Advanced Access

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Importing and Exporting Data

<u>Export Data from Access</u>

Sometimes you need to take the information in your Access database and convert it to another format. For example, if you need to read it with an older version of Access, or if someone wants to work with the information in formats other than Access (like Excel or Word). When exporting information from a database we're only going to be working with tables. To do this tasks follow these steps:

1. Right-click on desired table

2. Choose "Export…"

3. Give the file you're going to create through exporting a name and location

4. Choose the type of file you'd like to create (type and version number, i.e. Excel 97)

5. Left-click "Export"

Finished! Your database should be unchanged but a file (of whatever type, name, and location you chose) has been created.

Import Data to Access

When you have data from another source that you want to incorporate into your Access database you need to perform the Import function. To do so use the following steps:

1. Open the file menu and choose "Get External Data→Import…"

2. Choose the type of file you want to import and then navigate to the specific file.

3. Left-click Import

4. Decide what information you want to import, this is dependent on what's in the file that you chose. This window (show right) will have several options for you to choose from.
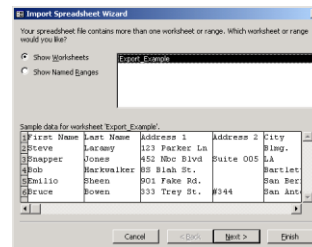
5. Left-click "Finish" button to go on to the final step

6. Decide whether you want to import to an existing object or you'd like to create a new one. If you want to go to an existing object select the name of it from the list offered.

Finished! Check out how the information has been incorporated into the table; see if the topics stayed the way you want. Be sure to check the width of the columns in your table, they'll probably need to be adjusted.

Office Links

There are tools provided to make transitions from Access objects to other Office programs as simple and smooth as possible; these are the OfficeLink options. To use one of the OfficeLink options:

1. Select a target object in the current database window

2. Open the tools menu and select "Office Links→<whichever option you want>"

3. The newly exported file will open up

Reports

Putting together reports using the Report Wizard is fairly straightforward. However, editing these reports to appear exactly as you like, include the fields you want, and generally fit your specific needs, can be quite tricky. For that reason we'll be working on editing reports in some detail tonight.

Editing Existing Reports

When you double-click on an existing report it simply shows you the results the report is intended to produce, so, to make any changes to the report's

layout, we need to get to the design view of the item. To do this simply

highlight the object you wish to edit and then left-click the Design button

(shown here→ Design). This will take you to a grid-like view of your

report (shown below).
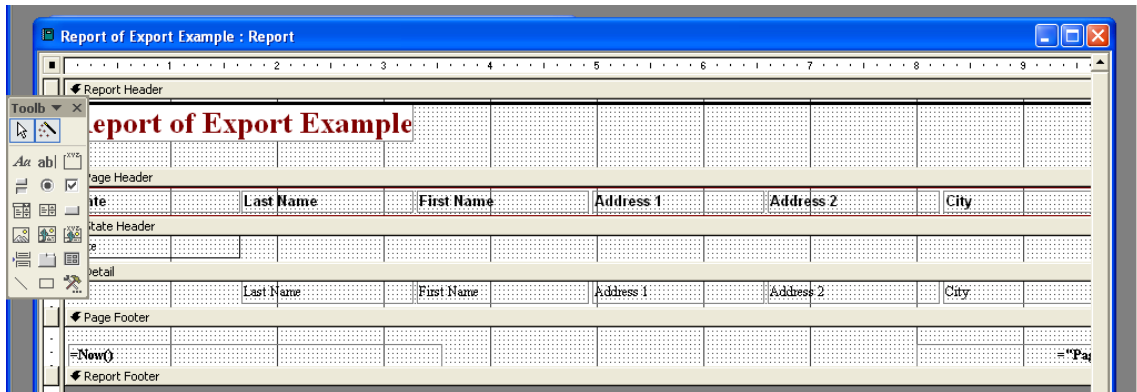
This is the screen where we'll make all the changes desired. Lets examine
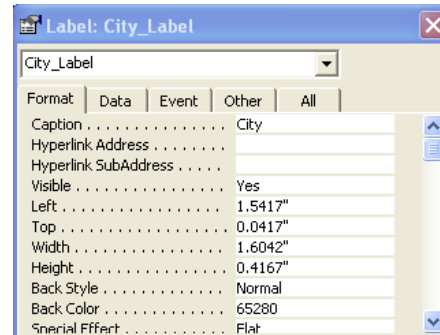
all the basic changes we can make individually:

<u>Size and appearance of sections</u>

You are immediately shown this segmented breakdown of the parts that

make up your report. There are boxes created for both the static text entered

in (like a category heading such as "last name") and the dynamic fields that

pull information out of the table/query. Both of these objects can be

manipulated. If you want to change the order that items appear in, simply

click and drag the box to a different place; if you want to change the size

allotted for a certain field, grab onto the corner of a box and drag it to the

size you want (just like changing window sizes). This way you can scale

your report appropriately for the information in it (how much space do you need for the 2 letters in a state abbreviation?).

Other things you can do to affect the appearance include making all the formatting changes that you're accustomed to from Word. To do this double-click on the object (label or text box) that you want to change. This window should appear (shown to the right), notice the Format tab in the upper left of the window, if not already in the forefront that should be clicked. Once you're looking at the format options you'll see all the varied things you can change. Text color, background color, borders, font style, underlining, text size, etc. Many, many changes available here and all under your specific control. *NOTE: Remember this screen, it is also where several other important changes can be made.

Another change that can be made to the appearance of the reports involves the spacing of the report. If you want more or less space between individual records you can control this by moving those large dividing bars. Notice that you can't make the space given smaller than the largest field within that space. This all might sound very confusing but we'll go over it in class and you'll see that it's relatively straightforward.

Changing Grouping Orders

When we created this report using the Report Wizard we decided whether or not to have any grouping levels. Thankfully this function isn't just reserved for the wizard's use, we can add or remove grouping levels from our reports very easily by using the following steps:

1. Open design view of report

2. Right-click on detail bar

3. Choose "Sorting and Grouping"

4. This window will appear

5. Select a field/expression to group on

6. In the group properties change the "Group Header" value to Yes

7. Determine the order it will be sorted in the Sort Order column

8. Close the Sorting and Grouping window and you're done
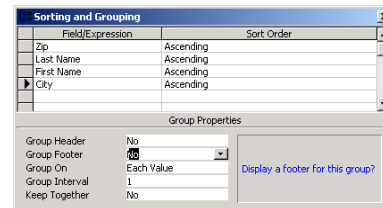
Adding Labels and Text Boxes

The two most basic objects you'll be adding into your reports are labels and text boxes. Labels are static text that you want to appear in certain spots in your report; examples of this include the reports title, and column headings (e.g. First Name, City, etc.). Text boxes are areas where you want to pull in information from the reports source, for example if you want the city to

appear in one place in the document and the last name to appear in another.
We'll look closely at this in class, it makes sense once you get the hang of it
but at first it's a little backwards.

-Labels: Using the toolbar shown here first select the item you
want to add (in this case click the capital 'A' that signifies
labels), then drag a box in your report grid to determine where
the label will go and how big it will be. Formatting this label will be
examined in detail in class.

-Text Boxes: Adding them is the same process as with labels, except you
choose the toolbar button to the right (the one with the lower case 'ab'), it's
after you've added the text box that things change. At that point you need to
specify what field you'd like to have run it's data through there.

<u>Adding Other Objects</u>

Most of the other objects offered by the "toolbox" window are better suited
to working with forms but there are some basic items you can throw into
your reports. We'll quickly look at how to add lines and rectangles to
enhance the appearance of and/or help organize your reports.

Forms

Form editing works the same as editing reports, the only differences are in the style that the objects appear in and what sorts of objects are available to add to the form (as opposed to the ones you use in reports).

Combo Box

A combo box in a form creates the kind of pull-down menu you so often see on the internet. These should be entered into forms when you have a few values you want users to choose from and you think it would be faster and/or easier for them to select the value of choice this way rather than typing it in. To enter a combo box into your form follow these steps:

1. Click on the form you want to edit and enter design mode

2. Click on the button in the toolbox that says "Combo Box" (I'll show you in class

3. Drag out a square in your design field for where you want the box to go

4. The "combo box wizard" will open up, follow the instructions to proceed in one of the 2 different ways I'll show you (both require you to select the values you want to have available and decide where you want the value stored, after entering it).

