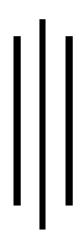
Tribhuvan University

Madan Bhandari Memorial College

New-Baneshwor, Kathmandu Nepal



Lab Report on

Computer Fundamental and Application (CACS 101)

Submitted By

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Code no: 3278613

Faculty: Humanities and Social Science

Semester: First Semester

Submitted To

Department of BCA

Mr.Arun Sharma

(Co-ordinator of BCA)



1.Introduction to MS DOS

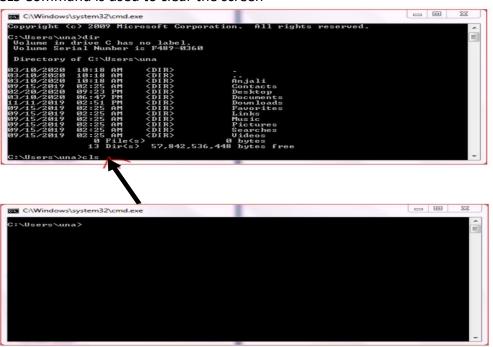
MS-DOS stands for Microsoft disk operating system. It is discontinued operating system for personal computers mostly developed by Microsoft. It is simply a system for operating the disks.

DOS Commands

In Ms-Dos there are two types of commands; internal and external. An internal command is embedded into the command.com file. However and external command is not embedded into the command.com file and therefore requires a separate file to be used There are some commands which used in Ms-Dos:

CLS Command

CLS Command is used to clear the screen





MK Dir

Mkdir command is used to create new directory

CD command

cd command is used to change the directory





Some Important DOS Commands and its uses

Command	Description
cls	To clear the screen
mkdir	To create folder/directory
cd	To change the currently working directory
dir	To display a list of files and folders contained inside the folder that you are currently working in. The dir command also displays other important information like the hard drive's serial number, the total number of files listed and many more.
exit	It is used to end/close the command prompt that you are currently working in.

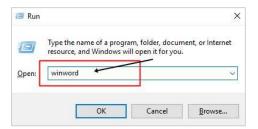


2.Introduction to MS Word

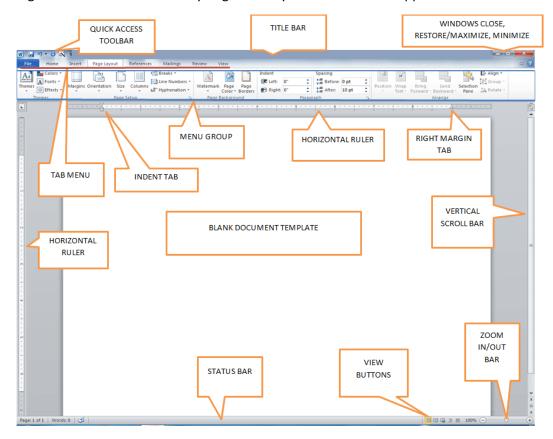
Microsoft Word is a word processor developed by Microsoft. It allows us to create, edit, format, save, print, delete, and view a multidirectional text document. It allows you to create and edit personal and business documents, such as letters, reports, invoices, emails, and books. By default, documents saved in Word 2010 are saved with the **.docx** extension.

How to open or run MS-Word

- **Step 1:** Click the button Windows key + R. Then the run window will pop out in screen.
- Step 2: Write winword in Open option in run window.
- Step 3: Press OK button and now MS-Word file is open.



Following is the basic window which you get when you start the Word application.



Navigation

Title Bar

It is the top most part of the window. It is the place where file information is located.



Menu Bar

The Menu bar is directly below the Title bar and it displays the menu.

Quick-Access Toolbar

The Quick Access Toolbar displays a small selection of the more commonly used commands in the top left hand corner of the application window.

Ribbon

It lies below Menu bar. These tabs are divided into groups which we see below the tab and differ according to tab. The groups in MS Word 2010 are the same as the toolbars in previous versions. They are much more organized, making it easier for us to find what we need and complete the task.

