

# Module 6

## Creating Reports

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## *Materials Required for Module 6*

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- r *Microsoft Access Getting Started*
- r *Microsoft Access User's Guide*
- r Address Book database

## *Module Objectives*

### *Lesson 1 - Creating Reports, Charts, and Mailing Labels*

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Upon completion of this lesson, you will be able to:

- r Create a mailing label report using a Wizard.
- r Correctly identify where each section of a report will print.
- r Explain the difference between charts created using a Wizard and those created using the chart tool.

### *Lesson 2 - Designing Reports*

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Upon completion of this lesson, you will be able to:

- r Create bound, unbound, and calculated controls.
- r Control the size, format, and properties of report sections.
- r Create report templates.

### *Lesson 3 - Sorting and Grouping Data*

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Upon completion of this lesson, you will be able to:

- r Create controls that display page numbers and the current date.
  - r Calculate totals on several group levels.
  - r Calculate percentages of totals.
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## *Lesson 1*

# *Creating Reports, Charts, and Mailing Labels*

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### Reading Assignment

- r *Microsoft Access Getting Started*  
Chapter 9: *Creating Reports*

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### As You Read

- r Reports and forms are very similar; you create the same controls to view and print data on both. However, the functionality of forms is focused on displaying and easy data entry of your data, while reports provide powerful features for grouping and totaling printed output.

## Exercises

- 1) A report can display, group, and total data from how many tables or queries?  
*See page 137- A single table or query.*
- 2) How many Report Wizards are shipped with MS Access?  
*See page 138- Three (Single Column, Group's/Total's, Mailing Lables)*
- 3) Would you use a Form or a Report to show grouped subtotals and what percent of the grand total those subtotals are?  
*See page 139- A report because of the subtotalling and the grand total. It is a global picture of the data.*
- 4) Would you create a Form or a Report if you needed to have the ability to edit data on the screen?  
*See page 139- A form because of the ease of manipulation or adding of data.*
- 5) Where do the following sections appear:  
*See page 135*  
  
Page Header/Footer\_\_\_\_\_ *The beginning and end of each page.*  
  
Report Header/Footer\_\_\_\_\_ *The beginning and end of each report.*  
  
Group Level Header/Footer\_\_\_\_\_ *The beginning and end of each group of data.*  
  
Detail Section\_\_\_\_\_ *Repeated for every record in a group.*
- 6) How do you access Microsoft Graph to modify a chart once you have placed the chart on a report or form using the Chart tool?  
*See page 149- Double click on the chart. Microsoft Graph is a server application.*

## Exercises

### Try This

- 1) Open your Address Book database and select the table Pets.
- 2) Press the New Report button on the Toolbar and select Blank Report.
- 3) Add the fields Owner ID, Pet Name, and Pet Type to the Detail section
- 4) Start Microsoft Paintbrush and draw a small picture.
- 5) Select the picture (the top right hand tool allows you to capture a portion of the screen by dragging a dashed picture around it) and choose the Copy command from the Edit menu.
- 6) Paste the picture into the Detail section.
- 7) Print Preview the report. How many times does the picture appear?  
*One picture for each new record.*
- 8) Move the picture to the Page Header. Now how many times does it appear in print preview?  
*At the top of each page.*
- 9) Move it to the Report Header section. How many times will it print?  
*Once at the beginning of the Report.*



## Lesson 2

# Designing Reports

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### Reading Assignment

- r *Microsoft Access User's Guide*  
Chapter 18: *Designing Reports*

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### As You Read

- r Much of the automating in Microsoft Access is done with form, section, and control properties. You will want to know what properties are available and how they will affect output, so that you can quickly help customers add powerful features to their reports. What property would you change to set your report to a width of 4.5 inches?

*The Report Property.Width*

How would you make the entire detail section raised or sunken?

*Detail Section.Special Effect*

How would you Prevent a page break in the middle of a record?

*Detail Section.Keep Together*





## Exercises

- 1) What type of controls can display a value from a table in your database -- unbound or bound?  
*See page 417- A Bound Control.*
- 2) What type of control would you create to display the current date or a company's logo -- unbound or bound?  
*An Unbound Control.*
- 3) What type of control would you create to calculate the tax due on each sale in the Orders table?  
*See page 427- A Calculated Control (Bound or Unbound).*
- 4) Which property determines the text contents of a label?  
*The Caption.*
- 5) How would you display a value, only once, that occurs multiple times in a detail line?  
*Detail.HideDuplicates?*
- 6) What control do you use if you wish to start a new page in the middle of a section?  
*Page Break*
- 7) If you change the default setting for a control, will those changes still be in effect when you create a new report?  
*See page 446- Only if you changed the template.*
- 8) How do you prevent the Page Header from printing on the first page?  
*Set page header to Not With Rpt Hdr.*

### Try This

- 1) Open the NWIND database and create a new blank report based on the Employee table.
- 2) Add all fields in one step.
- 3) Place a page break just before the Photo field.
- 4) Switch to Print Preview.
- 5) Does the page break before the employee's photo?

*Yes.*

- 6) The beginning of the next employee record prints immediately after each Photo and Notes if there is room on the page. How do you force Access to start a new page for each record?