5. Open the form and test box to make sure it works (to best test this out create some new records then open up the table the form refers to, the table

should be changed correctly (often if you misuse these controls you'll have a "–1" in your table where the value should be).

Command Buttons

Access provides a number of different functions that you can insert into your form if you want. From simple things like going to the first record to more complex choices (automatically printing a record, dialing a number, or e-mailing a recipient) entering the buttons into your forms is a quick task. Just select the command button option from the toolbox, drag it into place in your form, and tell the wizard which choice you want.

Inserting Images

Remember that forms are designed to be what users interact with the most, so it's important that they look nice. One thing we can do to improve their appearance (or even add clarity to what we're doing) is insert an image. To insert an image just click the image icon in the toolbox, drag the square where you want the image to appear, and select the image you want by navigating to the file.

Queries

We've already learned how to create a basic query (we'll run through an example in class), today I'd like to discuss how to design queries that are more complex and better serve certain situations.

Adding Ranges to Queries

The first thing I show how to do with queries is pick out a possible value and filter everything matching that value. Pretty basic but there are more helpful and sensible things that can be done with queries. One of the most useful things you can do is set your query to look for items that fall within a certain range, whether you're talking about a price range, age, or shoe size, it's easy to use some basic math to make your queries more dynamic. First you need to create a query, then open it in design mode (we'll run through this in class). You should then see this window:
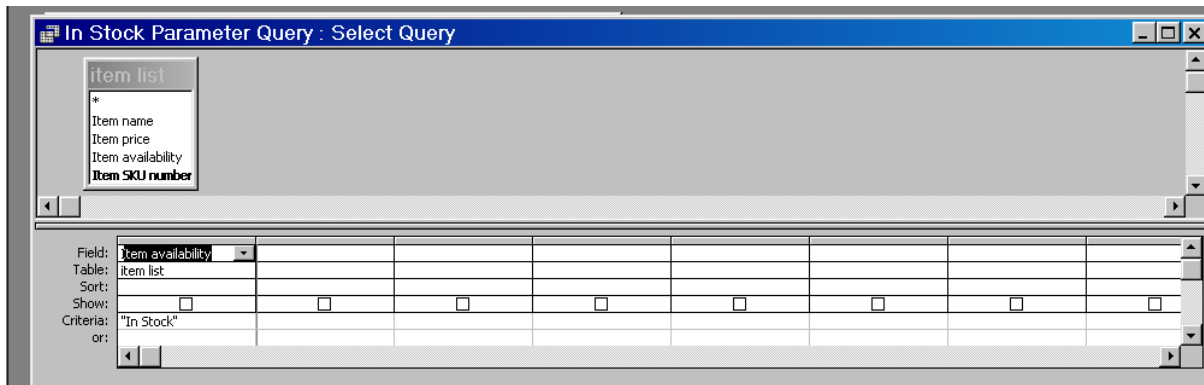
Here you select the table/field you want to filter based on, how you want it sorted, and what criteria to use for filtering. Instead of just typing in a static criteria that it's required to equal you can use symbols like '<', '>' to determine if you want a number to be bigger or smaller than the value. Also, if you want a number between two values (bigger than 20 but less than 50) you can use the 'And' operator (e.g.--> '>20 And <50'), or if you want

something to be one or the other (either '< 10 Or >100') you can use the 'Or' operator.

<u>Parameter Query</u>

Typically, when you create a query you specify the values you want to search for. The idea for parameter queries is to have a dialogue box pop open and ask you what criteria you'd like to search for every time you open the query. To perform this you again need to get to the design view of the query in question and change the criteria field to read: [Enter Value to match]. Say you want people to enter in a minimum age? Then you would type as follows: >[Enter Minimum Age]. We'll go over examples in class to make it clearer how this works.

Relationships

<u>Lookup Wizard</u>

One of the first examples of relationships between tables that I teach is how to create lookup wizards. Typically I use them to bring in one bit of information from one table to another; however, you can use it to view all the information available in the other table. Look at the item sku lookup in my relationships example table to see what I mean by this.