Ibadan Distance Learning Centre Series

CSC 272

INFORMATION MANAGEMENT SYSTEM

By

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GENERAL INTRODUCTION

Have you ever wanted to store some form of data on your system, for instance the list of your friends with their addresses. Or perhaps you need to type and format a report for your boss. Or maybe your office needs to gather and store lots of numerical data for subsequent analysis. And then after the analysis you will have to make a presentation based on the analysed data. Well, this course is the course for you. This course is a service course to teach you how to use some of the common applications on your computer system to store data, analyze such data to become information and subsequently present your information to an audience.

At the end of the course you should be familiar with four applications in the Microsoft Office suite. We chose the Microsoft Office Suite because they are easy to get and most computer come with the applications pre-installed.

LECTURE ONE

INTRODUCTION TO MICROSOFT OFFICE 2013

Introduction

Have you ever seen some documents and wondered how they were created. Perhaps you may have wondered if you can achieve such dexterity in the preparation of such documents, calculating large volume of data or even presenting such information. This course is designed to provide you with an introduction to the use of some Microsoft Office packages:- MS Word, MS Excel, MS Access and MS PowerPoint and how you can utilise them to be more productive.

Objectives

At the end of this lecture, you should be able to:

1. Explain the purpose of the packages covered in this course

2. State when to use a package

3. Identify the icon of the applications we will study.

1.1   Definitions and Descriptions

We chose to use the Microsoft suite, because it is the most common suite for preparing and managing data. However, there are other applications such as Open Office which open source and can also be used in place of Microsoft Office. Files prepared in either applications can be modified with either. For the purpose of this class, we will stick to Microsoft Office applications. Microsoft designed software programmes for productivity in homes, schools, offices and organisations. These applications are commonly installed as Microsoft Office except if they are installed separately. It is available for both Windows and Mac and includes programs, servers, services, and solutions for various business purposes. The programmes found in Microsoft Suite include Access, Excel, Word, PowerPoint, Outlook and Project, and a few more (see figure below). As earlier written, for the

purpose of this course, we will limit our learning to the first four. In subsequent sections, you will briefly learn what each of these applications are used for and how they can assist you to be more productive.
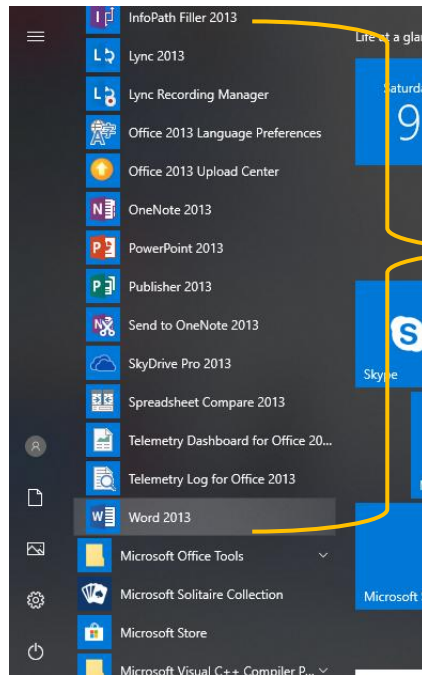
A list of some programmes found in Microsoft Office.

For the purpose of this course, the programmes of focus are Microsoft Word, Microsoft Excel, Microsoft Access and Microsoft PowerPoint which will all be treated using a computer running Windows.   The icons of each of these applications are used to launch the application. Each icon is displayed in the appropriate section. Note that the icons are different for different versions of Microsoft office. So the icons displayed here are for Office 2013.

1.2   Microsoft Word

Microsoft Word or MS-WORD (often called Word) is a Graphical word processing program that users can type with. Its purpose is to allow

users to type and save texts, tables, some graphics, some charts, etc. A file prepared and saved with MSWord is usually called a ***document*** and is generally save with the extension ".doc" or with newer versions of MSWord, ".docx". MSWord has helpful tools to make documents such as:

- Choice of typefaces

- Counting of words (this also counts letters and lines)

- Display of synonyms of words

- Insertion of pictures in documents

- Insertion of Tables

- Printing of document in different ways

- Special codes

- Spelling and grammar checker

- Thesaurus to help improve your writing

- Tracking of changes in a modified document

- Web pages, graphs, etc.

Microsoft Word also allows add-ons of third party software for spelling and grammar checker such as Grammarly. In the lecture two through lecture four, we will study aspects of MSWord for your level.

1.3   Microsoft Excel

Microsoft Excel is a spreadsheet application included in the Microsoft Office suite. A spreadsheet application is a tremendous tool for maintaining, analysing and calculating *small* sets of information. Spreadsheets present tables of values arranged in rows and columns that can be manipulated mathematically using both basic and complex

arithmetic operations and functions. Microsoft Excel is easy to understand and use. It allows you to create column names, enter your data, create formulas, analyse your data and perform so many other

functions. You can also sort, filter, and format the data quickly and easily. An Excel file is generally called a ***workbook***, because it usually contains several worksheet, and the file is save with the extension ".xls" or ".xlsx".

In addition to its standard spreadsheet features, Excel also offers programming support via Microsoft's Visual Basic for Applications (VBA), the ability to access data from external sources via Microsoft's Dynamic Data Exchange (DDE), and extensive graphing and charting capabilities. The best part about Excel is, it can apply to many business tasks, including statistics, finance, data management, forecasting, analysis, inventory, billing, and business intelligence. Following are the few things you can achieve with Excel:

- Number Crunching
- Plotting of Charts and Graphs
- Storing and Importing Data
- Manipulating Text
- Automation of Tasks
- Analysing of data
- Spelling and grammar checker

We will study some part of Excel in lectures five through eight. Note that we CANNOT exhaust ALL that can be achieved using Excel in the duration of this course.

1.4   Microsoft Access

Have you ever wanted to store a lot of related information but still have them distinct? For instance, you may want to store a list of the books in your library, who borrowed which one and when? Well, Microsoft Access is an information management software that helps you store information for reference, reporting, and analysis. Microsoft Access helps you analyse large amounts of information, and manage related large amounts of data faster and more efficiently than with Excel or other types of spreadsheets applications. In simple term, Microsoft Access is a type of database software that is used

to store information for reporting, referencing and analysis. MSAccess is most popular for its tables, forms and queries, which are sometimes called 'object' of Access. Suppose you are the owner of some business and would like to keep track of the happening in the office, here are some of the basic functions of MSAccess and how they can help you be more productive. MSAcess can:

- Maintain all information for each client or customer, including addresses, invoices, payment and order information.
- Track financial data without needing a separate software program. If you have the full Microsoft Office Suite, you may even set payment reminders.
- Manage marketing and sales.
- Track production and inventory by entering data
- Run reports and analyses using the reports and charts. You can basically run a report on anything within a matter of minutes, such as customers who are behind on payment.

Now that you have learned a bit more about what Microsoft Access can be used for, be prepared to learn more in subsequent lectures. An Access file is usually called a database and saved with the extension ".mdb" or ".accdb".

1.5 Microsoft PowerPoint

Imagine you have analysed your data, prepared some information and you have been asked to present these to your team members. How do you co about this. Well, you need to use Microsoft PowerPoint. PowerPoint is a software used to design presentation slides for reporting of results. It provides the avenue to present reports, results and information in general in a concise, attractive and graphical way. It allows for less words and more straight to point approach. The presentations are a collection of slides used for storytelling or reporting information on *ANY* topic. PowerPoint presentations are commonly used in business meetings, seminars, for training and educational purposes.

A PowerPoint file is usually called a Presentation and saved with the extension ".ppt" or '.pptx" for newer versions of PowerPoint. Some of the tasks you can achieve with PowerPoint include:

- Plotting of simple charts

- Inserting pictures and graphics to buttress your point

- Inserting videos of importance

- Using special effects on objects

- Using beautified background for each slide

- Spelling and grammar checker

The Office Environment

In the office environment, the window of each application has several portions namely the Name bar, status bar, tool bar, quick access to mention a few. These portions may vary from application to application. Even the tool bar for each application varies depending on what is "active' at that time. For each of the applications we will study these portions.

Summary

In summary, Microsoft Office includes the following programs:

- **Access** is a database management programme. Hence, it should be used when large amounts of data or information are to be collected and organised in a format for easy and future retrieval, reporting and analysis.

- **Excel** is a spreadsheet programme. Hence, it should be used for mathematical manipulation using both basic and complex arithmetic operations and functions.

- **PowerPoint** is a presentation programme. Hence it should be used for the presentation of information.

- **Word** is a Word processing program. Hence it should be used to type reports and documents.

Post Test

1. How are the various applications launched?

2. If you have a small amount of data and would want to analyze them, which application would you use?

3. Suppose you have a small business enterprise and need to keep track of several information in one spot, and at some point in time, generate reports based on the data available which of the office applications will be suitable for you?

4. Which 'tool' is available in all three of the applications discussed in this lecture?

References

Jeff W., 2018, *Microsoft Office - Service Description*, The Board of Regents of the University of Wisconsin System.

OpenGate Software Inc., 2018, A Brief MS Access Tutorial.