Ruler

The ruler is generally found below the main toolbars. The ruler is used to change the format of your document quickly.

Document Area

Just below the toolbar, there is a large area called document area. This is the place where we type text.

Status Bar

The status bar is the area at the bottom of the Word window that indicates information about the current document. It displays information about what page you are on, as well as your line number on the page and character number on the line.

Features

i. Text Formatting

To format a text

- a) Select the text you want to format
- b) Click the Home tab.
- c) Click the Font Dialog Box Launcher.
- d) Select the font, font style, and font size you want
- e) If you want, click the Font Color list arrow, and then click a color.
- f) If you want, select the effect you want in your text.
- g) If you want, select your underline style.
- h) You can see your formatted text in preview
- i) Click OK.

ii. Paragraph Formatting

To format a paragraph

- a) Select the paragraph you want to format
- b) Click the Home tab.
- c) Click the Paragraph Dialog Box Launcher
- d) Select the alignment, indentation, and line spacing you want
- e) You can see your formatted paragraph in preview

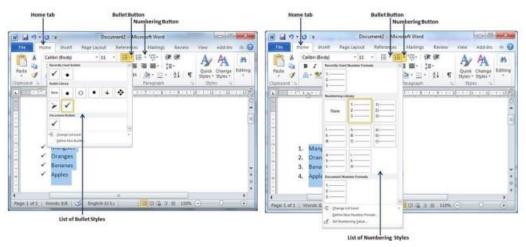


iii. Create a List from Existing Text

Step 1 – Select a list of text which you want to assign bullets or numbers. You can use any of the text selection method to select the portion of text.

Step 2 – Click the Bullet Button triangle icon to display a list of bullets you want to assign to the list. You can select any of the bullet style available by simply clicking over it.

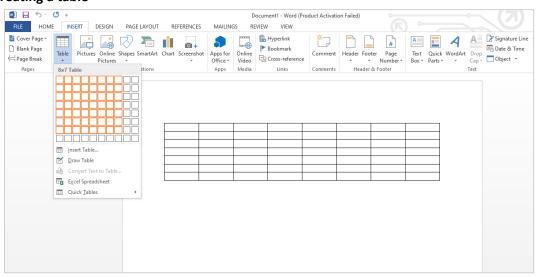
Step 3 – If you are willing to create a list of bullets you



iv. Table

A table is a structure of vertical columns and horizontal rows with a cell at every intersection. Each cell contain text or graphics, and you can format the table in any way you want. Usually the top row in the table is kept as a table header and can be used to put some informative instructions.

Creating a table



Step 1 – Click the **Insert** tab followed by the **Table** button. This will display a simple grid as shown below. When you move your mouse over the grid cells, it makes a table in the table



that appears in the document. You can make your table having the desired number of rows and columns.

Step 2 – Click the square representing the lower-right corner of your table, which will create an actual table in your document and word goes in the table design mode. The table design mode has many options to work with.

Step 3 – This is optional step that can be worked out if you want to have a fancy table. Click the Table Styles button to display a gallery of table styles. When you move your mouse over any of the styles, it shows real time preview of your actual table.

Step 4 – To select any of the styles, just click the built-in table style and you will see that the selected style has been applied on your table.

Mail Merge in MS-Word

When you use the Word Mail Merge feature, Word merges a main document with a recipient list to generate a set of output documents:

- > The main document contains the basic text that is the same in all of the output documents. It may contain a letterhead, text, and instructions in merge fields for inserting text (such as recipient names and addresses) that vary from one output document to another.
- ➤ The recipient list is a database that contains the data that is to be merged into the output documents. For example, the recipient list is a Microsoft Access database file or an Excel worksheet. This database is typically a list of names, addresses, phone numbers, and other categories of personal information.
- The output documents are the result of the mail merge. The text in an output document can be the same in all output documents, but you can apply formatting to specific documents.

