



Instructor Inputs

Session 3

Notes for Faculty

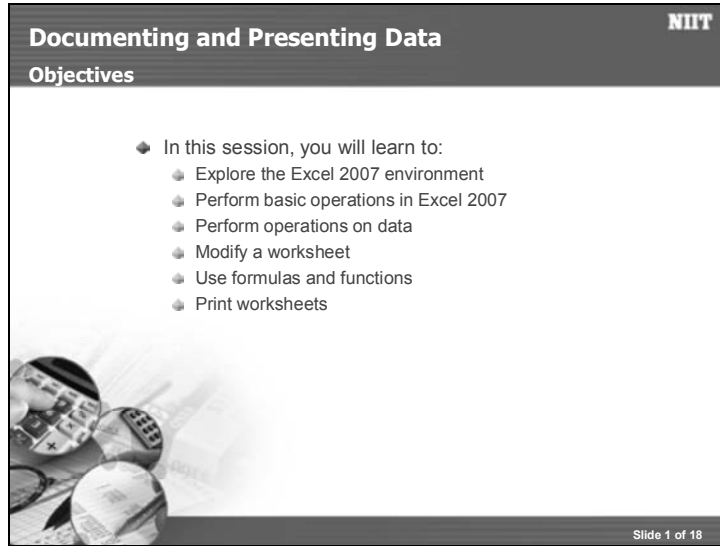
When conducting the Documenting and Presenting Data module, do keep the following points in mind:

- This is an activity based course with lots of demonstrations. While demonstrating an activity, ensure that you involve all the students. Making your sessions interactive will help you retain the interest of the students.
- Use the slides for conducting all the sessions. The slides will help you make your session interactive.
- The slides for this course contain text in blue color at most places. However, at some places, text is written in red color. Wherever text is written in red, it indicates that you need to demonstrate the activity written in red color to the students.

Session Overview

This session covers Chapter 2 of the book Documenting and Presenting Data – Student Guide. In this session, discuss the Excel 2007 environment. Then, explain how to perform basic operations in Excel. Discuss how to perform operations on data. In addition, discuss modifying and printing worksheet.

Slide 1



The slide is titled "Documenting and Presenting Data" with the NIIT logo in the top right corner. Below the title is the word "Objectives". The main content area lists the session objectives under the heading "In this session, you will learn to:". The objectives are: Explore the Excel 2007 environment, Perform basic operations in Excel 2007, Perform operations on data, Modify a worksheet, Use formulas and functions, and Print worksheets. The bottom left of the slide features a graphic of a calculator and a pen on a document. The bottom right corner indicates "Slide 1 of 18".

Documenting and Presenting Data NIIT

Objectives

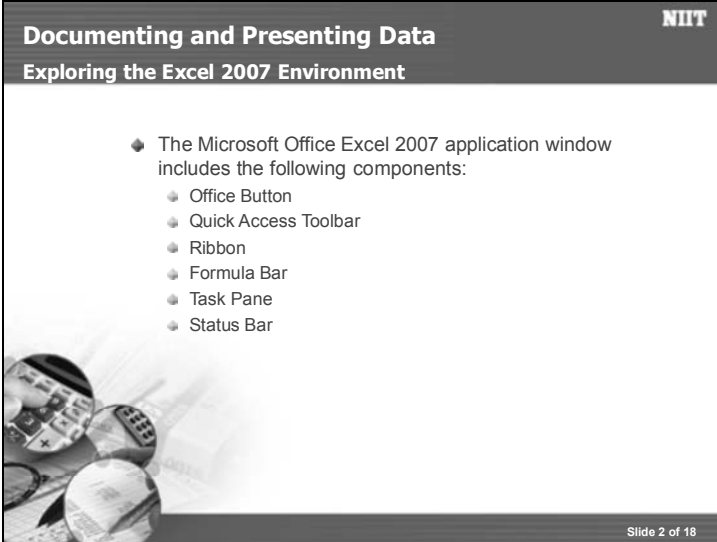
◆ In this session, you will learn to:

- ◆ Explore the Excel 2007 environment
- ◆ Perform basic operations in Excel 2007
- ◆ Perform operations on data
- ◆ Modify a worksheet
- ◆ Use formulas and functions
- ◆ Print worksheets

Slide 1 of 18

Start the session by sharing the objectives as given in the slide.