ExcelChamps, 2019, An Introduction to Microsoft Excel

Arkware.com, 2016, Microsoft-access-brief-introduction-new-users

LECTURE TWO

MICROSOFT WORD (I)

Introduction

This course is designed to guide on the use of some Microsoft Office packages. For this chapter you will be introduced to the MS Word environment, how to launch the application depending on your operating system and also how to navigate through MSWord.

Objectives

At the end of this lecture, you should be able to:

1. Launch Microsoft Word 2013 on Windows 7, 8 and 10.

2. Navigate around the MSWord 2013 application.

3. Identify icons and state what they mean or stand for.

2.1 Launching MS Word 2013

The easiest way to launch MSWord in Windows 7 environment is to use the following steps:

1) Click the **Start** button

2) In the Start Search field type "Word"

3) Select Word 2013 from the search results as show on the right ☞☞.

If your system is running **Windows 8**, then you have two options you can use to launch the application:

Option One:

If the start screen is displayed:

1) Type "Word" and as in Windows 7, a search result will be displayed which will show the

MSWord icon.

2) Select Word 2013 from the search results

Options Two:

If the desktop is displayed,

1) Click the start button

2) Type "Word"

3) Select Word 2013 from the search results
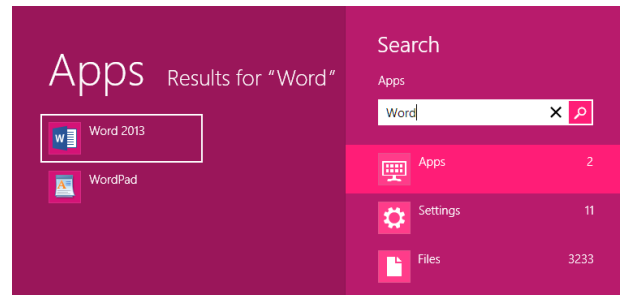
If your system is running **Windows 10**, then

1) Type "Word" in the search field on the bottom left of

your desktop shown below:

2) Select Word 2013 from the search results
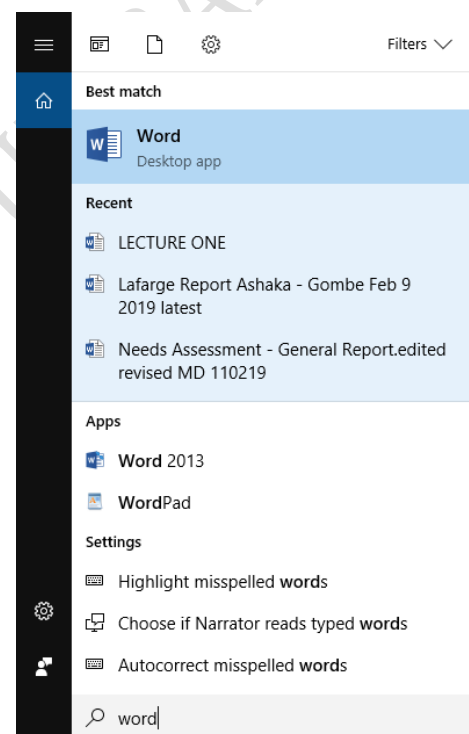
If you have successfully launched the application, you will be

directed to the start screen. We will study that next.

2.2 The Start Screen

The start screen is shown below with some of the graphics and

tools it offers. To make life easy for you, we used textboxes to label important sections of this start

screen.

The Start Screen is a new feature of Office 2013. Unlike older versions of Office, opening an Office

2013 application does not take you directly to a blank document – it instead opens the Start Screen.

However, it will open directly to a blank document if a word document is already opened. Note that

the Start Screen can be disabled under File → Options., however, doing so will cause the application

to open a blank document by default on start-up, similar to earlier versions of Office.

Recent Word Documents

Browse other Word
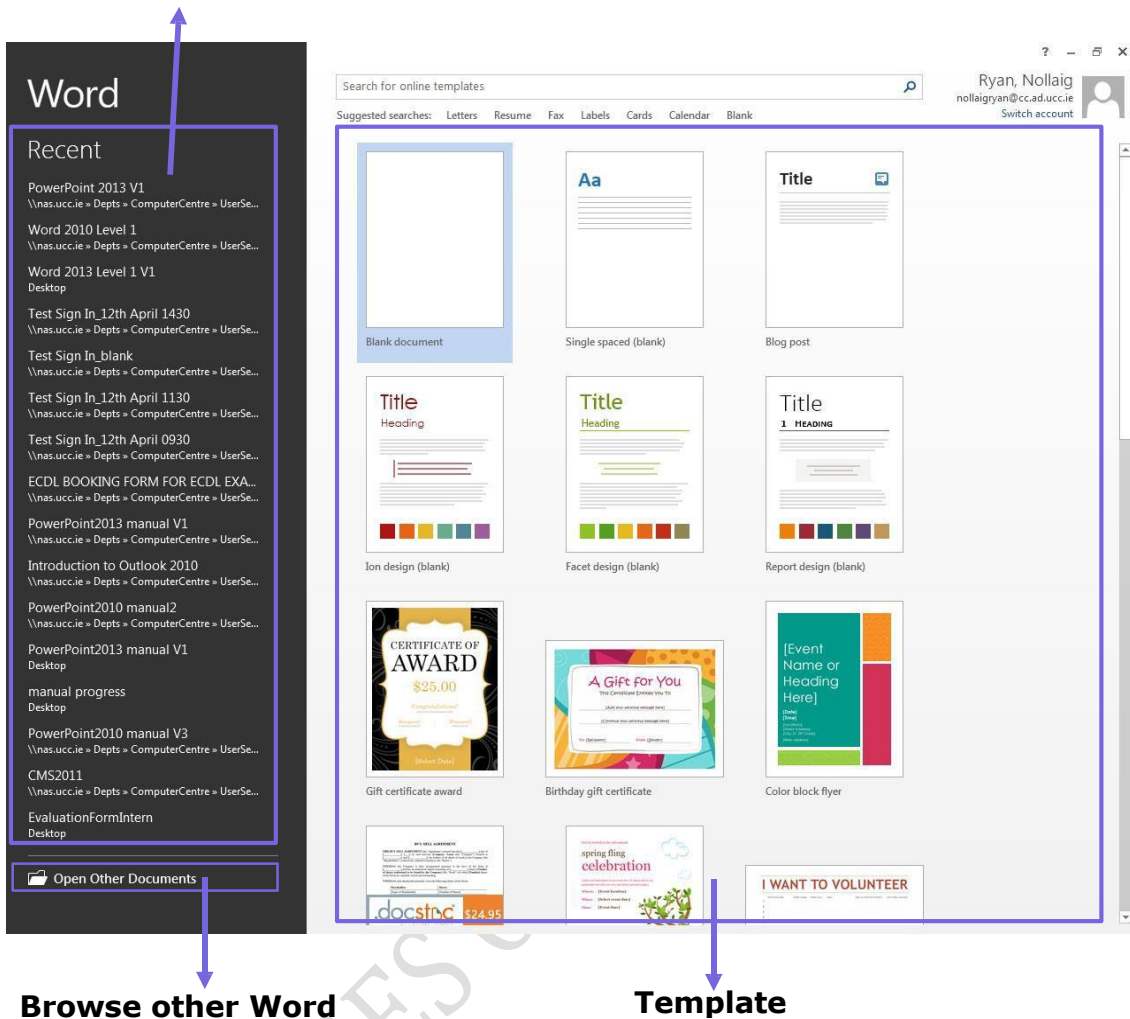
Template

The Start Screen displays recently opened documents on the left, and a selection of templates in the preview pane on the right. Clicking a template will open a preview pane demonstrating that template and some information about it. MSWord templates include letters, labels, reports, event flyers and much more. You can also browse for other documents not listed in the recent document section on the left. This will let you navigate to the file manager where you can then select any other file.

By default most people choose "Blank document" because they already have in mind what pieces of information they want to put in their Word document. This enables them start preparing their Word document, which is basically typing and formatting and inserting objects were necessary. Next we will study the MSWord window in details.