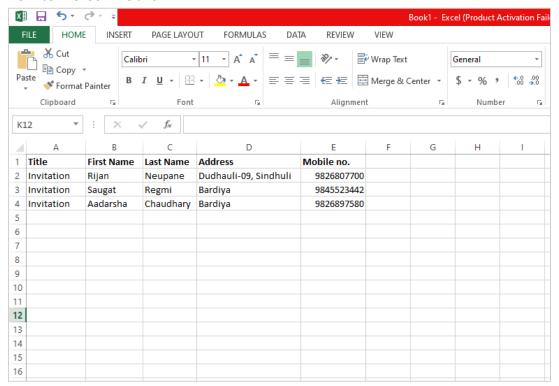
Step 1 : Set Up the Excel Data File

Before you proceed with the mail merge Wizard, make sure that your Excel worksheet is well structured for this purpose. Note the following requirements for the data table:

- The first row should contain field names for each column for example: Title, First Name, Last Name, Address and Mobile Number.
- Each field name should be unique.
- Each row should provide information about a particular item. For example: in a mailing list, each row might include information about a particular recipient.
- The table should contain no blank rows.
- Create your Excel data file, and then arrange it by using the fields that you want to use for your letter, as shown in the following sample data file.
- After you create your Excel data file, save it, and then close the data file.



The Excel file look like this:



Step 2: Set Up the Main Document

In Microsoft Office Word 2007, click Start Mail Merge in the Mailings tab, and then click Step by Step Mail Merge Wizard.

FILE HOME

Envelopes Labels Start Mail Merge

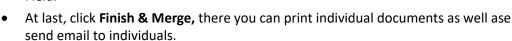
:/

Edit cipients • Recipient List Merge Fields Type a New List..

Use an Existing List... E Choose from Outlook Contacts... Write & Ins

200

- Under Select Document Type, click Letters.
- Type the letter or information you want to send
- Leave the blank space in those field where you want dynamic data
- Click Select Recipients and click Use an existing list, then select the Excel data file which we made before.
- Now place the cursor on blank spaces of letter.
- Click Insert Merge Field and select the required data Field.



The Final Document look like this:





Some Lab Works

CV



Class Routine

	6:30 - 7:30	7:30 - 8:30	8:30 - 9:00	9:00 - 10:00	10:00 -11:00
Sunday	DL	Maths		CFA LAB	
Monday	DL	CFA		English	Maths
Tuesday	DL	CFA	ak	English	Maths
Wenesday	DL	CFA	Break	Maths	ST
Thrusday	DL LAB			CFA	ST
Friday	CFA LAB			English	ST



MS-Excel

Introduction to MS-Excel

Microsoft Excel is a spreadsheet program used to record and analyze numerical and statistical data. Microsoft Excel provides multiple features to perform various operations like calculations, pivot tables, graph tools, macro programming, etc. By default, spreadsheets saved in Word 2010 are saved with the .xlsx extension.

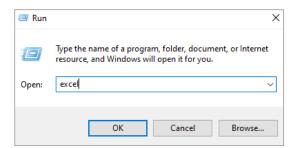
How to open or run MS-Excel in computer

Step 1 – Click the button windows + R at the same time.

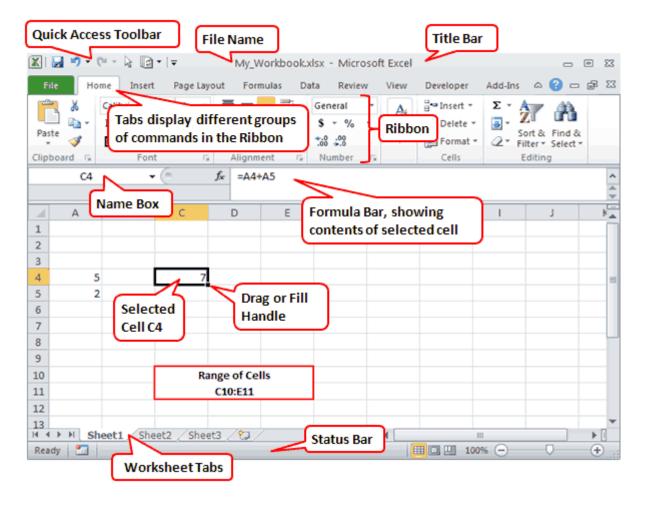
Then the run option will pop up in screen.

