



Access 3

Office XP (2002) Version

Forms and Reports

CAL People and Computer Training
University of California, Berkeley

For more information about the CAL PACT program, to sign up for classes, or to download course documentation, please visit our website at: <http://calpact.berkeley.edu>



Use this
space for notes

Introduction

Access 3 is a course created for CAL PACT participants to learn more about the features of Microsoft Access. The course covers introductory material to provide you with the fundamental knowledge to create a database using Access. It also serves as a future reference for you as you continue to gain experience on your own. Some topics may not be covered in as much detail during the course session as they are in this document. Documentation is available for previous versions of Access for Windows on the CAL PACT website: <http://calpact.berkeley.edu>.

Skills you need for this course

- How to use the mouse
- Familiarity with the Windows operating system
- Familiarity with other applications in the Microsoft Office suite

Skills and concepts you will learn in this course

- Creating and modifying Forms
- Creating and modifying Reports
- Importing and Exporting data
- Creating Reports

Conventions used in this document

Menus and menu commands are separated by a vertical bar (|). In the document they will appear as **Menu|Command**. An example of this is: “Select **File|New...**”

So far in the Access classes we have been dealing with Tables and Queries. These two objects are basic elements that define your database. However, these two objects may not be the best ways to view and enter data.

For example, when working in Datasheet view of a table object, you are staring at all the records that are in that table and you may only want to focus on one. If this table had many fields, these fields probably extend beyond the width of your screen. This forces you to scroll to the right to see the particular field that you want. In this situation, it would be more practical to view one record at a time, and view all the data completely without having to scroll.

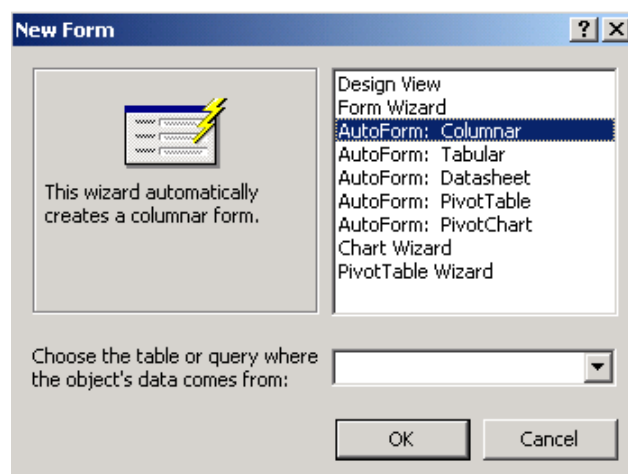
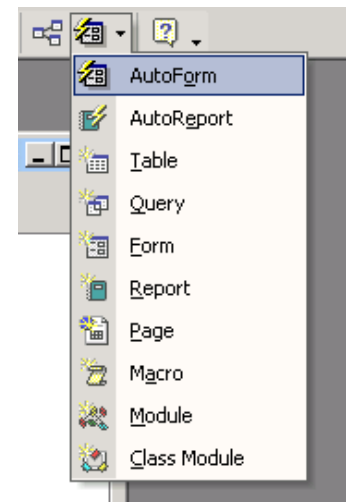
These same issues apply when you want to print your data or when you want to make a presentation to others. You want your data to be in the clearest possible format and Tables and Queries sometimes don't do the job.

To solve these problems we can use Forms and Reports. Forms allow you to adjust how you display your Tables and Queries into a variety of different formats. This is primarily used for viewing data and entering data on a computer. Reports are used, similar to templates, so that when you print out your data it is formatted in the way you want. You can use this feature to generate reports of your data, to make mailing labels, and many other printable items.