2.3   The MSWord Window

If you chose the blank document template, the next screen you will be shown is below. That is the standard MSWord Window. We have also labelled it for ease. Note that the system will automatically name the document "Document1". This is the standard view of Word, known in Word 2013 as the 'Print Layout' view
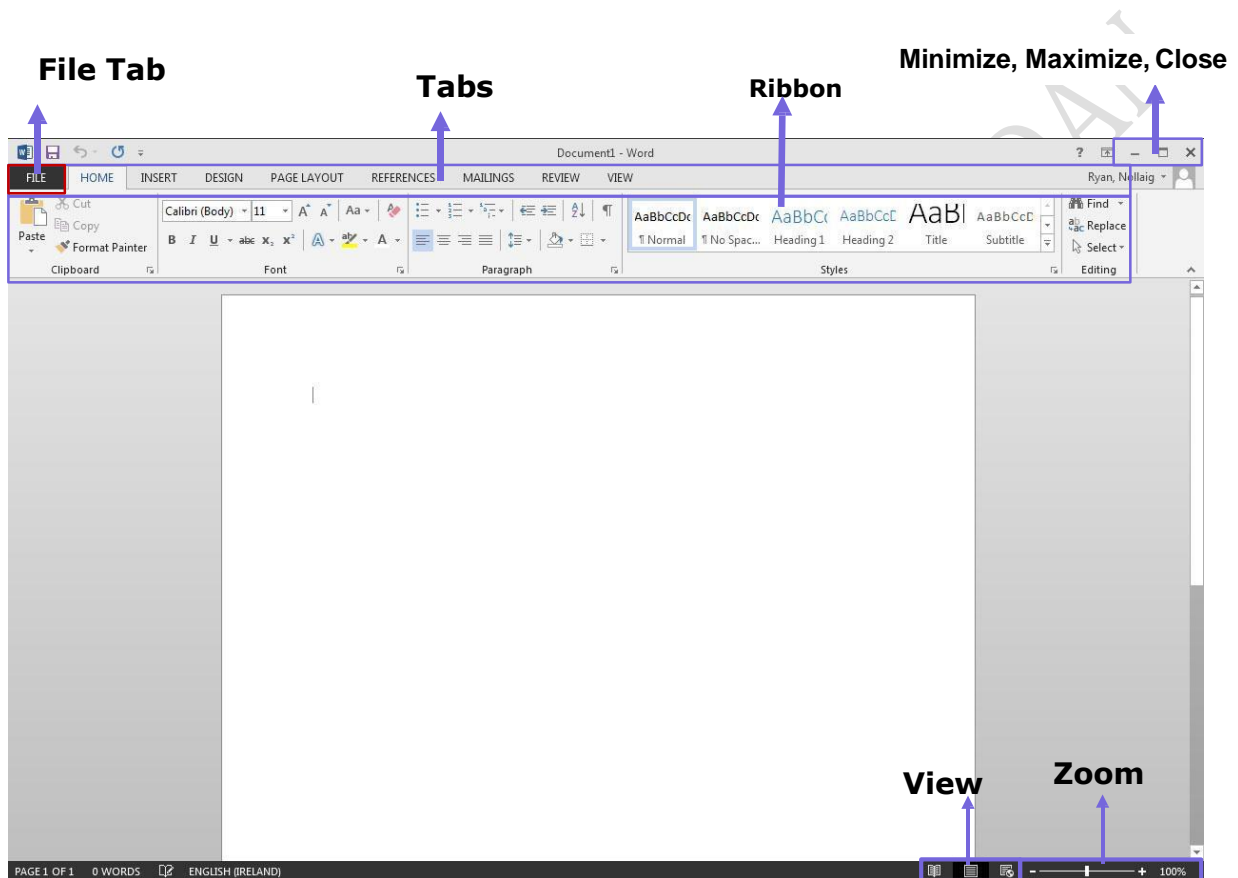
The Minimize, Maximize, Close portion of the screen enables you to minimize a document you are currently working on, or maximize the document (if the window is not full) or Close the document entirely. Closing the document may also result in exiting the MSWord application.

The Zoom section allows you to blow up your document especially if the font size is small. Note that this does not increase the size of the font, it only zooms in to make the font appear bigger on the screen only.

The Layout section allows you to navigate through the three main different layouts allowed in MSWord, which are Read Mode, Print Layout (default layout) and Web layout. The other two

layouts are Outline and Draft. The layout can also be seen as the different ways of displaying the working environment of MSWord.

The tabs are used to group similar tools and are named appropriately. So each time you click on a tab, the ribbons, which contain a collection of icons for to perform functions under that tab, is displayed. The icons or tool-points may also be expandable if it has an arrow-like symbol at the bottom right of each group. Next, we will briefly treat what each tab is used for.

2.4   The File Tab

The File Tab is located on the top left hand corner of the screen can be regarded as a replacement for the file menu. The options normally found in the file menu such as Open, Close, Save, Save As and Print can all be found here.

The next figure shows the arrangement of the functions available on the File Tab. You can clearly see the location of Open, Save, Save As and Print, other functions on this tab include the New, export, share and close among others. Of particular interest is the Info menu which will be briefly discussed.
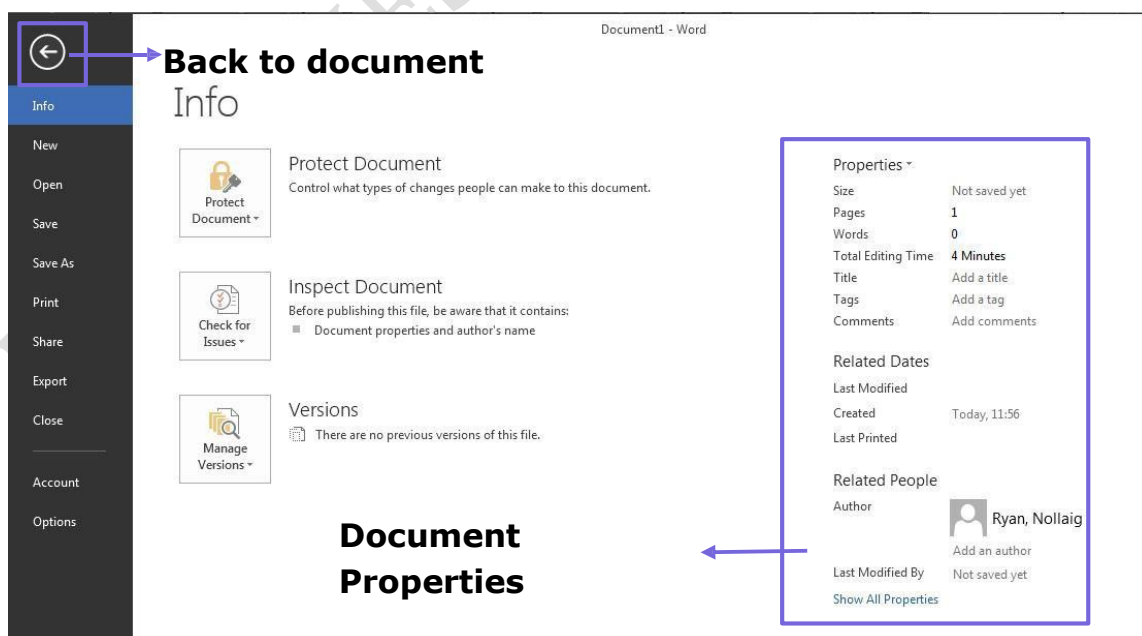
The Info Menu

The Infor menu houses the Protect, Inspect and Versions sub-menus and they in turn contain some nice features such as Mark as Final and Run Compatibility Checker; however there are additional features such as Inspect Document, Encrypt Document, Restrict Access and Add Digital Signature that need to be understood and if used. For your level, we will only worry about the basic features.

Protect Document

Protect Document controls what type of changes people can make to the document you are working on, should you send them a softcopy. It lets you encrypt (which includes setting a password) your document before sending it to others. We would not recommend doing this because if the password is forgotten the data cannot be retrieved. So use the feature with caution. The *Protect document* sub-menu also allows you to Restrict Access to the current open document. This enables you to limit the functionality of a document while still allowing others to view it, and, if they have the necessary permissions, work with it. *This feature is an add-on that needs to be bought.*

Before you share an electronic copy of a Word document with other people, you may use the **Mark as Final** command to make the document read-only and prevent changes to the document. When a document is marked as **final**, typing, editing commands, and proofing marks are disabled or turned off and the document becomes read-only. In addition, the Status property of the document is set to Final. Note that this is not a security feature, the *mark as final* can be removed by the recipient of the file and the file will be editable once more. Its use is merely to convey that you believe this to be a completed work.

Lastly the Protect document feature allows files to be signed digitally and therefore be verified by a recipient. Again this feature is a commercial add-

on that needs to be purchased.

Inspect Document

With this feature, you can check your document

for obvious issues that might cause problems in
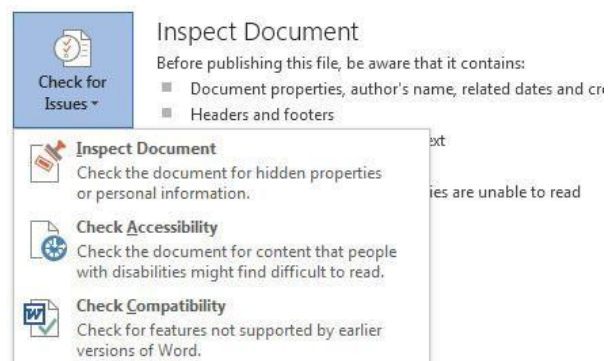
earlier versions of Word here. This is useful, for example when you need to save the document you are working on as an earlier version of MSWord.

2.5   The Ribbon

The Ribbon is present in all Microsoft applications but contain differently named tabs and commands. Some tabs are however common in all the applications. There are three basic components to the Ribbon, See figure below.

1. **Tabs:** There are seven basic ones across the top. Each represents an activity area and has been carefully selected according to user activities. Eg. **HOME**.

