Reports
- Reports are Access objects used to display information from the database in a user-friendly format.
- Reports can be printed or viewed on screen.
- Reports are based on tables or queries.

What is a Custom Report?
- A custom report is a report developed completely from scratch applying the controls, layout, and formatting specified by the designer.
- OR a report developed with the Report Wizard or Report tool to which the designer makes changes in the layout and formatting.

Designing the Report
- Before beginning, sketch a layout of the report. Identify the data the report is to present including any calculations that may be required.
- A report may be based upon tables, queries, or a combination of fields from tables and queries.
- Select the fields to be included from the appropriate objects (tables/queries) and place them on the report.
- Arrange fields in a logical and legible layout within the space allocated for the report.
- Add calculated fields and other controls to provide extra details such as page numbers and the report date.
- Enhance the report with graphics, lines, grouping, and formatting.

Reports - Important Terminology
- Control-any item found on a report
- Compound Control—a bound control in which the field and its label are connected and work as one object
- Text Box—a control used to store interactive data
- Label—a control used to enter descriptive information
- Grouping—placing related items together in a report
- Group Header—a report section identifying the grouping field; usually contains the group name
- Group Footer—report section summarizing data in a group; often contains subtotals or counts of group items.
- Grouping field—an Access object used to view and maintain data stored in underlying tables
- Properties—field characteristics
- Filter—temporary subset of data
Report Sections

An Access report may have up to seven distinct sections:
- **Report Header** - appears only on the first page of the report; cover page
- **Page Header** - appears at the top of each report page; often contains report and/or section headings, page numbers, dates, etc
- **Group Header** - appears before each group section; identifies the grouping level
- **Detail** - contains detailed report data
- **Group Footer** - appears at the end of each group section; often contains group summary information
- **Page Footer** - appears at the bottom of each report page; often contains page numbers and other reference information
- **Report Footer** - appears at the end of the report; contains report summary information

Making Adjustments

Report design, as with form design, is a trial-and-error process. In order to evaluate the design and layout of a report, the designer must switch frequently between Design and Print Preview.

Most design changes can be reversed using *Undo*, including formatting applications and field modifications.

**Suggestion:** If you plan to make major design changes, be sure to save the report first. Then, if you don’t like your changes, you can always revert back to your original design.

Report Sections

A report may have more than 7 sections if multiple grouping levels are included. You are not required to use all 7 sections in a report. Use only those that are necessary to present your data effectively.

Grouping a Report

**Grouped Report** – a report in which data with a common field is displayed together in sections

Notice in the example that Customer 11005 appears on the report three times, but the records are spread throughout the report.

Formatting the Report

- A functional report can be created using the Report Wizard
- Create reports with appeal and purpose by formatting the report and adding grouping and calculations.
- See page 388 for layout enhancements.

Grouping a Report

**Sorting the report helps by displaying all records with the same field contents together.**

The example report has been sorted on Customer ID. Now all three records for Customer 11005 appear together.
Grouping a Report

- Using grouping allows the report to display with each record shown as a line item under the group header.
- With grouping, you can also perform calculations on data in the group.

The example report has now been grouped on Customer ID. All three records for Customer 11005 appear as line items and a Contract Amt total has been calculated.

How to Add Grouping to a Report

- In Design view click the Group & Sort button from the Grouping and Totals group on the Design tab to display Group, Sort and Total pane.
- In the Group, Sort and Total pane at the bottom of the screen, click Add a Group.
- Select the field you want to group.
- Adding a group to a report automatically adds a group header, but you must select additional options if you also want a group footer.

How to Add Grouping to a Report

A Group Header section now appears in your report.

Adding a Group Footer

When grouping is selected, Access only adds a group header by default.
- To add a group footer, from Design View, click the More Options button in the Group, Sort, and Total pane.
- Next, click the drop-down arrow beside without a footer section and choose with a footer section.
Using a Group Footer

- Use a group footer to summarize data about the group such as Totals, Counts, or Statistics.
- In the example report, we’ll add an unbound textbox to the group footer section, enter the expression =Sum([ContractAmt]) in the unbound textbox, and change the label to appropriately reflect the contents of the textbox.
- You also need to make sure that all fields are aligned and that field placement is appropriate.

Adding Page Numbers

- In the Page Numbers dialog box, choose how you want the page numbers to be presented:
  - Format – How you want the numbers to display
    - Page N (Page 2)
    - Page N of M (Page 2 of 18)
  - Position
    - Top of Page (in the Header)
    - Bottom of Page (in the Footer)
  - Alignment
    - Left
    - Center
    - Right
  - Inside (Odd pages display on the left side of the page and even pages display on the right side of the page or on the “outside” of book-bound pages)
  - Outside (Page 1 displays on the right side of the page and Page 2 displays on the left side of the page or on the “outside” of book-bound pages)

Report View - Group Footer

- Below is the example report in Report View.
- Notice how each Customer ID group includes a total based on only the values in that group.

Adding Date and Time

- Many times you like to see when a report was printed. If multiple versions of a report are printed often, it is even helpful to have the time on the report. Follow the instructions below to add the date and/or time to a custom report.
- From Design View, click the Date and Time button in the Header/Footer group of the Design tab.
Adding Date and Time

- In the **Date and Time dialog box**, choose
  - What you want displayed (date, time, or date and time)
  - And
  - How you want the date/time to be presented:
    - The examples by each option button show you how the date/time will display
- Date and Time controls are placed in the **Report Header** by default. If you want the controls placed in another location, simply select the controls and drag them to the desired location. You can further format the controls to display in the font style, color, and size you want.

You Will Also Learn About

- Entering expressions
- Adding subreports

End of Lesson

- Work through **Tutorial 7** in your Access textbook.
- Omit pages 430-434 of the tutorial. We will not be creating mailing labels as part of this lesson.
- Complete the assigned exercises and submit through NS Online.