logo, title, or date and time to the form.
- To remove a Form Header or Form Footer section, drag its bottom edge up until the section area disappears or set the section’s Visible property to No.
Adding a Title to a Form

Figure 6-30  Title placed in the Form Header section

Figure 6-31  Form Header and Form Footer sections in Design view

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Adding a Combo Box to Find Records

The label has a shadow effect and uses a bold, red font.

The combo box has the same background color as the Header section.

The background colors for the Header and Detail sections are set to the same value.

The Subform/Subreport tool in Design view is used to add a subform to a form.

You use the Line tool in Design view to add a line to a form or report.

These text boxes have a sunken effect.

You use the Rectangle tool to add a rectangle to a form. This rectangle groups these controls and their labels visually.

The labels are formatted with bold, blue text and the same background color as the Detail section.

This calculated control uses the Total function, which calculates the total of an expression; its general format as a control in a form or report is =Sum(expression).

This calculated control uses the Count function, which determines the number of occurrences of an expression; its general format as a control in a form or report is =Count(expression).
Adding a Combo Box to Find Records

(Cont.)

Open the Property Sheet for the form in Design view, make sure the record source is a table or query, and then close the Property Sheet.

On the DESIGN tab, in the Controls group, click the More button, click the Combo Box tool, and then click the position in the form where you want to place the control.

Click the third option button (“Find a record on my form based on the value I selected in my combo box”) in the first Combo Box Wizard dialog box, and then complete the remaining Combo Box Wizard dialog boxes.

Figure 6-32 Property sheet for the form
Adding a Combo Box to Find Records

(Cont.)

Figure 6-33  Unbound combo box added to the form

Figure 6-34  After aligning the combo box control and the title
Adding a Combo Box to Find Records (Cont.)

Figure 6-35 Displaying the combo box’s list of visit IDs

combo box arrow
scrollable list of visit IDs
Adding a Combo Box to Find Records

(Cont.)

Adding a Subform to a Form

• Use the Subform/Subreport tool in Design view to add a subform to a form

Figure 6-36  Selecting the linking field
Adding a Combo Box to Find Records

(Cont.)

Figure 6-37 Viewing the subform in Form view
Adding a Combo Box to Find Records

(Cont.)

Figure 6-38  After moving and resizing the subform

- Subform and label aligned on their left edges
- Subform label deleted
- Subform column widths adjusted
Displaying a Subform’s Calculated Controls in the Main Form

• To display calculated controls in a form or report use the Count and Sum functions

  – The Count function determines the number of occurrences of an expression
    • =Count(expression)

  – The Sum function calculates the total of an expression
    • =Sum(expression)
Displaying a Subform’s Calculated Controls in the Main Form (Cont.)

Adding Calculated Controls to a Subform’s Form Footer Section

Figure 6-39  Subform in Design view
Displaying a Subform’s Calculated Controls in the Main Form (Cont.)

Figure 6-40  Setting properties for the subform calculated control

- **form control Name**
- **Control Source**
- **text box control set to Control Source property value**
Displaying a Subform’s Calculated Controls in the Main Form (Cont.)

Adding Calculated Controls to a Main Form

Figure 6-42  After adding two calculated controls

Figure 6-41  Text box control’s expression in the Expression Builder dialog box
Displaying a Subform’s Calculated Controls in the Main Form (Cont.)

Resizing, Moving, and Formatting Calculated Controls

Figure 6-43  After modifying the calculated controls and their labels

calculated controls resized

labels moved and resized to their best fit

New Perspectives on Microsoft Access 2013
Displaying a Subform’s Calculated Controls in the Main Form (Cont.)

Figure 6-44  After moving and aligning the calculated controls and their labels
Displaying a Subform’s Calculated Controls in the Main Form (Cont.)

![Image of a Subform's Calculated Controls in the Main Form](image)

**Figure 6-45** Displaying a control’s ScreenTip

- ScreenTip for the bottom calculated control: *Calculated invoice total for this patient visit*
Changing the Tab Order in a Form

• Pressing the Tab key in Form view moves the focus from one control to another
  – A control is said to have **focus** when it is active and awaiting user action
  – The order in which the focus moves from control to control when a user presses the Tab key is called the **tab order**
  – Setting tab stops enables the user to keep his or her hands on the keyboard without reaching for the mouse and speeds up the process of data entry in a form
Changing the Tab Order in a Form (Cont.)

Figure 6-46  After attempting to update a calculated control

users cannot update a calculated control
status bar warning message
Changing the Tab Order in a Form (Cont.)

Figure 6-47 Changing the tab order for the Detail section in the main form

- Click the shaded area to select an item.
- PatientID combo box.
- Your Text items may have different numbers.
- Tab order.
Improving a Form’s Appearance

Adding a Line to a Form

Adding a Line to a Form or Report

- Display the form or report in Design view.
- On the DESIGN tab, in the Controls group, click the More button, and then click the Line tool.
- Position the pointer where you want the line to begin.
- Drag the pointer to the position for the end of the line, and then release the mouse button. If you want to ensure that you draw a straight horizontal or vertical line, hold down the Shift key before and during the drag operation.
- To make small adjustments to the line length, select the line, hold down the Shift key, and then press an arrow key. To make small adjustments in the placement of a line, select the line, hold down the Ctrl key, and then press an arrow key.
Improving a Form’s Appearance (Cont.)

Adding a Rectangle to a Form

Adding a Rectangle to a Form or Report

- Display the form or report in Design view.
- On the DESIGN tab, in the Controls group, click the More button, and then click the Rectangle tool.
- Click in the form or report to create a default-sized rectangle, or drag a rectangle in the position and size you want.
Improving a Form’s Appearance (Cont.)

Modifying the Visual Effects of the Controls in a Form

Figure 6-50: Completed custom form in Design view

- Background changed to Light Blue 2
- Sunken effect
- Red, bold font and shadowed effect
- Blue, bold font