2. **Groups:** Each tab has several groups that show related items together. E.g. **Font**

3. **Commands:** A command is a button, an icon, a box to enter information, or a menu. E.g. [B]. One thing you should note is that if you place your mouse over any command, without clicking the command, Microsoft office will display the name of that command and state what is does, briefly. Try it now!
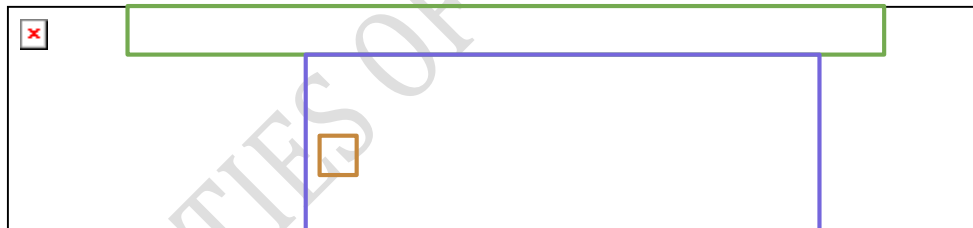
2.5.1   The Home Tab
This tab is displayed by default as soon as a document is opened or a new document is created. It contains all the tools you use most often, such as the commands in the Font group for changing text font: Font, Font Size Bold, Italic superscript, subscript etc. One command that will come in handy is the change case command. It allows you to change the case of whatever has been typed! Try it right now. Type a sentence in ALL CAPS and then click on the icon. A dropdown menu will appear for you to select what you want. You see, not so difficult.

The Clipboard group houses the cut, copy and paste (special) commands as well as a feature called

format painter, that basically copies the formatting used in one paragraph and applies it to another paragraph.

The Paragraph group contains commands for Bullets and Numbering, Alignment and Shading, Line spacing, Indentation, Sorting among other commands. One icon I strongly advice students to active is the Show/hide ¶ . This is called the paragraph mark and when activated, if allows non-printing characters like itself, the space and tab character to be visible in the MSWord environment. Activating this feature, tells you what is where. Turn this feature on right now ans notice all the 'symbols' that have appeared from nowhere.

Next to this group of commands is the Styles group that allows you to set and apply a consistent format for a paragraph. Then then editing group that allows you Find, Replace and Select object.
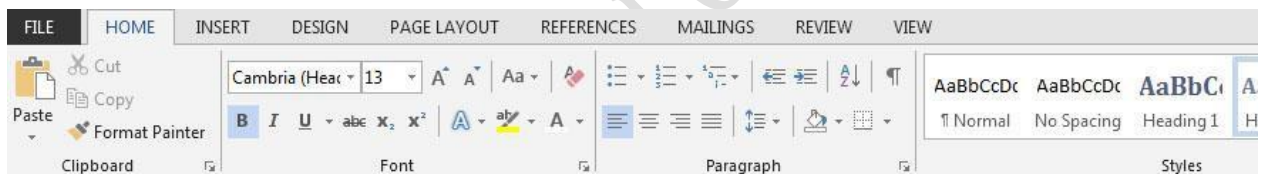
2.5.2   The Insert Tab
The Insert Tab, shown below allows you to among other things insert a cover page to a document, blank pages or a manual page break, tables, pictures smartArt headers and Footers among other commands. Some of these feature will be treated in subsequent lectures.

All graphic objects can also be inserted from this tab. When you insert a graphic or table of shape, **additional tabs** known as contextual tabs become available. For example, if you insert a picture the **Picture Tool** contextual tab appears.
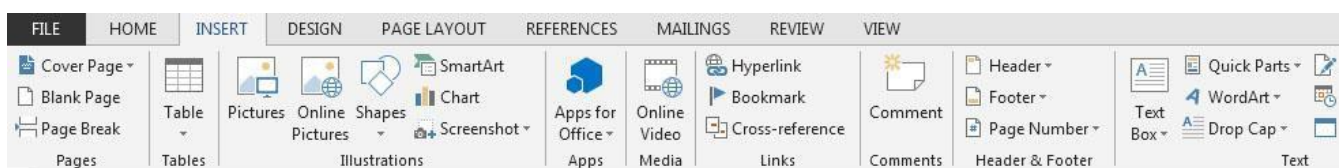
An important tool you would need is the Equation tool. It allows you to design an equation, exactly the way it should appear. The good thing is that the equation is treated an object and moves together instead of scattering when you move it. Try it out now. Click on the equation command and type the following equation. You need to be patient with this.

$$V = \frac{1}{4\pi\epsilon_0} \sum_i \frac{q_i}{r_i}$$

2.5.3   The Design Tab

The Design tab is a new feature introduced in MSWord 2013. In previous versions of Word, commands and options related to the formatting and style of the overall document, such as themes, watermarks, styles, paragraph spacing etc. were spread across several tabs. Now they can all be found together in the Design Tab. This tab also gives you the option to change a document 'theme,' which changes the look of Headers Footer and Fonts.

Two commands that may interest you are the watermark command and the page border command. The watermark command allows you to insert a picture or text and use it as the background of the page. Such pictures or text appear faint. Have you ever seen a document that had "Confidential" written faintly across the page? That is a water mark! The Page Borders, allow you to use some graphics as borders to the pages of your document.

2.5.4   The Page Layout Tab

The Page Layout tab allows you to change the Page Setup of your document. That is, all the commands you need to set the margins of your document, set orientation, select the paper size, indent paragraphs among other commands. The Break command is usually helpful to ensure that a page, for instance starts on a new page, instead of the middle or bottom of the page.
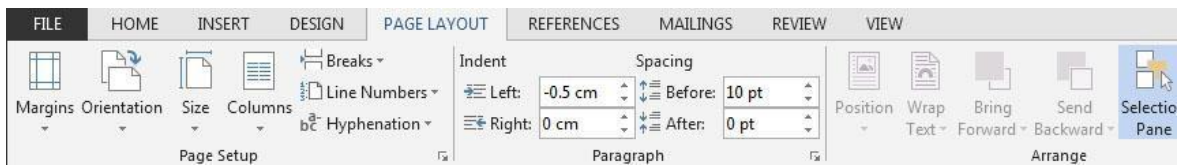
Remember how newspapers are several columns, this tab allows you to achieve such. By default every new document is started as a one-column document but you can change that appearance from this tab using the *Columns* command.

2.5.5   References Tab

There is a group in this tab for creating a Table of Contents, footnotes, an index, a bibliography and other references. This feature of MSWord is for advanced users of the application because of the complexities involved.
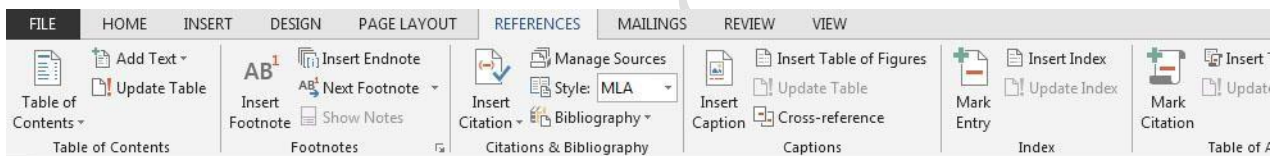
2.5.6   The Mailings Tab

This tab contains tool that are for medium to advance users of MSWord. The Mailings tab is used to perform a *mail merge* and also create envelopes and labels. A step by step guide can be launched from the Start Mail Merge icon. Mail merge operation is used when you need to send say the same letter but with minor customization to a large number of people. You would need a table that has all their information.
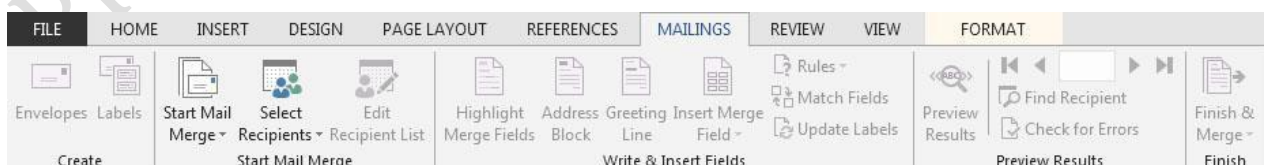
2.5.7   Review Tab

The review tab provides the tools for proofing a document that is spell checking, thesaurus, word count, etc. It is here you can also track changes and accept or reject changes on an edited document.