Slide 2



Documenting and Presenting Data NIIT

Exploring the Excel 2007 Environment

- ◆ The Microsoft Office Excel 2007 application window includes the following components:
 - ◆ Office Button
 - ◆ Quick Access Toolbar
 - ◆ Ribbon
 - ◆ Formula Bar
 - ◆ Task Pane
 - ◆ Status Bar

Slide 2 of 18

Before discussing about the Excel 2007 interface, explain what is a spreadsheet.

A spreadsheet can be defined as an electronic document that stores various types of data, such as numbers, text, and non-alphanumeric symbols. Data in a spread sheet is stored in a tabular format. A spreadsheet consists of row and columns that intersect to form cells. The cells store the data entered into a spreadsheet.


Then, familiarize the students with various elements of the Excel 2007 interface. Discuss in detail about the components listed in the slide.

To know more about the Excel 2007 window, you can refer to the following link:

- http://www.baycongroup.com/excel2007/01_excel.htm#window

Slide 3

Documenting and Presenting Data
Exploring the Excel 2007 Environment (Contd.)




- ◆ The Excel 2007 workbook window includes the following components:
 - ◆ Cell
 - ◆ Worksheet
 - ◆ Sheet tab bar
- ◆ The Sheet tab bar comprises of:
 - ◆ Sheet tabs
 - ◆ Tab scrolling buttons
 - ◆ Insert Worksheet tab

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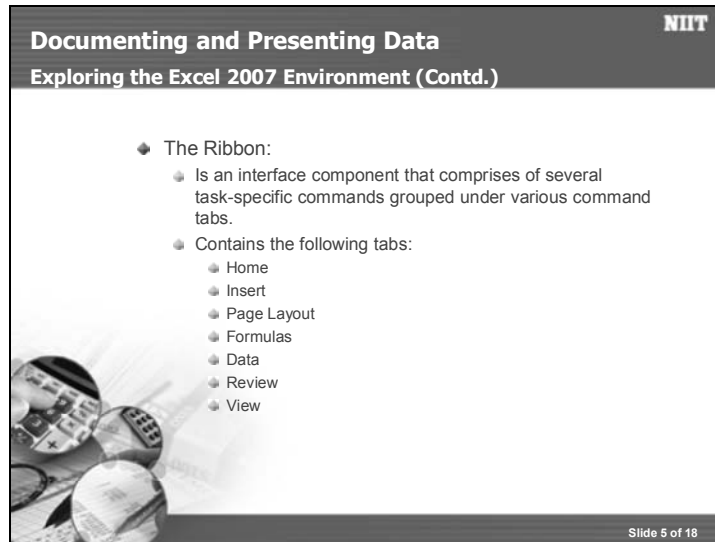
Slide 4

Documenting and Presenting Data
Exploring the Excel 2007 Environment (Contd.)



- ◆ The Mini toolbar:
 - ◆ Is a toolbar that appears when you select or right-click text in a worksheet.
 - ◆ Displays the common text formatting options.

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Exploring the Excel 2007 Environment (Contd.)

- ◆ The Ribbon:
 - ◆ Is an interface component that comprises of several task-specific commands grouped under various command tabs.
 - ◆ Contains the following tabs:
 - ◆ Home
 - ◆ Insert
 - ◆ Page Layout
 - ◆ Formulas
 - ◆ Data
 - ◆ Review
 - ◆ View

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The Ribbon is designed in such a way that it allows accessing various commands with ease. Explain the various tabs displayed in the Ribbon. In addition, discuss the advantages of using the Ribbon.

To know more about the Ribbon panel, you can refer to the following link:

- http://www.baycongroup.com/excel2007/01_excel.htm#ribbon

In addition, discuss in brief about contextual tabs and Dialog box Launchers.

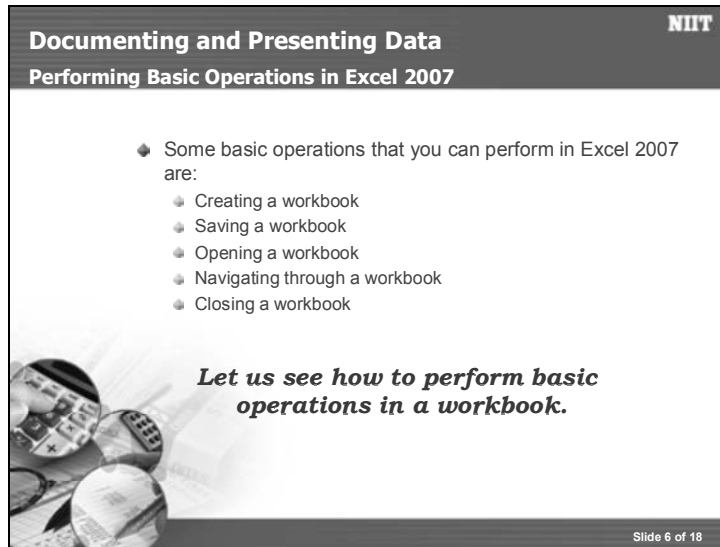
Contextual tabs:

You can tell the students that contextual tabs are command tabs that appear on the Ribbon only when they select specific objects on the worksheet. These objects can be a chart, table, drawing, text box, or WordArt. The contextual tabs are displayed in addition to the existing command tabs on the Ribbon.

Dialog Box Launchers:

Dialog Box Launchers are buttons that accompany the groups on command tabs. On clicking the dialog box launcher, it launches a dialog box associated with the respective group, which provides additional commands and tools.

Slide 6



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Performing Basic Operations in Excel 2007

- ◆ Some basic operations that you can perform in Excel 2007 are:
 - ◆ Creating a workbook
 - ◆ Saving a workbook
 - ◆ Opening a workbook
 - ◆ Navigating through a workbook
 - ◆ Closing a workbook

Let us see how to perform basic operations in a workbook.

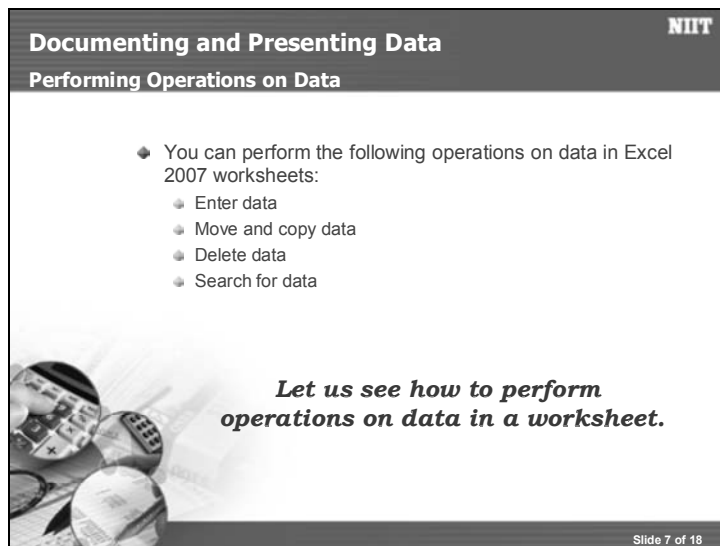
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To know more about saving and closing workbook, you can refer to the following link:

- http://www.baycongroup.com/excel2007/01_excel.htm#save

Demonstrate performing the basic operations listed in the slide on a workbook.

Slide 7



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Performing Operations on Data

- ◆ You can perform the following operations on data in Excel 2007 worksheets:
 - ◆ Enter data
 - ◆ Move and copy data
 - ◆ Delete data
 - ◆ Search for data


Let us see how to perform operations on data in a worksheet.

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Demonstrate performing operations on data in a worksheet.


Slide 8

Documenting and Presenting Data
Modifying a Worksheet



- ◆ Excel 2007 allows you to modify a worksheet by inserting:
 - ◆ Rows
 - ◆ Columns
 - ◆ Cells

Let us see how to modify a worksheet.




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Demonstrate modifying a worksheet by inserting rows, columns, and cells.

Slide 9

Documenting and Presenting Data
Using Formulas and Functions



- ◆ A formula:
 - ◆ Is a sequence of values and operators.
 - ◆ Begins with an equal to (=) sign.
- ◆ Excel formulas enable you to perform calculations on numerical data.
- ◆ Functions are predefined formulas that perform calculations by using specific values, called arguments, in a particular order.
- ◆ Excel 2007 provides the following basic types of functions:
 - ◆ Mathematical functions
 - ◆ Statistical functions
 - ◆ Date and time functions
 - ◆ Logical functions




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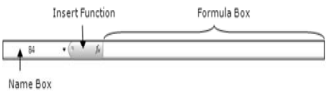
A formula in Excel 2007 is defined as a set of mathematical instructions that can be used to perform calculations in the worksheets.

Slide 10

Documenting and Presenting Data
Using Formulas and Functions (Contd.)