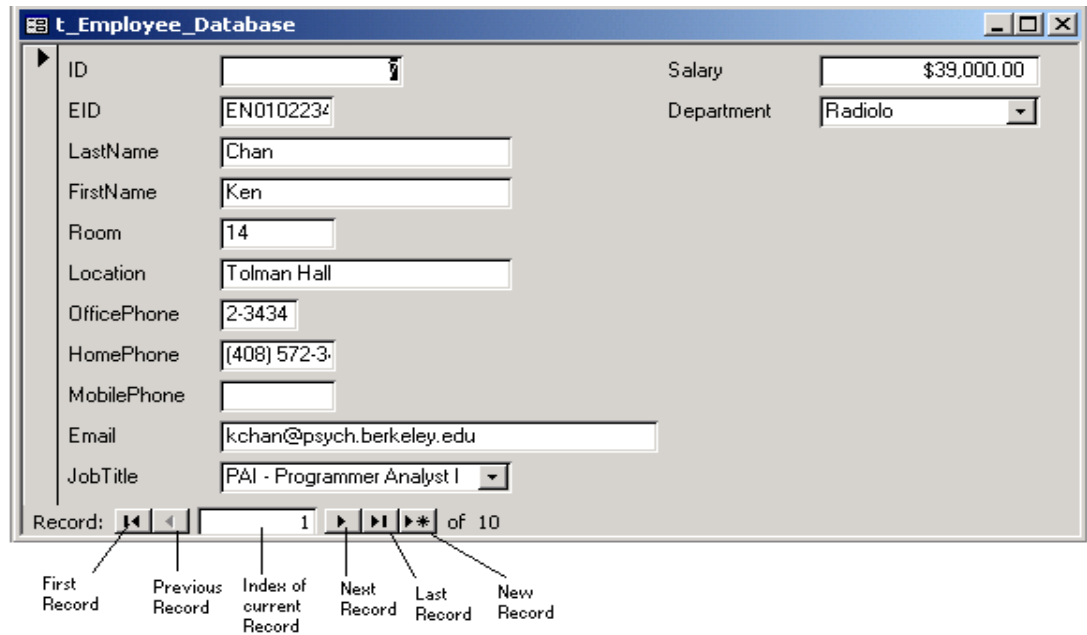
Forms

Forms can be created based on either existing tables or queries. In general, it is more common that forms are based on tables. Information entered in forms can be saved for later use. Whatever information is entered in the form will be saved into the table that the form refers to. This is an important distinction! Forms never "save" data. It's just a "nice" way to look at (or change) data in your tables - the building blocks of your database!

Autoform provides a fast and easy way to create a form. This function can be accessed by first selecting the desired table from the **Table** tab (in the Database window) and then selecting the **Autoform** function from the **New Object** button pull down menu on the toolbar.



Likewise, you can get the same effect by selecting the **Forms** tab (in the Database window) and clicking on **New**. Select **AutoForm: Columnar** and select the desired table from the pull down menu. Either method tells Access to create a form based upon the field names you designated when creating the table.



Once the form is created, current records can be viewed by clicking on the arrows at the bottom of the form. Just as with tables, records can be deleted by selecting **Edit|Delete Record** when the record you want to delete is currently displayed.

Design View

Forms in Design View allow you to manipulate the way data will appear. Field headers and cells as well as text and background colors can be changed with this option.

Form Layout & Size

You may notice that there are doubles of each field. The transparent boxes are labels, which always appear with the text inside the box. The corresponding white boxes will contain the actual data for each specific record when in Form view.

The size and layout of field names and entry blanks can be rearranged to suit your needs. The overall form size can be changed by moving the mouse cursor over the borders of the form until you see a double headed arrow, as shown below. Then click on the mouse and drag the form to its new size.



Field names and entry blanks can be moved by clicking on the appropriate box and then putting the mouse cursor over the border that appears. The mouse cursor will change to a small black hand (below). Click and drag the box to its new location.



These objects can be rearranged in data pairs or individually. By default, moving a label object will also move its corresponding data object, and vice versa. Select the object as if you were going to resize it and put the mouse cursor over one of the *border outlines*. Then, click and drag the objects to their new location.

At times you'll want to move an individual object. Select the object (by clicking once) and move the mouse cursor to the top left corner of the object until a hand with a pointing finger appears, then click and drag. This type of move will only affect the individual object selected and not its corresponding "pair."







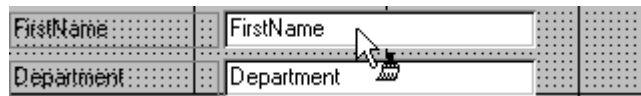
The size of the objects can also be changed. First select the box, then move the cursor over one of the eight small black boxes ("resizing handles") around the selected object. A double-headed arrow will appear. Then click and drag the box to its new size.





Text/Display Formatting

Labels (field names) can be changed by selecting the object and renaming it once the cursor appears in the field. However, use caution changing the input box objects! These names refer to field names, and if changed, you'll lose the "connection" to the particular field!

