

Introduction to MS Excel

Principles of Management Information Systems

MIS 201 Lab

Outline

- About MS Excel
- Formatting Worksheets

- Analyzing Worksheets
- Using Functions



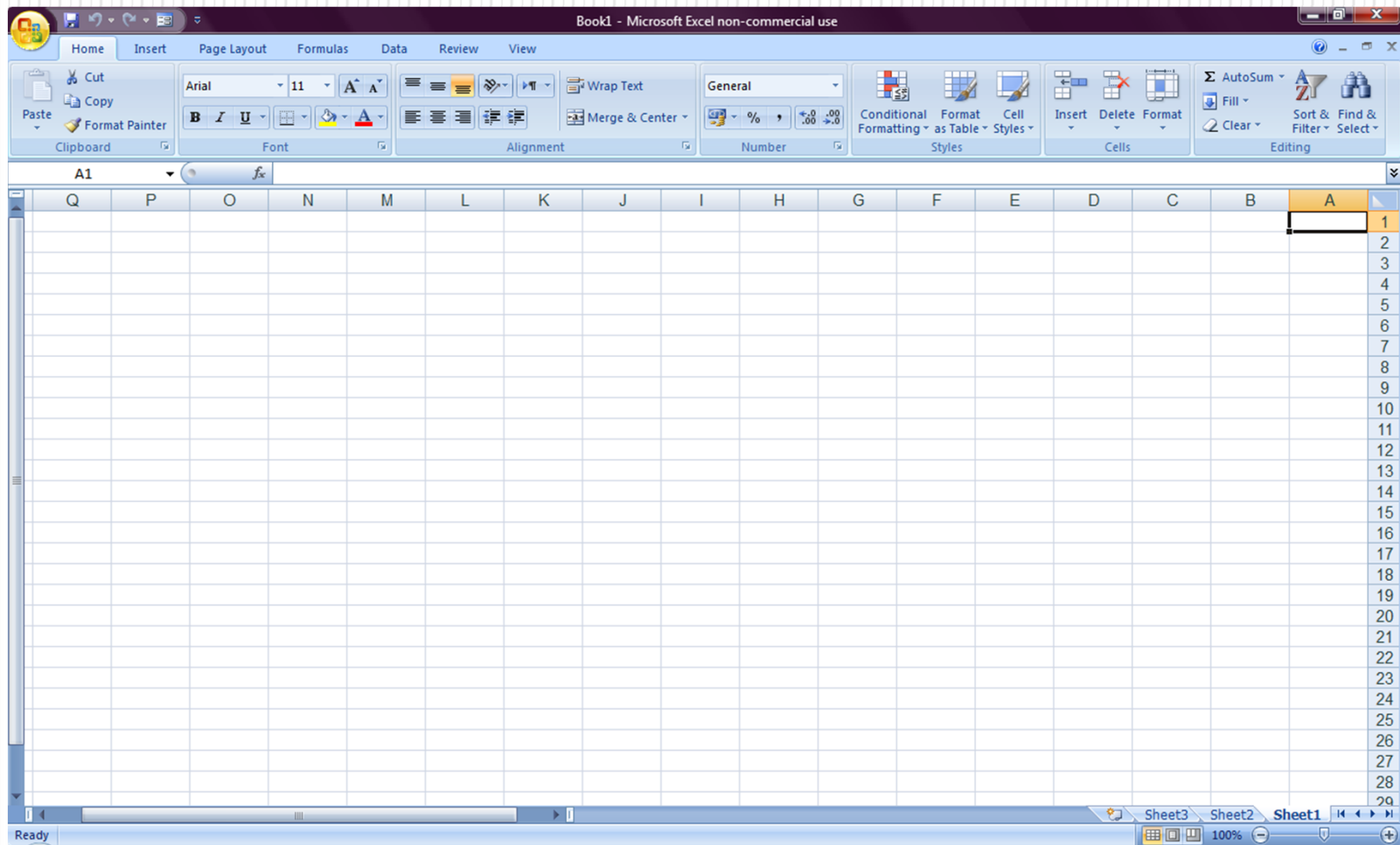
About MS Excel

- Excel is a computer application that simulates a paper worksheet
- It consists of rows, columns and cells
- Each cell contains either:
 - Texts
 - Dates
 - Numeric values
 - A formula (Arithmetic operations ex. + - * / ^)
 - A function (Simple or Complex data operation ex. Sum)