*Set the section property ForceNewPage to After Section*

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## Lesson 3

### *Sorting and Grouping Data*

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#### Reading Assignment

- r *Microsoft Access User's Guide*  
Chapter 19: *Sorting and Grouping*

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#### As You Read

- r By combining expressions with various grouping of data, you can create powerful reports. You could create a report that showed, by product group, the average call time of all PSS technicians. Within each product group you could group the technicians who take 60 calls or more per day, those that take 30 - 59 per day, and those who answer less than 30 per day, sorted by the length of time they have worked for Microsoft. What types of reports do you want to create on the data in your Address Book database?



## Exercises

- 1) How many levels of sorting can you define in a report?

*See page 450- 10 levels.*

- 2) If all of my customers are in either the USA or the UK, and I want to group them according to country, what would I set for the Group On property?

*See page 460- Use the Each Value.*

- 3) How many groupings would I have of my customers in the USA and UK if I chose Prefix Characters for Group On and 2 for Group Interval?

*2 Groups.*

- 4) What would you set the Group On and Group Interval properties to if you wanted to see a bi-weekly report of hours worked by each sales representative?

*Group Hours Worked on Weekly with an Interval of 2*

### Try This

- 1) Open the NWIND database and create a new report based on the Orders table.
- 2) Add the fields Order ID, Customer ID, and Order Amount.
- 3) Add Order Amount to the Sorting and Grouping box so that the records are sorted ascending by the Order Amount. (You should not need to change any defaults.)
- 4) Print Preview to view the result.
- 5) In the Sorting and Grouping box set the Group On and Interval properties to *Interval* and *10*.
- 6) Change the Group Header property to *Yes*. Cut & Paste the labels to the Order Amount Header section.
- 7) Are the records within each grouping sorted in Ascending order?
- 8) Add the Order Amount field again to the Sorting and Grouping box and sort it Ascending.

9) Print Preview to view the result.



## *On-Your-Own*

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In this lab you will create a report listing the birthdays of the people in your Main Contact Table by month.

- 1) Create a new report based on the Main Contact table in your Address Book database.
- 2) Select the text box in the toolbox.
- 3) Click on the Property Sheet icon. "Default Text Box" should be displayed in the title bar.
- 4) Set the Auto Label property to No.
- 5) Add text boxes for the Last Name, First Name, and Date of Birth to the Detail section.
- 6) Click on the Sorting and Grouping icon. Drag the field Date of Birth to the first row of the Sorting and Grouping box and set the Group Header property to Yes and the Group On property to Month.
- 7) Select the line tool and draw a line across the Date of Birth Header section.
- 8) Print Preview the report. Do you have a list of the people in your Main Contact table by month? You do, but this probably is not what you imagined the result would be. Access automatically sorts by year, then by month, and then by day. If two people in your table were born in the same year *and* in the same month then they would be grouped together.
- 9) Cancel Print Preview and activate the Sorting and Grouping Box again. Change the Field/Expression entry from Date of Birth to "`=datepart("m",[Date of Birth])`", without the outer quotes. Change the Group On property from "Month" to "Each Value".
- 10) Print Preview the report again. This time you should see people grouped by the month they were born in, regardless of the year.



11) Add an unbound field to the Group Header section, and add an expression to extract the month of each group. Example: "January"

*Hint: =Format([Date of Birth],"mmm")*

Now modify the report so that it only shows the birthdays of those who are older than 30. You cannot apply filters to reports but you can base your report on a query.

12) Start a new query on the table Main Contacts.

13) Add the fields Date of Birth and set the criteria so that only those who are over 30 are displayed. Run your query to verify that the dates in the dynaset meet your criteria.

*Should be 4 records in Instructor Version.*

14) After you have saved your query, change the Record Source property of the Birthdays By Month report so the new query you created is the source for the records.

15) Preview your report. What happens on your screen?

*It attempts to do a parameterized query.*

16) Open your query, choose Query Properties from the View menu, and uncheck Restrict Available Records.

17) Save your query and preview your report again. Once you are satisfied with the output, print the report.

## *The PSS Challenge*

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Use the Mailing Label Report Wizard and the query Catalog to create a label for each product sold by Northwind traders that looks similar to this label for Escargots from Burgundy:

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Seafood

58: Escargots de Bourgogne

24 pieces / \$13.25

*Hint: You will need to use the Format() command to display the Unit Price as dollars and cents.*

How would you move a report template to a new database?

## *Instructor Led Module Review*

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### *1) Answer Questions*

*Would you use a Form or a Report to show grouped subtotals and what percent of the grand total those subtotals are?*

*See page 139- A report because of the subtotalling and the grand total. It is a global picture of the data.*

*What would you set the Group On and Group Interval properties to if you wanted to see a bi-weekly report of hours worked by each sales representative?*

*Group Hours Worked on Weekly with an Interval of 2*

### *2) Review As You Read and Points to Ponder*

*How would you move a report template to a new database?*

*Copy it to the clipboard, open the new database, and paste.*

*How would you make the entire detail section raised or sunken?*

*Detail Section.Special Effect*

*How would you Prevent a page break in the middle of a record?*

*Detail Section.Keep Together*

### *3) Present one or two possible lab solutions.*

### *4) Discuss various participant solutions*