The review tab also allows you the set the language you want MSWord to use when performing Spell checks.
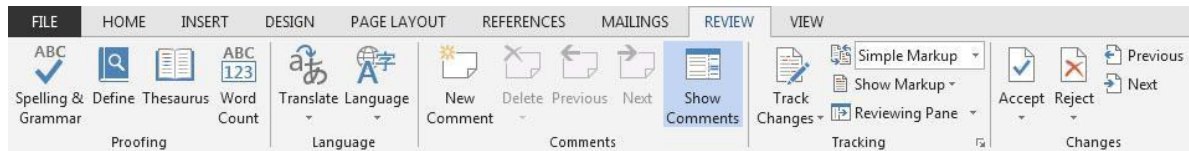
2.5.8   View Tab

From the view tab, you can choose to switch on the ruler, gridlines, and split windows. You can also switch between 'print layout', 'read mode', 'outline mode' and others. If you have two documents open at the same time and would want to review them side by side, then you click on the "view side by side" command. This will allow you view the two documents side by side, you can even synchronize the scrolling so that while you scroll down in one document, the other document also scrolls down.
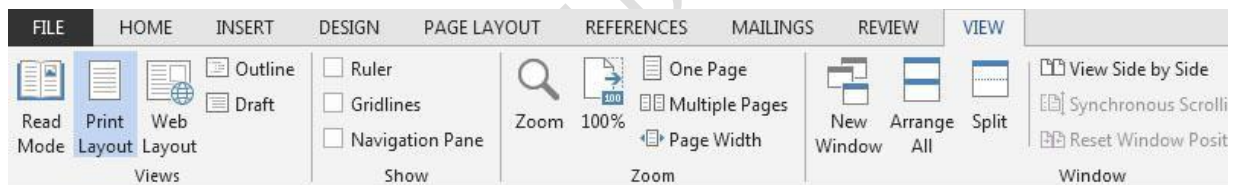
2.5.9   The Contextual Tabs

In MSWord and other Microsoft applications, certain tabs appear only when you need them. Let's say you have inserted a picture or a table, but now you want to do more with it. Maybe you want to change how text wraps around it or you want to crop it. Where are those commands found? Just select the 'object' (picture, graph, table) and it's tab will appear. For example:

• Select a picture
• The Picture Tools tab appears. Click that tab.
• Additional groups and commands appear for working with pictures; like the Picture Styles group.
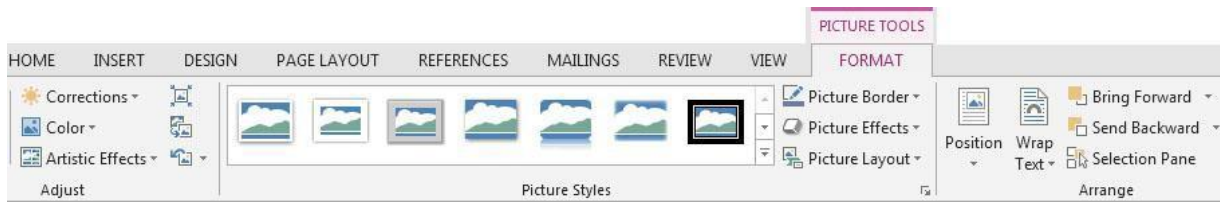
When you click away from the picture, the Picture Tools tab disappears, and you are returned to the Home Tab. Note that the Contextual tabs are easily identified by their distinctive colours. They usually have either one or two tabs, as shown below. They also appear for other activity areas, such as:

- Tables
- Shapes/Drawings
- Smart-art
- Charts
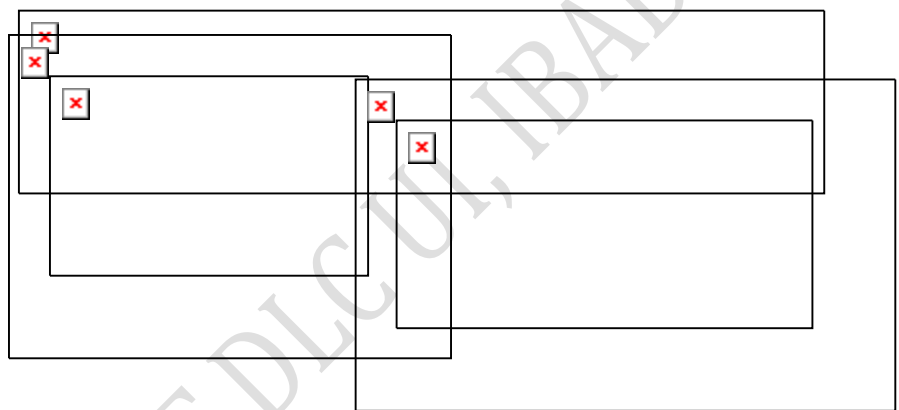
2.6   Quick Access Toolbar

The Quick Access Toolbar is located on the upper left hand corner next to the Microsoft File Tab. It is a customizable toolbar that contains a set of commands that are independent of the tab that is currently displayed. This means that the buttons remain the same no matter what tab is currently open. By default, it contains the commands save, undo, and re-do, but you can customize it to display any commands you wish.

2.6.1   Adding a command to the Quick Access Toolbar

There may be a command that you use on a regular base that you would like to have access to without having to go through the ribbon interface. To add such a command to the quick access toolbar do the following:

1) Locate the command in its tab
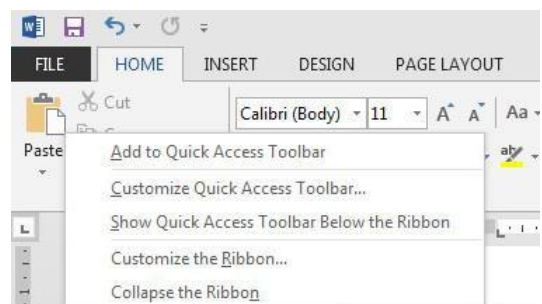
2) Right Click on the command button

3) From the menu that displays select "Add to quick access toolbar"

4) The button will now be added to the toolbar.

2.6.2 Removing a button from the quick access toolbar

1) Right click on the button in the quick access toolbar

2) Select "Remove from quick access toolbar" from the menu that displays

Remove from Quick Access Toolbar

Customize Quick Access Toolbar...

Show Quick Access Toolbar Below the Ribbon
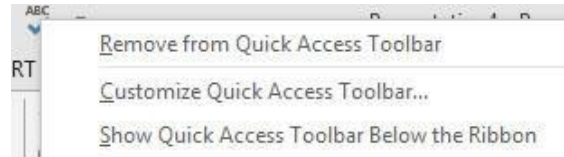
2.6.3 Undoing and Redoing Changes

Sometimes you'll make a change to your text and then regret it. Fortunately, Word remembers every change you make to a document during a given session and lets you undo any number of them-even if you made them hours ago – *as long as you do not exit the program*. You can undo typing as well as formatting changes. Word also has a Redo command that redoes changes after you've undone them.

Undo: Immediately after you type text in the document the undo button is activated on the Quick Access toolbar. Clicking the **undo** button will undo your last action.

Undo Redo

Re-do your last change (essentially "undoing the Undo"), choose Re-do from Toolbar.

Summary

In this lecture, we have been introduced to the general environment of MSWord. We studied tabs, commands and menus are used for.

References

https://www.ucc.ie/en/media/support/computercentre/trainingmanuals

LECTURE THREE

MICROSOFT WORD 2013 (II)

Introduction

In this chapter, we will learn more about the MS Word application.

Objectives

At the end of this lecture, you should be able to:

1. Know how to use dialog launcher.

2. Understand views and how to use them.

3. Know how to save document

4. Know how to format text

3.1   Dialog Box Launcher

There are times that at first glance, you may not see a certain command from a previous version of

MSWord. Some groups have a small diagonal arrow in the lower-right corner. [image] . The arrow is called a

Dialog Box Launcher. If you click it, you'll see more options related to that group. Those options will

often appear in the form of a dialog box that you may recognize from a previous version of Word.

Or they may appear in a familiar- looking task pane.
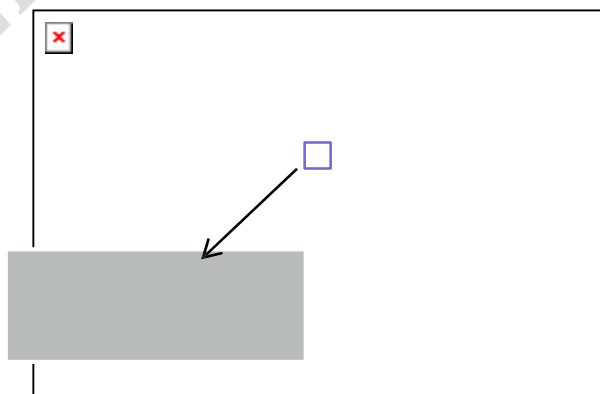
3.2   Views

There are several views obtainable in MSWord. To see them, you click the **View** tab on the Ribbon. The views are:

Print Layout: this is the default view and shows the document as it will appear on the printed page.

Web Layout view: this displays the document as it would appear as a web page.

Outline view: this view simplifies the text formatting to help you focus on the structure of the document.

Draft view: is designed for speed of entry and editing, it was called Normal View in earlier versions of Word. The documents are displayed as an outline, with the paragraph formatting defining the levels of outline.

Read Mode: The Read Mode is a new feature introduced in MSWord 2013. It maximizes the document in an un-editable view. It is useful to be aware of this feature and how to switch to a standard view, as if a document is closed in Read Mode, it will remain in Read Mode the next time it is opened. Read Mode has three menus:

- **File Tab:** This is the standard File tab which you usually have access to from the ribbon.

- **Tools:** This menu contains a "Find" button which can be used to search the document for a word or phrase.