Step 2 – Write excel in open option in run file.

Step 3 – Press OK button and now MS-Excel file is open.



Following is the basic window which you get when you start the Excel application.





Navigation

Title Bar

It is the top most part of the window. It is the place where file information is located.

Menu Bar

The Menu bar is directly below the Title bar and it displays the menu.

Quick-Access Toolbar

The Quick Access Toolbar displays a small selection of the more commonly used commands in the top left hand corner of the application window.

Ribbon

It lies below Menu bar. These tabs are divided into groups which we see below the tab and differ according to tab. The groups in MS Excel 2010 are the same as the toolbars in previous versions. They are much more organized, making it easier for us to find what we need and complete the task.

Sheet Area

Just below the toolbar, there is a large area called sheet area. Basically this is where you work all the tasks. It is divided into rows and columns.

Rows

Rows run horizontally. Each row is identified by row number, which runs vertically at the left side of the sheet. Row numbers ranges from 1 to 1048576.

Columns

Columns run vertically. Each column is identified by column header, which runs horizontally at the top of the sheet. Columns header ranges from **A to XFD**.

Cell

The intersection of rows and columns is called cell. The row number (1, 2, 3,) and column header (A, B, C,) provide an address, such a C10 or G21, which uniquely identifies each cell in the worksheet.

Active Cell

The cell selected in active worksheet is called active cell.

Range

A Range is a group of one or more cells. If you select more than one cell at a time, you can then perform actions on the group of them at once, such as applying, formatting or clearing the contents. A range can even be an entire worksheet. It is referred to by using the first and last cell addresses seperated by a colon. The group of cells from **A1 to A20** would be written as **A3:A20**

Formula Bar

It is located above sheet area. It displays the value of formula entered in the active cell.



Name Box

It is located to the left of formula bar. It displays the cell reference of the active cell.

Sheet Tabs

They are the tabs that display the name of the worksheet in the workbook, by default its name are sheet 1, sheet 2, sheet 3, etc.

Status Bar

The status bar in excel can be quite useful. By default, the status bar at the bottom of the window displays the average, count and sum of the selected cells.

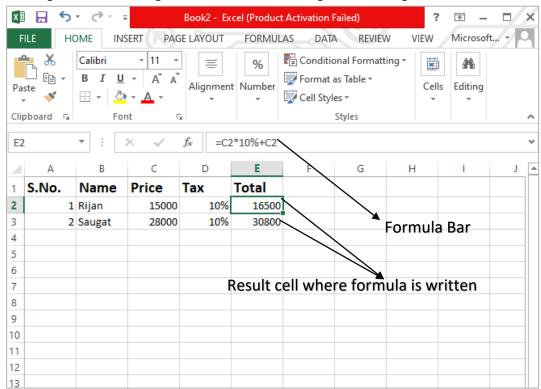
Features

1. Formulas

Formulas are the **Bread and Butter** of worksheet. Without formula, worksheet will be just simple tabular representation of data. A formula consists of special code, which is entered into a cell. It performs some calculations and returns a result, which is displayed in the cell.

Creating Formula

For creating a formula you need to type in the formula bar. Formula begins with "=" sign. When building formulas manually, you can either type in the cell addresses or you can point to them in the worksheet. Using the Pointing method to supply the cell addresses for formulas is often easier and more powerful method of formula building. When you are using built-in functions, you click the cell or drag through the cell range that you want to use when defining the function's arguments in the Function Arguments dialog box.