The text and the background of both the field and input boxes can be changed by using the Background, Foreground, and Border buttons on the toolbar. Select the object you wish to change, then click on the desired box    and select your color options from the pull down menu. To apply the same color formatting to another box, use the **Format Painter** button on the toolbar, designated by the paintbrush. Select the object whose format you wish to copy, then click on the **Format Painter** button () . A new cursor will appear which looks like a pointer and paintbrush. Then click on a box to apply the new format. To apply the format to multiple objects, double-click when selecting the Format Painter button.



New text can be added into the form by selecting the **Label** button () from the **Toolbox** menu (). If you wish to change the label for a specific field, click within the object and change the text. Manipulation within the **Detail** section will retain form modifiers, such as text/background color and labels, although the information displayed within the boxes changes for each record.

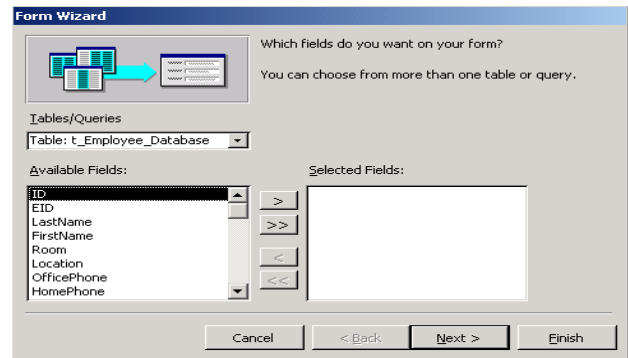
Color changes can be made to any object in the design grid. Text, objects, and backgrounds can be assigned colors other than those designated by the **Form Wizard**. Select the background or cell you want to change and then select the color

from the **Fill/Back Color** palette to make the change. Select the object and then select a color from the **Font/Fore** palette to change text colors.

More Advanced Forms

Forms can be used to view entries individually or allow a more customized manner of data entry. The easiest way to begin a form is to use the built-in Autoform, the method we have been using so far. But you can also design and create forms from scratch. Like many Microsoft products, there are many ways to accomplish the same thing. One way to create a new Form is through the **Form Wizard**.

This wizard helps automate the process by taking care of some of the finer details. Select **New** from the forms tab (in the Database window) and select the **Form Wizard** along with the table you wish to include in the form.

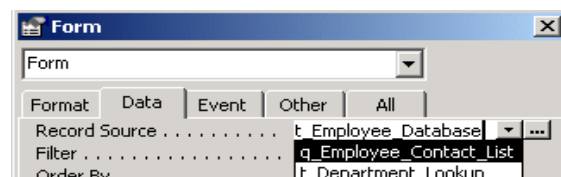
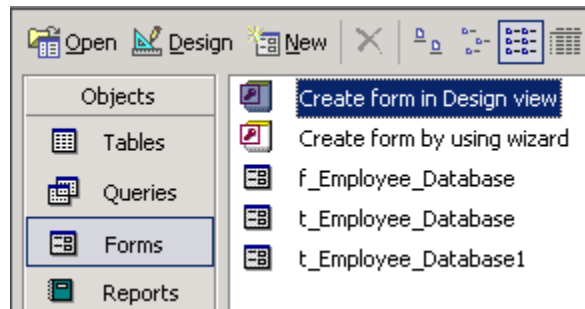


You will then be prompted to select the fields you wish to add to the form. Notice that you can choose fields from different tables and queries. This allows you to use fields from related tables in the same form.

Next, select a layout you want your form to follow from the given set. On the next screen choose an aesthetic scheme that will decide the font, colors, and backgrounds that will be used in your document. In the last screen you will be asked to provide a name for the new Form, and to choose whether you want to go to **Design View** to further customize your form, or to **Form View** to start entering data. That's it, you're done!

Manually Designing a Form


Aside from using the Form Wizard, you can also create forms manually. This can give you more control when creating a form. But it is also more time consuming than using the Form Wizard. Begin by clicking **Create form in Design view** under the **Forms** tab.



Next, click the **Properties** (🔧) button and select the **Data** tab. Select a table or query to be the source of the fields for your form. A new window should appear with a list of

available fields. Click and drag the fields from the list to the **Detail** area of the form.

When you drag and drop the Fields on to the Form workspace, two boxes will appear. The left (usually transparent) item is the Label and the right box is the Detail area that will contain the data from the underlying Table.