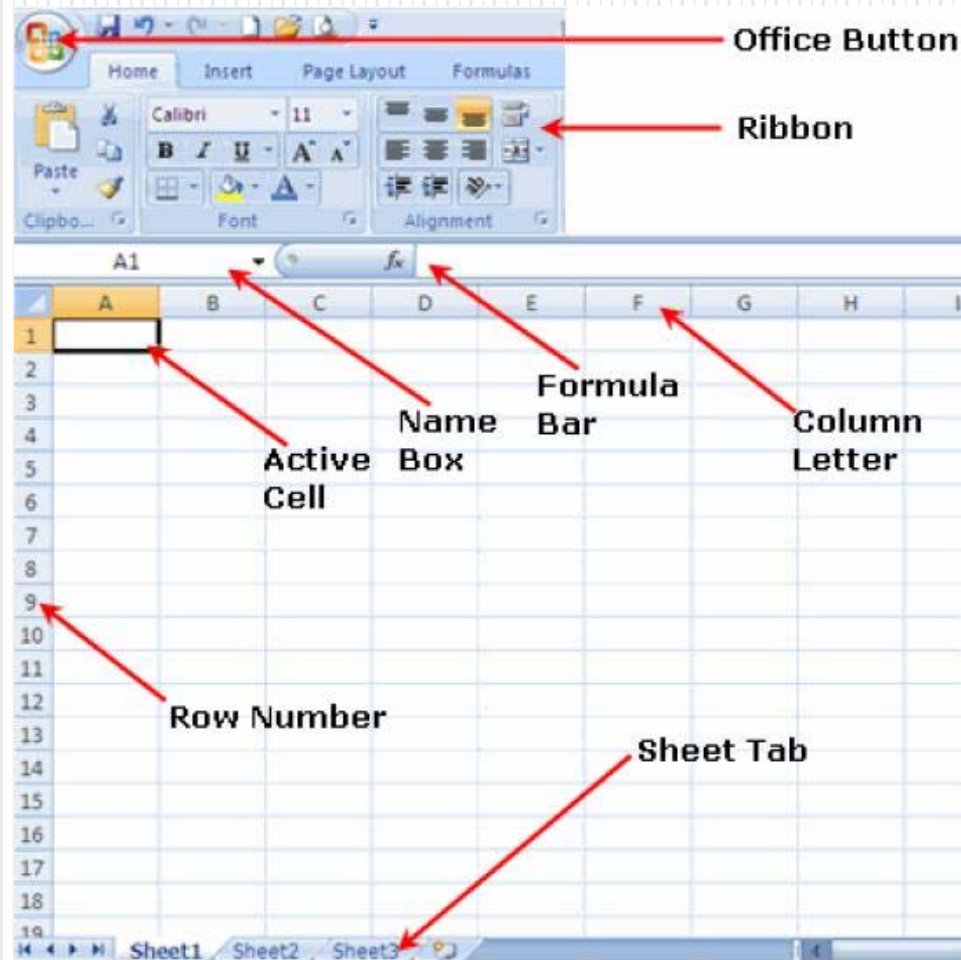
About MS Excel

- Spreadsheets are frequently used for financial information because of their ability to re-calculate the entire sheet automatically after any change to a single cell.
- A workbook is a spreadsheet file. Each workbook in Excel contains three pages or worksheets