- **View:** This tab allows you to change several layout aspects of Read Mode, as well as return to the standard Print Layout view.

   o **Edit Document:** This will return you to the standard Print Layout View.

   o **Navigation Pane:** This will open up the same navigation pane found in Print Layout on the left-hand side. It is useful for navigating through large documents.

   o **Comments Pane:** The comments pane will display any comments made on the page of the document currently being viewed.

   o **Page Colour**: You can choose between white, inverse and sepia.

   o **Layout:** This allows you to switch from the standard "column" view to "Paper", view,

which is quite similar to the "Print Layout" view, but it does not have the Ribbon

Now that we are familiar with the working environment of MSWord, let us type our first document. As earlier studied, you create a new document by launching the application and selecting Blank document template. Do that right away.

3.3 Creating your first document

After creating your blank document, type the following note without pressing "Enter" at the end of each line. You will notice that MSWord has a facility called word-wrap, which automatically brings the last word of the line onto the next line if the text won't fit on just one line.

I made myself a mud house,
As perfect as could be.
I was pleased with myself.
I thought I'd keep it
And sleep in it.
I also made some mud beds
And a pillow for myself.
Then last night it rained
and the house disappeared.

Inserting Text

The blinking insertion point in your documents shows you where the text you type will appear. You can move the insertion point by pointing and clicking to insert text wherever you like.

Example: Click in the space to the left of the word "pleased" in the the first paragraph, and type very and add a space. The word is inserted and the remaining text is pushed to the right to accommodate it.

Note: Never press the Enter key to end lines within a paragraph. This causes uneven line breaks and other problems when you format the text.

3.4   Saving a Word Document

After creating and typing your document, you can save it with the following step:

1) Click on the File Tab

2) In the menu that is displayed select the 'Save' button

3) The Save As can also be used and this menu will display three options. To save the document to your computer, make sure the computer tab is highlighted, then navigate to the appropriate location on your computer or elsewhere.
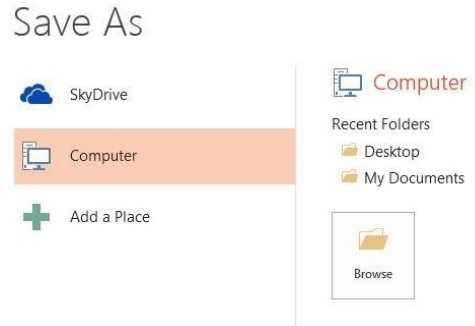
4) The menu on the right will display recently accessed folders, and also a 'browse' button.

5) Click 'browse.' This will open the familiar Save As window.

- Name the file

- Select the file location.

- Click Save

Be sure before you click on the Save button that you have chosen the correct location.

Saving Changes to a document

To save a document with any new changes since it was first saved

Choose Save from the Quick Access toolbar

Or

Click on the Save option in the File Tab.

3.5   Closing the document

To close a document, use the following steps:
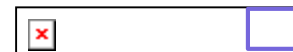
1. Click the x in the top right hand corner of the screen

2. If there have been any changes made since the document was last saved it will prompt you to save these changes before closing

3. Click **yes** on the dialog box that appears to save all changes

3.6   Opening a Document in Word

After you have worked on a Word document and saved it, there may be need for you to continue working on such document. The following steps will guide you.

1. From the **File** tab choose **Open**

2. Click the folder you wish to open

3. Double click on the name of the document you want to open.

4. The file should now be open in Word – if not click on the open button.
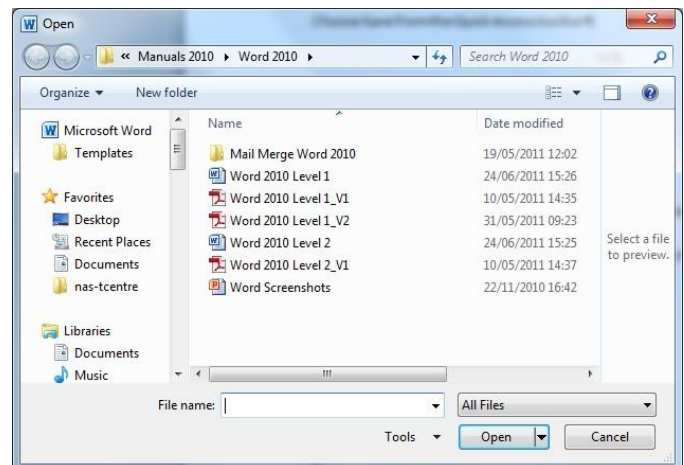
3.6.1   Pick Up Where You Left Off

A useful new function of Word 2013 is the "Pick Up Where You Left Off" function. When you are working on a Word document which is several pages long, Word will remember which page you were working on when you saved and closed. So, when you re-open that document, Word will offer to return you to that exact point. This can be very useful in particularly long documents.

When you re-open a document, a box will pop out on the right of your screen. It tells you the name of the section you were last editing, and how long ago you last edited it.

3.7   Text Formatting

Word has a number of character styles such as bold, underline, italics etc. The simplest way of formatting text is to simply highlight the text to be formatted and then select the type of formatting you require from the Home tab or the mini toolbar.

3.7.1 The Mini Toolbar

The Mini Toolbar is a convenient pop-up toolbar which contains a

selection of frequently used commands, and which appears

when text is selected for formatting. For instance, you want to

quickly format some text, but you're working on the Page Layout

tab. You could click the Home tab to see the formatting options, but using the mini toolbar is faster.

1. Select your text by dragging with your mouse, and then point at the selection.

2. The Mini toolbar will appear and you can click a formatting option there.

3. If you move the mouse away from the Mini Toolbar, it will fade until it disappears entirely.

Try it now! Select some text and the mini Toolbar will pop-up

To format text that you have already typed, there are a variety of options you can choose from. Some

of these are stated below.

3.7.2 Bold, Italic Underlined

1. Select the text to be formatted

2. On the Ribbon, select the **Home** tab. In the **Font** group click on the required option

   • **B** for Bold

   • *I* for Italics

   • <u>U</u> for Underline – There is also a drop down arrow for more underline options

3.7.3 Strikethrough, Subscript Superscript

1. Select the text to be formatted

2. On the Ribbon, select the **Home** tab. In the **Font** group click on the required option

3. To create a single line ~~strikethrough~~ on text click

4. To create a subscript format e.g. H_2O click

5. To create a superscript format e.g. 21st click

34

3.7.4 Change Case

There are times you have types a whole paragraph only to realize you

have been typing in the wrong case, say ALL CAPS, you can change

the case of the text as follows:

1. Select the text you want to change

2. From the Ribbon select the **Home** tab. In the **Font** group click

    the arrow next to the change case command.

3. From here you can see all the options available

4. Select the option you desire
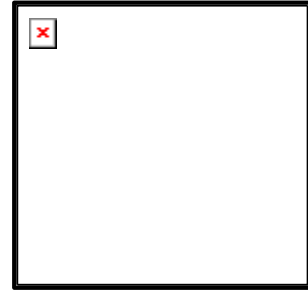
3.7.5 Change Font Colour

1. Select the text to be coloured

2. Select the **Home** tab. In the **Font** group click the arrow next to the font

    colour command

3. Click any colour and this will be applied to the selected text

Note: To choose from an even larger selection of colours, click the More Colours command at the bottom of the Font Colour Palette.

3.7.6 Change Font Type

The default font in MSWord is 11- point Calibri, but Microsoft Word comes

with more than 150 fonts. You can change the font of any text at any time as

follows:

1. Select the text that is to be changed. To select an entire document

    press **Ctrl & A** or from the **Home** tab in the **Editing** group click

    the arrow next to select and choose **select all.**

2. Click the down arrow in the Font box on the **Home** tab

3. Scroll down the list and choose a different font type
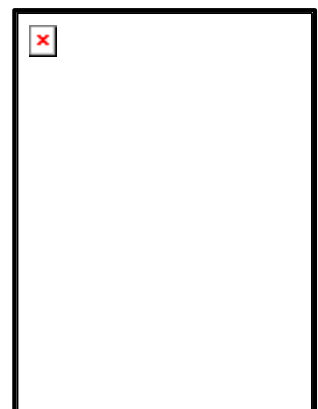
3.7.7   Clear Formatting
To remove all formatting from a selected text do as follows:

1. Select the text

2. Click on the Clear formatting command
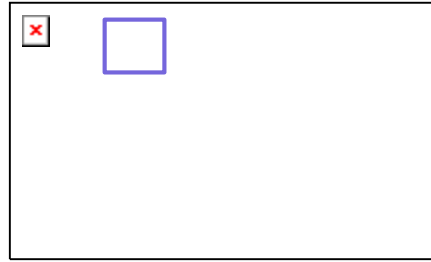
3.8   Text Alignment

The default text alignment in a document is left. This means the text starts on the left and moves right as

entered. To change alignment of words sentences or   paragraphs;

1. Select the text

2. From the **Home** tab in the **Paragraph** group, click on the appropriate alignment button

Note that *Justifying* text aligns it evenly at both the left and right sides.

3.9   Changing Line Spacing of a paragraph

1. Highlight the paragraph you need to edit. You can achieve this by

    clicking in the paragraph three time quickly.