Every object on in your form has its own set of properties. To access these properties click on the object, and then select the Properties () button. Or, you can right click the object and then select **Properties...** Every object has its own set of items that can be specifically adjusted to format that object. If you wish to format the “Forms” properties, (i.e. the entire documents properties), click anywhere in the back ground and select the Properties button on the toolbar. Because there are a multitude of properties that can be adjusted for each object, we will not cover them here. Once the Properties window is opened, it will remain open while you edit your form unless you close it. If you click on another object, the Properties window will then show the properties of the newly selected object.


Enhancing a Form

Combo Boxes

Combo boxes allow you to quickly call upon a list of records from a particular field to be added into a form. Instead of having to type in the field value manually, combo boxes enable you to select the proper value from a drop-down menu that can refer to separate tables. Combo boxes can be added to a form in **Design View** using the **Combo Box** button on the **Toolbar**. Select an area where you would like the box to be located and click on the spot.

You will then be guided through the **Combo Box Wizard** to help you set up this option. The first window allows you to designate where the data for the box will come from. To avoid confusion, it is usually best to refer to an existing table/query for the combo box to draw its values. Select the option “I want the combo box to look up the values in a table or query,” and the next two windows ask for the table and fields it will reference. The following window allows you to adjust the column width of the box. The two subsequent windows give you the option of what field to choose as the value to be stored in your form/database and the field to which it will be saved. If you choose to store it in the form, it will be a value local to the form that is not located in any underlying table. If you choose to store the value in a Table, it will store the value in the field that you specify. Finally, choose a name for the combo box and let the Wizard do the rest.

Text Boxes

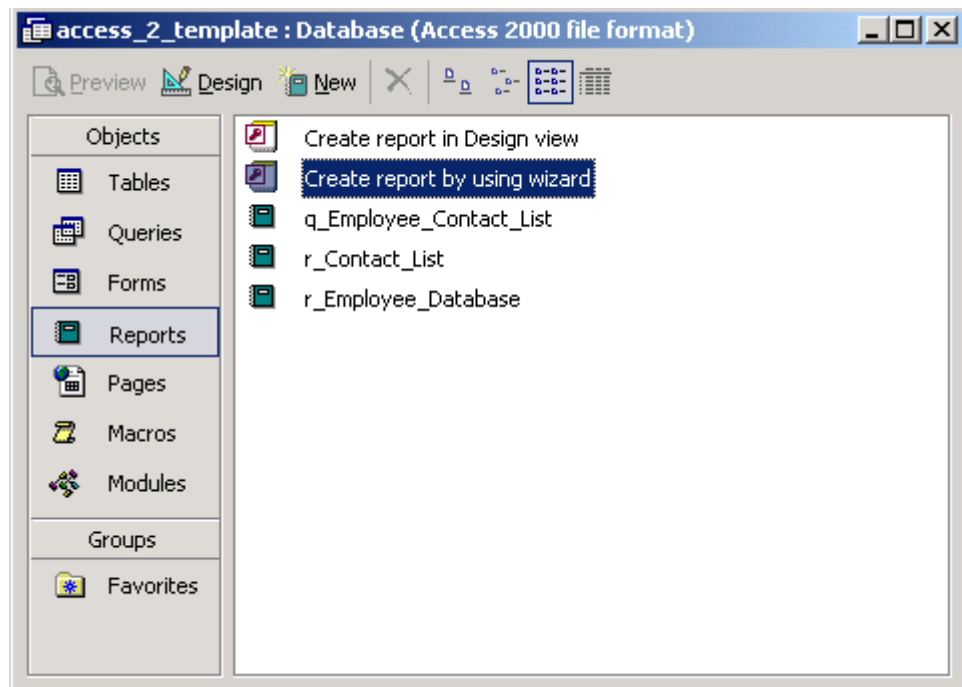
Text boxes allow you to input information that you may find useful to include in a form, but not necessarily as a part of a table. (Ex. Displaying the annual income of an employee based upon weekly hours and hourly pay fields). Similar to combo boxes, text boxes can be added to a form in **Design View** by clicking on the **Text Box icon** () from the **Toolbox** window and clicking on a space within your form.

You will notice that a label and data objects appear. They need to be given a function since they do not refer to any table’s field. Double-click the label object and rename it, then click on the data object and select the Properties button from the toolbar.