As soon as you complete a formula entry, Excel calculates the result, which is then displayed



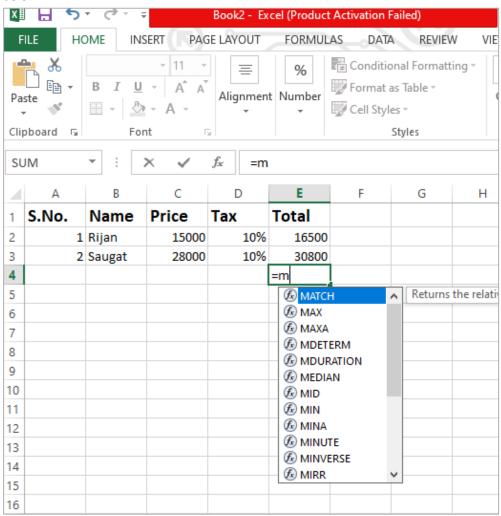
inside the cell within the worksheet (the contents of the formula, however, continue to be visible on the formula bar anytime the cell is active). If you make an error in the formula that prevents Excel from being able to calculate the formula at all, Excel displays an Alert dialog box suggesting how to fix the problem.

2. Function in Formula

Many formulas you create use available worksheet functions. These functions enable you to greatly enhance the power of your formulas and perform calculations that are difficult if you use only the operators. For example, you can use the LOG or SIN function to calculate the Logarithm or Sin ratio. You can't do this complicated calculation by using the mathematical operators alone.

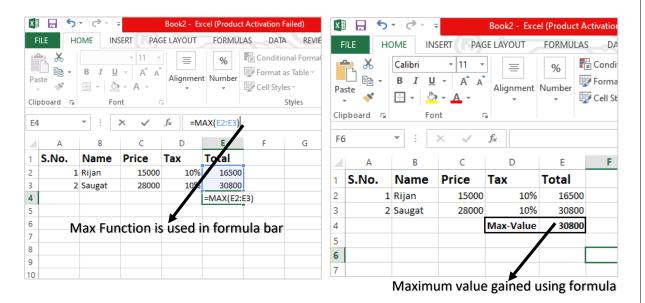
Using Functions

When you type = **sign** and then type any alphabet you will see the searched functions as below.





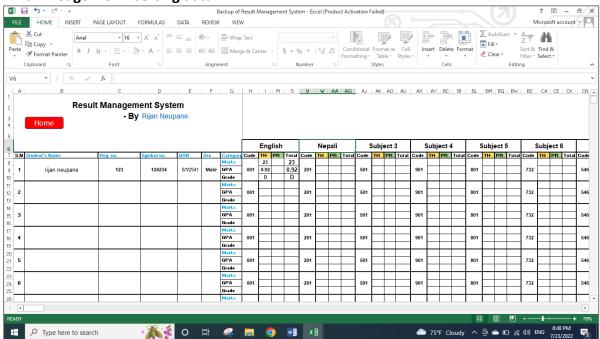
Suppose you need to determine the largest value in a range. A formula can't tell you the answer without using a function. We will use formula that uses the MAX function to return the largest value in the range. Let's see in the image below:



Some Lab Works

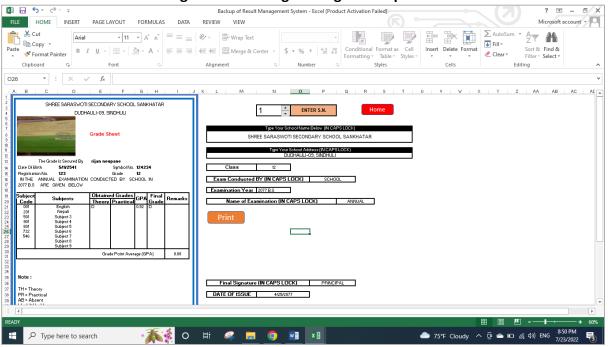
Result Management System

a. Ledger for inserting data





b. Grade Sheet fetching data from ledger using VlookUp





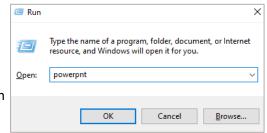
PowerPoint

Introduction to MS-Powerpoint

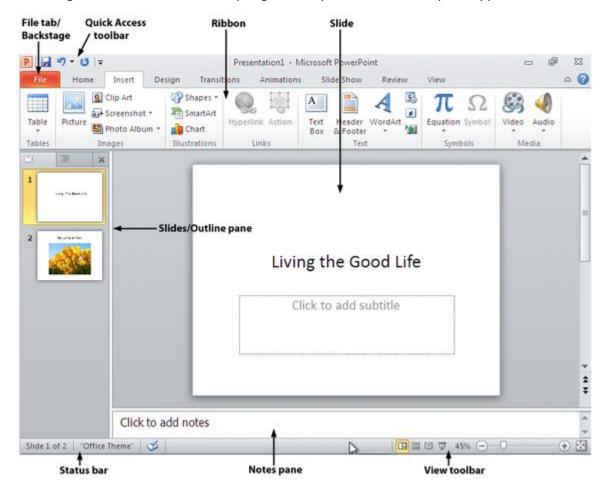
MS-Powerpoint is a presentation software that helps us to create combination of various slides depicting a graphical and visual interpretation of data, to present information in a more creative and interactive manner. By default, presentations saved in a powerpoint 2010 are saved with the .pptx extension.

How to open MS-Powerpoint

- **Step 1** Click the button windows + R at the same time.
- **Step 2** Write powerpnt in open option in run file.
- Step 3 Press OK button and now MS-Powerpoint file is open



Following is the basic window which you get when you start the Powerpoint application.

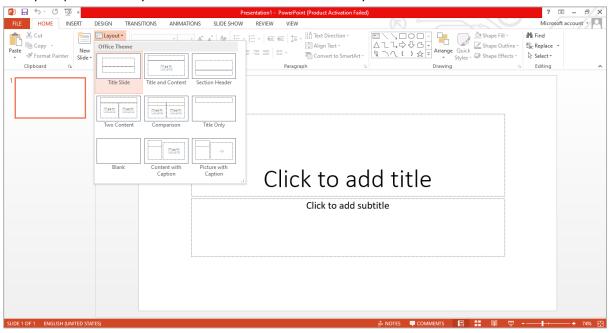




Features of Powerpoint

1. Slide Layout

Multiple options and layouts are available based on which a presentation can be created.



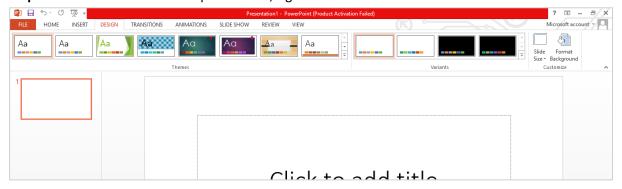
This option is available under the "Home" section and one can select from the multiple layout options provided.

2. Slide Design

MS-Powerpoint has various themes using which background color and designs or textures can be added to a slide. This makes the presentation more colorful and attracts the attention of the people looking at it.

Given below are the steps to apply theme in PowerPoint:

- Step 1: Click the Design ribbon .
- **Step 2**: Select one of the theme that suits your requirements.
- Step 3: To edit the theme for a specific slide, right-click on the desired theme and select.



3. Slide Background

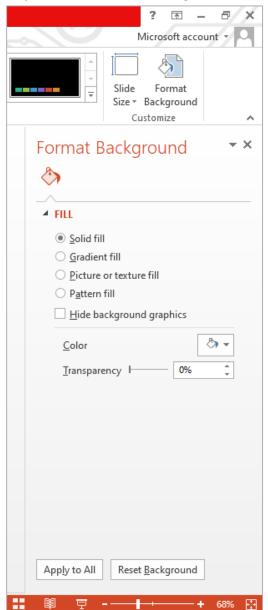
As PowerPoint is a design-based program, backgrounds are effective ways of improving the aesthetics and readibility of the slides. The **Themes** in Powerpoint help to select the background by default, so every time you change the theme, the default background is set automatically. Theme includes more than just backgrounds, so you can retain other aspects of the theme while changing the default background.



Given below are the steps to apply backgrounds in PowerPoint.

Step 1 - Click on Design tab

Step 2 – Click on Format Background at the Right Corner of window.



Step 3 – Set the designed background following the options as shown on above image.