About MS Excel



About MS Excel

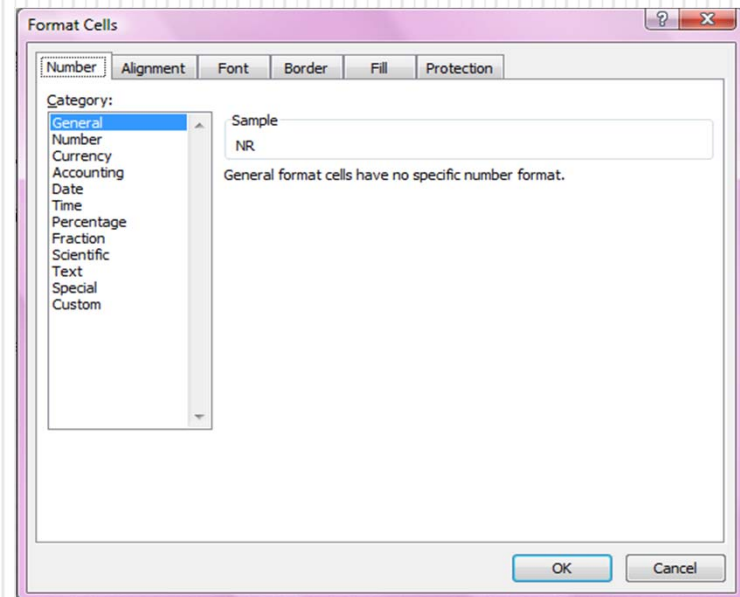


Formatting Worksheets

- Formatting Cells

1. Select the cell(s) to be formatted
2. Right click then select “Format cells”
3. A dialogue box will be displayed to configure all formatting options

- Number tab
- Alignment tab
- Font tab
- Border tab
- Fill tab

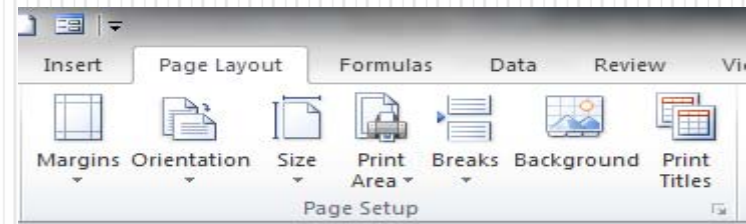


Formatting Worksheets

- Page Setup

It gives you an instant view of how printed Excel pages will look

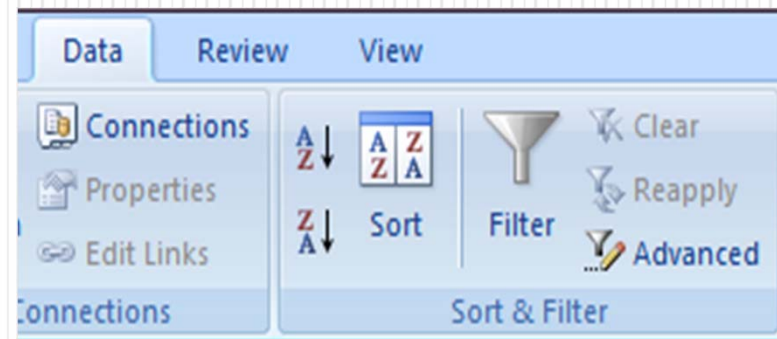
- To activate it:
Select “**Page Layout**” tab



- Page Setup dialogue box:
 - Page tab
 - Margins tab
 - Header/Footer tab
 - Sheet tab

Formatting Worksheets

- Sorting data:
Rearranging records in ascending or descending order based on any Column
- To Sort Data:
 - Select data to be sorted
 - From “**Data**” tab, select either:
 - Ascending
 - Descending



Formatting Worksheets

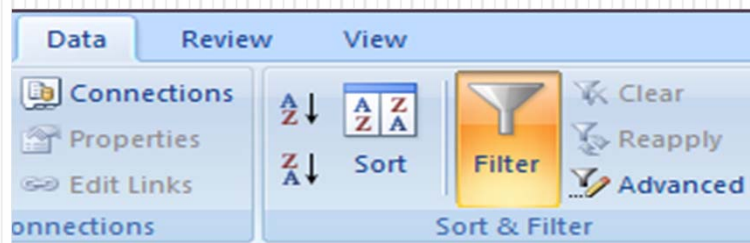
- Filtering Data

A quick and easy way to find and work with a subset of data in a range.