For example, to calculate an employee's weekly pay, I would want to divide my table's "salary" by 52. I could do this by selecting **Data** under the object's property window and select the **Expression Builder** button from the **Control source**. Then I could build an expression as with like we did in Access 2 while working with queries.

Creating Reports

Reports are a useful way to present your information when a hard copy of your data is needed. New reports can be created by selecting the **Report** option for the **New Object** pull down button or by selecting **New** from inside the **Reports** tab (in the Database window). Then select **Report Wizard** and choose the table or query from which the report's data will come.



Choose the desired fields from the available tables/queries to add to your report. Finally, the Report Wizard will take you through various steps on how you would like your report to be displayed, including text layouts and formatting designs.

Formatting reports is very similar to formatting Forms. After creating a Report, go to **Design View**. The layout and the tools bars are almost identical. Once you get used to making Forms, you can easily produce reports.

Reports and Mailing Labels

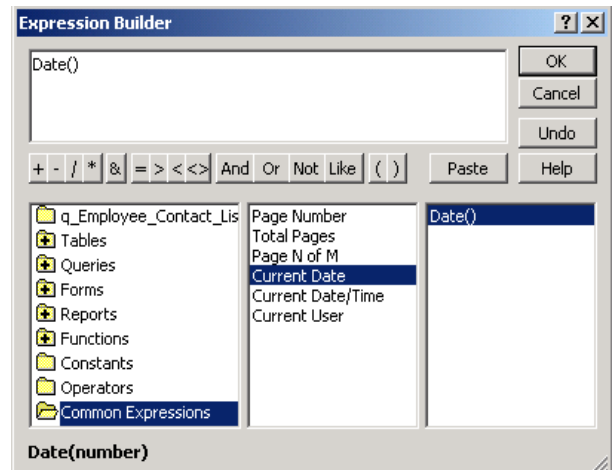
Once a report has been created, Access allows you to easily customize it with features like time stamps and graphics. Since the main purpose of a report is to produce a hard copy of your information, these options serve as nice additions.

Mailing Labels

You can create labels by first beginning a new report. You *must* click on the **New** icon in the **Reports** section of the Database window. Then select **Label Wizard** and specify the proper table or query that your labels will be based on. You will then be prompted to select a label size and layout options. If you know the label brand and item number, you can specify it, or, you can create your own dimensions. When creating a prototype label, feel free to use spaces, commas, and returns. Your labels will have an identical layout to your prototype. Next, select how you would like your labels sorted and finish by choosing a name for your mailing label report.

Time Stamps

A time stamp can be easily integrated into your report by adding a text box (see previous section) and altering its properties in **Design View**. Once you have added the text box, select it and view its properties by clicking the **Properties** button (). Click on the **Format** tab and select the date layout from the Format cell's pull-down menu. Then, switch to the **Data** tab and use the **Expression Builder** from the **Control Source's** cell. At the bottom of the folders column, select the **Common Expressions** folder, choose the appropriate expression, and close the window.



Integrating Graphics

Access also allows you to integrate a wide range of pictures in many graphic formats. In **Design View**, select **Unbound Object Frame** from the **Toolbox** window and click on the area you wish to place the image. The **Insert Object** window appears, which allows you to select your graphic. Click on “**Create from File**” and browse the graphics files on your computer until you locate an appropriate image and click **Open**.

Exporting & Importing Data

Access can import and export data from many types of non-Access database files, such as Microsoft Excel and Foxpro, Dbase, Paradox, Lotus 1-2-3, and delimited/ or fixed-width text files.

Importing Data

External data must be imported into an existing Access database file to be usable by Access. Begin by opening a database file you would like the imported data to be added to or create a new database file. Select **File|Get External Data|Import**.

Select the data source by first selecting the data type from the pull down menu under **Files of type**. Then browse the available storage devices and folders until you locate the appropriate file. Select the file for import and click the **Import** button. Select the component(s) you wish to import and then click on the **Options** button. The option checkboxes enable you to import into Access formatting, relationships, special toolbars, and so forth that were created in the original application.

Exporting Data

Access database files may also be saved to work with other applications by exporting an existing database. Highlight the table you wish to export and select **File|Export....** In the **Export To** window, select the location to store your exported file and select the type of file to export as by using the down pointing arrow under **Save as type**. If you wish to retain any formatting applied to the data (fonts, lookup fields, field widths, etc.), click the **Save Formatted** checkbox. Finally, click **Save** to save the file.