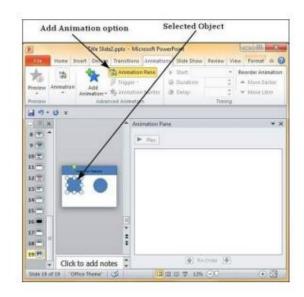
4. Animation

Powerpoint offers animation support which can be used effectively to add some motion in a monotonous presentation and make it more interesting. Animation can be applied to any object on the slide and the motions can be automated, timed or triggered.

The following steps will help you add and preview animations in the slide.

- **Step 1** Go to the Animation ribbon and click on the Animation Pane to display the animation sidebar.
- **Step 2** Select one of the objects in the slide and click on Add Animation menu option.
- **Step 3** Choose one of the Animation options.



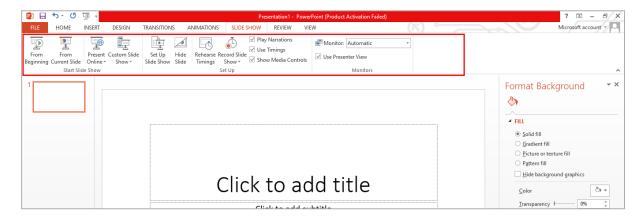




- **Step 4** Once you add the animation for an object, it will show up in the animation pane.
- **Step 5** By default, all the animations are initiated by a click, but you can change this.
- **Step 6** From the timing section, you can also manipulate the animation timings.
- Step 7 To preview the animation settings, just click Play on animation pane.

Slide Show in PowerPoint

Most PowerPoint presentations are created to be run as a slideshow. Given all the advanced features available in PowerPoint 2010, it is no surprise that there are many features related to running the slideshow that have been included in this program too. Most of these features are really to help you create a good slideshow without having to go through the entire presentation over and over again after every minor change. Features related to running the slideshow are grouped under the slideshow ribbon.



Convert PowerPoint Slide to a Video

- Step 1: Click on the file tab to show file options.
- Step 2: Scroll down and select Export and navigate to create a video.
- Step 3: Select your video settings preferences.
- Step 4: Click on create a video.
- Step 5: Choose a filename, saving a location and video type.



Presentation on CALL

















Conclusion

Learning with the help of CALL improves students' cognitive and communicative abilities more than traditional teaching and learning methods. Cognitive learning makes the learner responsible for his own learning and the communicative approach improves learner communication skills in the language.





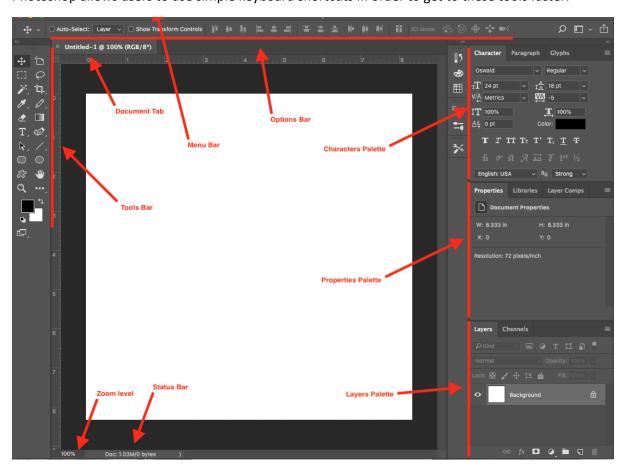
Adobe Photoshop

Introduction to Photoshop

Adobe Photoshop is a graphics editing program, or image editing software that allows you to create and manipulate visual images on the computer. Editing features in the program help in creating and managing visual images for internet, print and other new media disciplines.

Workspace

Photoshop lays out the most important tools that you will need right on the main workspace. This allows you to easily find the tools that you need without digging through menus. Furthermore, Photoshop allows users to use simple keyboard shortcuts in order to get to these tools faster.



Tool Bar

It provides access to a variety of tools with multiple image-editing functions. These tools typically fall under the categories of drawing, painting, measuring and navigation, selection, typing and retouching. Some tools contain a small triangle in the bottom right corner of the tool icon; these tools can be expanded to reveal similar tools.