It displays only the rows that meet a specific criteria

- To Filter Data:

- Select data to be filtered
- From the “**Data**” tab, select “**Filter**”



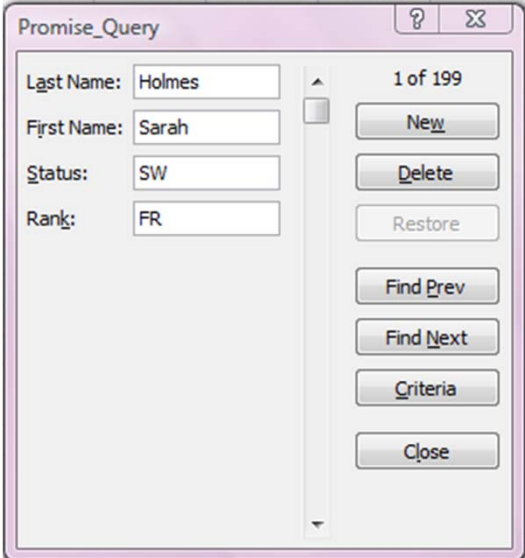
Formatting Worksheets

- Data Form

A dialog box that displays one complete record at a time. You can use data forms to add, change, locate, and delete records

To use Data Form:

- Add the button to the “Quick Access Toolbar”
- Select a range of data
- Click on the “**Form**” button
- A dialog box will be displayed



The screenshot shows a dialog box titled "Promise_Query" with a question mark icon and a close button in the top right corner. The dialog box is divided into two main sections. The left section contains four text input fields: "Last Name:" with the value "Holmes", "First Name:" with the value "Sarah", "Status:" with the value "SW", and "Rank:" with the value "FR". The right section contains a vertical stack of buttons: "New", "Delete", "Restore", "Find Prev", "Find Next", "Criteria", and "Close". Above the "New" button, there is a small upward-pointing arrow and the text "1 of 199".

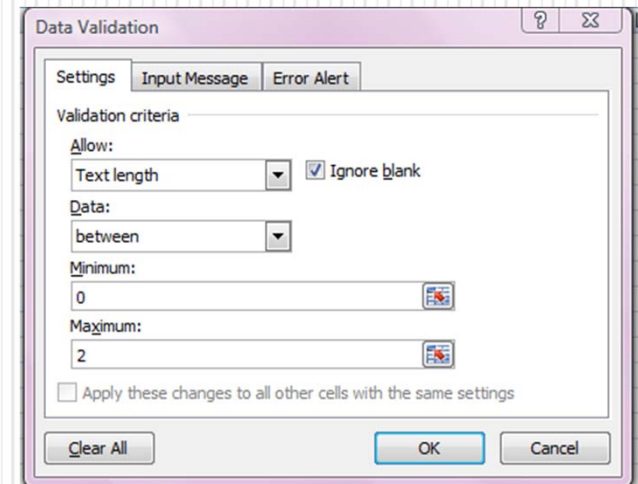
Formatting Worksheets

- Data Validation

To restrict data entry to a certain range of dates, limit choices by using a list, or make sure that only positive whole numbers are entered

- To Validate Data:

- Select a range of data
- From “**Data**” tab, click “**Data Validation**”
- In the “**Settings**” tab, specify the type of validation



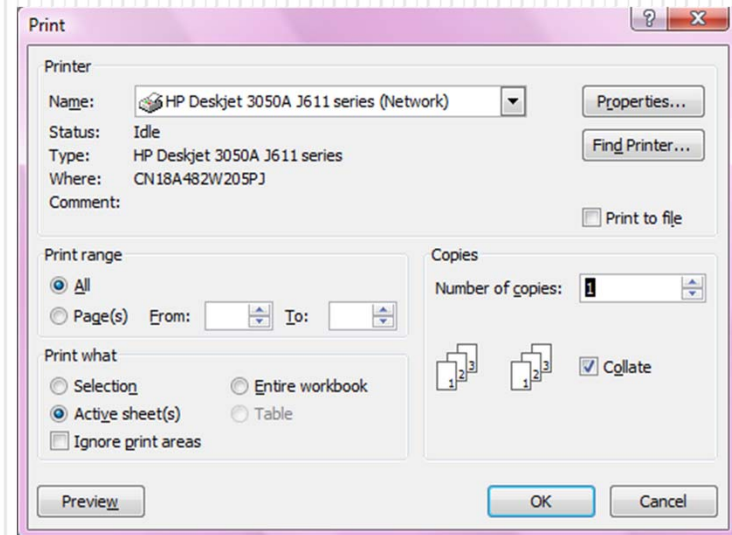
Formatting Worksheets

- Printing Sheet

When you are finished with your worksheet, you should use the Print dialogue box to print