- ◆ The Formula Bar:
 - ◆ Is a bar at the top of the Excel window that displays the formula of the active cell.
 - ◆ Is divided into the following three parts:
 - ◆ Name Box
 - ◆ Insert Function
 - ◆ Formula Box
- ◆ The following figure shows the Formula Bar with its three components.




Let us see how to enter formula in a worksheet.

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Demonstrate how to enter formula in a worksheet.

Slide 11

Documenting and Presenting Data
Using Formulas and Functions (Contd.)



- ◆ The AutoFill feature of Excel 2007 enables you to quickly copy a formula to adjacent cells by dragging the fill handle.
- ◆ The fill handle is a small plus sign at the lower-right corner of the active cell.




Let us see how to copy a formula by using the fill handle.

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Demonstrate how to copy formulas by using the fill handle.

Slide 12

Documenting and Presenting Data
Using Formulas and Functions (Contd.)



- ◆ Some of the basic types of functions provided by Excel 2007 are:
 - ◆ Mathematical function
 - ◆ Statistical functions
 - ◆ Date and Time functions
 - ◆ Logical functions


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To know more about Excel 2007 functions, you can refer to the following links:

- <http://www.brainbell.com/tutorials/Excel-2007/Formulas-and-Functions/>
- http://spreadsheets.about.com/od/excel2007/ss/excel2007_forma_3.htm

Slide 13

Documenting and Presenting Data
Using Formulas and Functions (Contd.)



- ◆ You can insert the advanced functions, such as financial, information, database, and engineering functions by using the Function Library group.
- ◆ You can copy formulas and functions using copy or paste feature of Excel 2007.

Let us see how to use functions in Excel 2007.


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Demonstrate how to use functions in Excel 2007.

Slide 14

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Printing Worksheets



- ◆ Excel allows you to get a hard copy of the worksheets by printing it.
- ◆ A worksheet can be prepared to be printed by using the following options:
 - ◆ Page breaks
 - ◆ Page layouts
 - ◆ Margins
 - ◆ Headers and footers
 - ◆ Sheet options
- ◆ Excel allows you to:
 - ◆ Preview the worksheet data before printing.
 - ◆ Print the entire worksheet or a part of it.

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To know more about printing worksheets, you can refer to the following links:

- <http://nicetutz.blogspot.com/2007/11/printing-workbooks-in-excel-2007.html>
- <http://office.microsoft.com/en-us/excel/HA101983101033.aspx>

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Printing Worksheets (Contd.)



- ◆ Excel enables you to print the worksheet by using the Print dialog box, which consists of the following sections:
 - ◆ Printer section
 - ◆ Print range section
 - ◆ Print what section
 - ◆ Copies section

Let us see how to print a worksheet.

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Demonstrate how to print a worksheet.

Slide 16

Documenting and Presenting Data**NIIT**

Summary

- ◆ In this session, you learned that:
 - ◆ Microsoft Excel 2007, component of the Microsoft Office XP suite, is an application that helps you store and manage alphanumeric data in rows and columns.
 - ◆ When you launch Excel 2007, the application displays the following two windows one within the other:
 - ◆ Application Window
 - ◆ Worksheet Window
 - ◆ The Microsoft Excel application window includes the following components:
 - ◆ Office Button
 - ◆ Quick Access Toolbar
 - ◆ Ribbon
 - ◆ Formula Bar
 - ◆ Task pane
 - ◆ Status Bar



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Summarize the session by using the points given in the slides.

Slide 17

Documenting and Presenting Data**NIIT**

Summary (Contd.)

- ◆ Some basic operations that you can perform in Excel 2007 sheet are:
 - ◆ Creating a workbook
 - ◆ Saving a workbook
 - ◆ Opening a workbook
 - ◆ Navigating a workbook
 - ◆ Closing a workbook
 - ◆ Worksheet Window
- ◆ You can perform the following operations on data in worksheets:
 - ◆ Enter data
 - ◆ Move and copy data
 - ◆ Delete data
 - ◆ Search for data
- ◆ Excel 2007 enables you to insert various worksheet components, such as rows, columns, and cells in a worksheet.




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Documenting and Presenting Data

NIIT

Summary (Contd.)

- A formula is an equation used to perform types of calculations.
- To use a formula, you need to specify an equal to (=) sign before the formula.
- Excel 2007 provides the following basic types of functions:
 - Mathematical functions
 - Statistical functions
 - Date and time functions
 - Logical functions
- You can print an entire worksheet or a part of it.



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