Options Bar

Works in co-ordination with your tool bar to provide additional settings for the tool you're currently using. The options bar changes according to whichever tool you are using.



Menu Bar

It contains menus for performing common tasks. It consists of eleven menu options: File, Edit, Image, Layer, Type, Select, Filter, 3D, View, Window, and Help. Menu items containing an ellipsis indicate that a dialogue box will follow that option. Menu items with an arrow indicate a submenu for that particular option.

Panels/Palettes

It helps you monitor and modify your work. It provides groups of functionality specific to certain tools or tasks. You can create a custom workspace by moving and manipulating panels.

The tools layout

Let's look at how Photoshop's toolbar is organized. While it may seem like the tools are listed randomly, there is actually a logical order to it, with related tools grouped together.

At the top, we have Photoshop's Move and Selection tools. And directly below them are the crop and slice tools. Below that are the Measurement tools, followed by Photoshop's many Retouching and painting tools. Next are the drawing and Type tools. And finally, we have the navigation tools at the bottom.

The toolbar's hidden tools

Each tool in the toolbar is represented by an icon, and there are many more tools available than what we see.

A small arrow in the bottom right corner of a tool icon means that there are more tools hiding behind it in that same spot.



Most of the spots in the toolbar hold more than one tool.

To view the additional tools, **click and hold** on the icon. Or **right-click** on the icon. A fly-out menu will open listing the other tools that are available.

For example, if I click and hold on the Rectangular Marquee Tool icon, the fly-out menu tells me that along with that tool, the Elliptical Marquee Tool, the Single Row Marquee Tool and the Single Column Marquee Tool are also grouped in with it.



To choose one of the additional tools, click on its name in the list. I'll choose the Elliptical Marquee Tool.



A Summary of Photoshop Tools

An asterisk (*) after a tool's name indicates a default tool, and the letter in parenthesis is the tool's keyboard shortcut. To cycle through tools with the same keyboard shortcut, press and hold shift as you press the letter. This list id up-to-date as of **Photoshop CC 2021.** Note that some tools are not available in earlier versions.

Move and Selection Tools



Move Tool * (v)

The Move tool is used to move layers, selections and guides within a photoshop document. Enable **Auto Select** to automatically select the layer or group you click on.



Artboard Tool (v)

The artboard tool allows you to easily design multiple web or UX layouts for different devices or screen sizes.



Rectangular Marquee Tool * (M)

The Artboard Tool allows you to easily design multiple web or UX layouts for different devices or screen sizes.



Elliptical Marquee Tool (M)

The Elliptical Marquee Tool draws elliptical selection outlines. Press and hold Shift to draw a selection in a perfect circle.





Single Row Marquee Tool

The Single Row Marquee Tool in photoshop selects a single row of pixels in the image from left to right.



Single Column Marquee Tool

The Single Column Marquee Tool in photoshop selects a single column of pixels in the image from top to bottom.



Lasso Tool * (L)

With the Lasso Tool, you can draw a freeform selection outline around an object.



Object Selection Tool * (W)

The Object Selection Tool lets you select an object just by dragging a rough selection outline around it.



Quick Selection Tool (W)

The Quick Selection Tool lets you easily select an object simply by painting over it with a brush. Enable "Auto-Enhance" in the options bar for better quality selections.



Crop Tool * (C)

Use the Crop Tool in Photoshop to crop an image and remove unwanted areas. Uncheck "Delete Cropped Pixels" in the options bar to crop an image non-destructively.



Brush Tool * (B)

The Brush Tool is Photoshop's primary painting tool. Use it to paint brush strokes on a layer or on a layer mask.





Eraser Tool * (E)

The Eraser Tool in photoshop permanently erases pixels on a layer. It can also be used to paint in a previous history state.



Zoom Tool * (Z)

Click on the image with the Zoom Tool to zoom in on a specific area. Press and hold Alt and click with the Zoom Tool to zoom out.

Lab Work of Photoshop