- There are five important options:

- Printer
- Properties
- Print range
- Copies
- Print what



Analyzing Worksheets

- Charts
 - Provide visual representations of the data
 - May be embedded in an existing worksheet, or can be created on a separate chart sheet with its own tab in the workbook
- Chart steps:
 - Chart type
 - Chart options

Analyzing Worksheets

- To create a chart:
 1. Select data series
 2. Go to “insert” tab
 3. Pick the chart type
 4. Designate the chart location
 5. Choose the chart options
 6. Change the chart location and size
- Question:



Analyzing Worksheets

- Formulas

- Allow you to perform simple calculations on data
- Basic mathematical operators such as $+$ $-$ $/$ $*$

- Example (1) Percentage:

A student scores 450 points out of 800. Find % score result.

1. Locate the pointer in the cell where you need the percentage
2. Type $=A3/B3$ then press “Enter” key
3. To convert the result into percentage format, click on %

Analyzing Worksheets

- Example (2) Taxes:

A company imports goods that have a value of \$100,000.

Find 3% tax

1. Locate the pointer in the cell where you need the result
2. Type $=3/100*A4$
3. Press “Enter” key

- Question:

Using Functions

- Excel supplies more than 350 functions organized into 10 categories

1. Statistical Functions:

- **MAX:** finds the greatest value in a range
- **MIN :** finds the lowest value in a range
- **AVERAGE:** determines the average within a range
- **STDEV:** estimates standard deviation based on a sample (range of numeric values).
- **COUNT:** counts the number of cells in a range (numeric value only)
- **COUNTA:** counts the cells with text as well as numeric values (non blank cells)

Using Functions

2. Mathematical Functions:

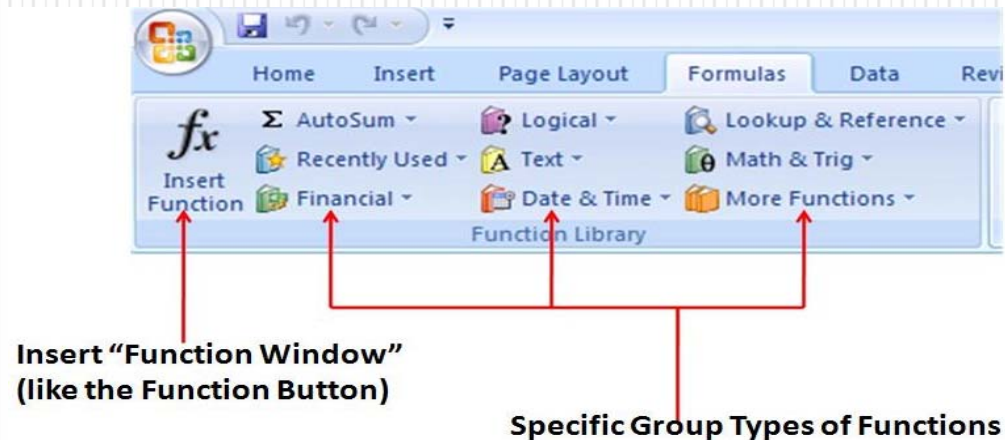
- **SUM**: finds the total value of selected cells
- **SQRT**: calculates square root of a number
- **Fact**: calculates the factorial of a number
- **SIN**: will calculate the sine of an angle
- **COS**: finds the cosine of an angle

3. Logical Functions:

- **IF**: determines the truth value for a condition
=IF(logical_test, value_if_true, value_if_false)

Using Functions

- To use the functions:
 - Use the “Function” button next to the “Formula bar” to select from a list of functions
 - You can use “**formulas**” tab then specify a function type. A series of dialog boxes will assist you in filling the arguments of the function



Any question !!