2. From the **Home** tab in the **Paragraph** group click on the
    Line Spacing command

3. You are now given a list of line spacing options from1.0 to 3.0

4. Choose the desired spacing
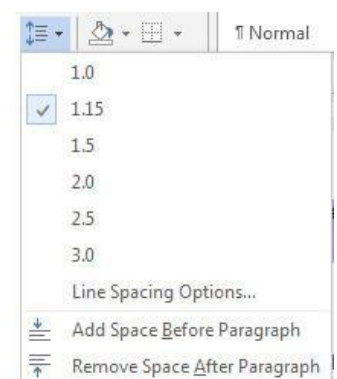
To view other line spacing and paragraph spacing options click on **Line Spacing Options.**

3.10   Change Paragraph spacing

At times you type a paragraph and need some space before and after the paragraph. Some of us achieve this by pressing the enter key several times. Unfortunately, this may cause some trouble for you later. So the best way to do this is to:

1. Click inside the paragraph you want to change spacing before or after

2. From the **Line Spacing** command click on

    • Add Space Before Paragraph

    • Add Space After Paragraph Alternatively:
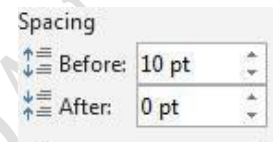
        OR

On the Ribbon, select the Page Layout tab, in the Paragraph group, under Spacing click the up arrow on the Before or After to increase spacing.

3.11   Bullets and Numbered Lists

Word can easily create bulleted or numbered lists for you. Bulleted and numbered lists make   your document more readable by setting off key points or numbered steps.

Creating a Numbered List as You Type

1. Move the insertion point to the beginning of the first line in the list

2. Type *
3. Press the **Spacebar** and then type the text of the first list item

4. Press **Return**
5. Enter the text for the next list item and so on

Or

1. Type a number followed by a full stop such as **1.** to begin a numbered list

2. Press the **Spacebar** and then type the text of the first list item

3. Press **Return**

4. Enter the text for the next list item and so on

Bullets   Numbers

To Add Bullets or Numbers Using the Ribbon

1. Select the text you want to add bullets or numbers to

2. Click the arrow next to the bullets or numbers command to choose

a different format of bullets or numbering
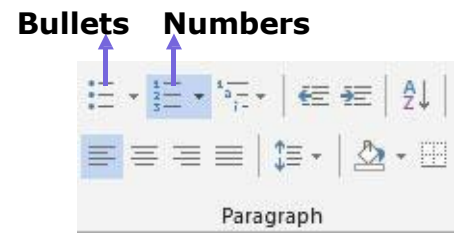
3.12   To Sort a List

Select the text you want to sort then:

Click on the **Sort** command from the **Paragraph** group. This will bring up a pop-up menu.

1. Under **Sort by**, select a field number or name

2. From the dialog box that appears click the drop down

   arrow next to **Type** to select the appropriate type of

   data which is to be sorted; i.e. text, number or date

3. Click on either **Ascending** or **Descending** to sort the list **A-**

   Z or **Z-A**

4. Click **Ok** to start sorting
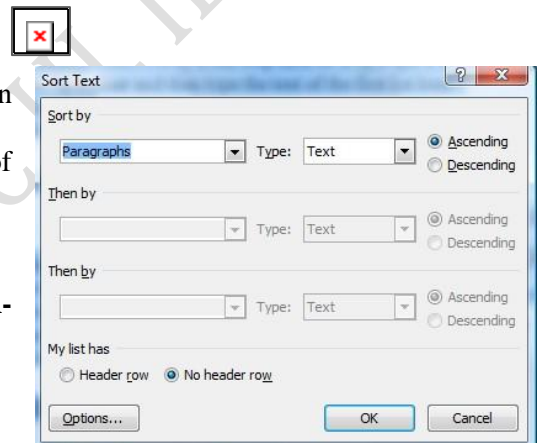
NOTE: If the list has a heading that you do not want sorted, select the Header Row option under **My List Has.**

Summary

In this lecture, we learned how to create an MSWord file, type into it, format the typed text, add bullet

point as well as manipulate the front face and Colour.

References

https://www.ucc.ie/en/media/support/computercentre/trainingmanuals

LECTURE FOUR

MICROSOFT WORD 2013 (III)

Introduction

In the previous lecture, we learned how to create a word document and save it. We also learned how to format the text, sort text and format paragraphs. Perhaps after typing the text you may need to re-structure your document by moving text around or even pick some text you have typed into another document. These are what we will learn in this lecture.

Objectives

At the end of this lecture, you should be able to:

1. Know how to use the clipboard tools.

2. Understand views and how to use them.

3. Know how to insert and format table

4.1   Manipulating 'Elements'

After you have prepared your document, you may want to manipulate the text by moving it around or manipulate other objects. There are two main ways you can manipulate your text/ object and these are Cutting or Copying and the Pasting. You can move or copy any element in a document, whether it is text, graphics, or an item inserted from another application.

Moving means to remove **(cut)** the selected text or graphic from one location and insert it in another location.

Copying means to make a copy of the selected text or graphic and insert it in another location, leaving the original version unchanged.

In the following sections, we will study how to achieve any of the two methods with different variations. The headings specify the variations.

4.1.1 Moving and Copying Blocks of Text or Object Using the Ribbon

1. Select the element

2. On the **Ribbon**, select the **Home** tab, in the

   Clipboard group click **Cut** or **Copy**
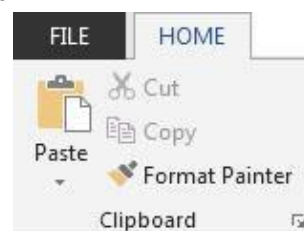
3. Click into the new location for the element you have cut or copied

4. On the Home tab from the Clipboard group click Paste.

5. The original element has now been moved or copied to the new location.

4.1.2 Moving Blocks of Text/ Objects Using Drag and Drop

1. Select the element you want to move

2. Click and hold down the left mouse button inside the selected element

3. With the left mouse button still held down, drag the mouse to the desired location and let go

   of the mouse button

4. The element has now been moved to the new location

4.1.3 Copying Blocks of Text/Objects Using Drag and Drop

1. Select the element you want to copy

2. Hold down the **Ctrl** key and hold down the left mouse button inside the selected element

3. With the **Ctrl** key and the left mouse button still held down, drag the mouse to the desired

   location

4. Let go of the mouse button and then the **Ctrl** key

5. The element has now been copied to the new location

4.1.4 Copying and Moving Text/objects between Documents

Open all documents you wish to copy or move text between. You can switch between documents by

opening the Window menu and selecting the filename of the document you need.

1. Select the element you want to move or copy

2. Do one of the following:

- To **move** the selection, click the **Cut** button on the **Home** tab

- To **copy** the selection, click the **Copy** button on the **Home** tab

3. Position the insertion point in the new location.

4. Since your new location is in another document, open the **Window** menu and select the required document.

5. On the standard toolbar, click the **Paste** button

4.2 Finding and Replacing Text/ characters

You can use the Find command on the Edit menu to search for text, formats such as bold and indent, special characters, and other elements such as footnotes, graphics, and fields. To search for and replace these items, you can use the replace command.

4.2.1 Finding Text in a Document

1. From the **Home** tab, select Find.

2. A Navigation pane will open on the left hand side of the screen

3. In the Search Document Field, type the text you want to find, e.g. elections

4. Each instance of the word will be highlighted on the document and listed in the Navigation pane.

5. Click X to close this Navigation Pane.

4.2.2 Replacing Text in a Document

1. From the **Home** tab, choose **Replace**

2. Type the text you want to find in the 'Find What' box:

3. Type the replacement text in the 'Replace With' box:

4. Click the **Replace** button, checking that each entry is to be changed beforehand. If not click the Find Next button to move to the next entry
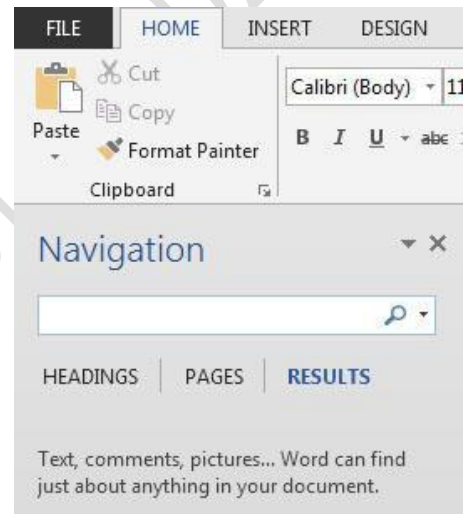
5. Click OK

6. Click Close.

There are three options you can use when replacing text. These are summarized below.

TO	CLICK
Replace the text and find the next occurrence.	The Replace button.
Change all occurrences without confirmation.	The Replace All button.
Leave the text unchanged and search for the next occurrence.	The Find Next button.

4.3   Navigating with the Go to Command

When you want to jump to a particular place in your document, the *Go To* command can often take you there much more quickly than scrolling. This, only possible if you know the page number of the location you would want to get to. To do this,

1. From the **Home** tab click the arrow beside "**Find**", and from the menu that displays choose "**Go To**"

2. This will display the Find and Replace dialog box with the Go To tab selected

3. Select the type of item you want to go to

4. If you know the exact number of the page, comment, or other item you want to see, enter the item number

5. Click Next or Previous to navigate forward or backward

6. Click the Close button to put away the dialog box
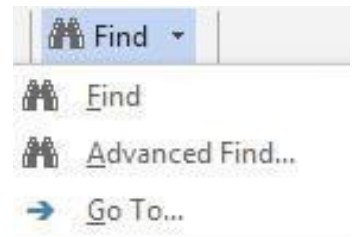
4.4   Setting the Page Layout of your document

The Page Layout tab allows you to change the Page Setup of your document. That is, it contains all the commands you need to set the margins of your document, set orientation, select the paper size, indent paragraphs among other commands.

4.4.1 Changing the Page Orientation

The default orientation for Word documents is Portrait. To change the page

orientation to Landscape;

1. Click on the Page Layout Tab

2. From the Page Setup group choose Orientation

3. Choose the Landscape option
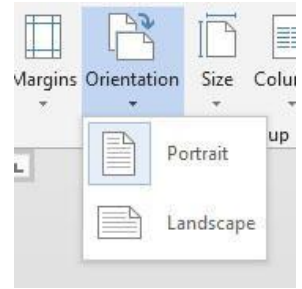
4.4.2 Vertical Alignment

The default vertical alignment for a new document is 'top'. Vertical alignment determines where the

text you type will flow from. Basically aligning it on the page.

1. Click the **Page Layout** tab

2. On the Page Setup group click on the dialog box launcher

3. Choose the **Layout** tab

4. Open the **Vertical Alignment** drop down list box, by clicking on the down arrow

5. Select **Centre**

6. Click **OK.**
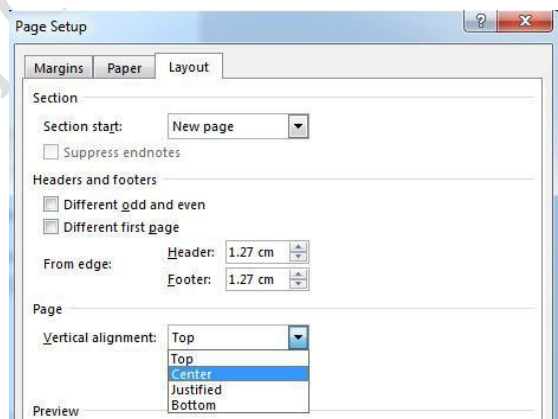
You will notice that the cursor will move to the middle of

the page. Whatever text you type will be centered

vertically on the page.

4.4.3 Changing the Page Margins

There are a number of pre-set options within margins. For example,

the **Narrow option** changes the top and bottom as well the left and

right margins to 1.27cm. To change the margins to a specific

measurement;

1. Click the **Page Layout** tab
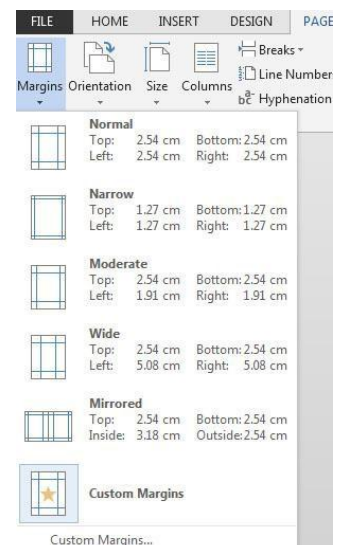
2. Choose one of the default options or click on the

   Custom Margins option

3. In the dialog box which pops out, click the up and down arrows beside your chosen margins
   to adjust them.

4.4.4   Adding Page Numbers

There are a variety of page numbering options available in M S Word

2013. You can format your page numbers so that they appear at the bottom

of your page, top of your page, or in the margins. You can even format the

type of numbers Word should use (1,2,3 or A,B,C or I,II,III, etc)

   1. From the **Insert** tab, choose **Page Numbers**.

   2. Choose the desired location from the Position drop down list, i.e. Bottom of Page

   3. Choose the desired position from the Alignment drop down list, i.e. Center

   4. Click the OK button
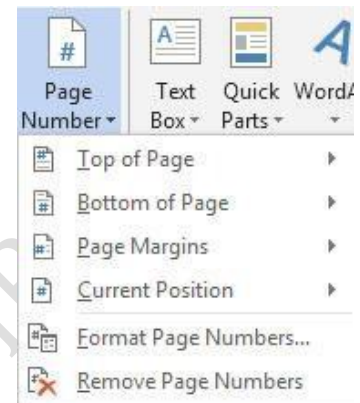
4.5   Document Review

The Review tab has groups of command to enable you 'proof read' you document, add comments,

tracking changes in situations where you send the document to some else to edit. Among other

commands. The following sections will guide you through.

4.5.1   Word Count

When you're writing to fill a specific amount of space or you're simply curious about the

size of your document, you can use the Word Count command. To view the number of

words in your document; From the **Review** Tab, select Word Count.
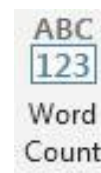
Note: Click the Include Footnotes and Endnotes check box to include the

text from footnotes or endnotes in the count as well.
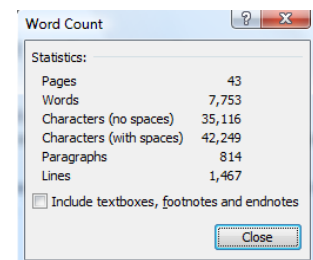
However, if you want to count the number of words in a particular

paragraph or some paragraphs, then select the area that you wish to count the words, then click on

Word Count. MSWord will display the result on the screen for you.

4.5.2   Looking up words in the Thesaurus

The thesaurus helps you to improve the precision and variety of your writing.

You can quickly find synonyms for a selected word or phrase. For some

words, you may also find antonyms and related words.

To Look Up Words in the Thesaurus

1. Select the word in the document for which you want to find a
   synonym, antonym or related word

2. From the **Review** tab, choose **Thesaurus**. The Thesaurus pane will open on the right hand
   side of screen

3. Hover the cursor over an equivalent word from the list in the Research window, for
   example surplus. The word will now have a drop down menu to its right. Click on the arrow,
   if you wish to use this word instead and choose Insert from the drop down list
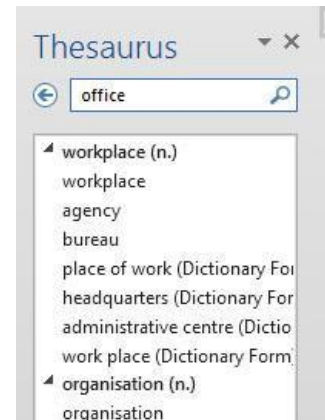
4.5.3   Editing and Proofing Tools

MSWord checks your document for spelling and grammatical errors by using its main dictionary,

which contains most common words. If MSWord finds a word that isn't in its main dictionary, it

displays the word in the Spelling dialog box and gives you choices for correcting the possible

misspelling. When you check spelling, Word checks your entire document, starting at the

insertion point. However, if you highlight text, Word checks only the text you've selected and it

will then ask if you want to continue checking the remainder of the document.

To Check Spelling

1. On the **Review** tab, click the Spelling & Grammar button

2. For each word that is displayed in the "Not In Directory" box, select the appropriate options
   from the Suggestions box underneath

If the correct option is not listed click into the Not in Directory box and correct the spelling yourself,

clicking Change when ready.

4.6   Indents

Indentation is not new, when writing hand written letter, we sometimes indent the first line to differentiate one paragraph from the next. This is also possible in MSWord. To set off a paragraph from other text, you can indent the paragraph in one of the following ways:

4.6.1   To Indent Paragraphs
1. Select the paragraphs you want to indent

2. On the **Home tab or Page layout tab**, in the **Paragraph group** do one of the following

To increase indent, click on the increase indent button. This will indent the paragraph to the next tab stop.

 ← Increase Indent button

To decrease indent, click on the decrease indent button, to

decrease indent to the previous tab stop

 ← Decrease Indent button

Alternatively, you can set precise measurements for paragraph indents by using the dialog box in the

Paragraph group on the **Home tab**.

1.   From the Home tab, select the launch dialog box in the Paragraph group.
2.   This brings you into the Paragraph dialog box. Here you have the choice of changing the

Indents & Spacing from the Left and Right margins.

4.6.2   Indenting an Entire Paragraph from the Left
1.   Under Indentations, change the Left Indentation to the required measurement

2.   Type the text

4.6.3   Indenting a Paragraph from Both Sides
1.   Change the Left and Right Indentations to the required measurement

2.   Type the text

4.6.4 Indenting the First Line of a Paragraph

1. Click the arrow to the right of the Special box, choose **First Line**, and increase by the required measurement

2. Click OK

4.6.5 Hanging Indent (Second line of text is indented)

1. Click the arrow to the right of the Special box, choose **Hanging Indent**, and increase by the required measurement

2. Click OK

4.7 Tables

Table are used mainly to organize 'objects' in an MSWord document. With tables, you can arrange columns of numbers and text in a document without using tabs. Tables also provide a convenient way to present text in side-by-side paragraphs, as in a resume, or to arrange text beside graphics. It also allows you to summarize data in concise manner as shown below:

Monthly Sales Analysis of Cocacola	
State	**Number of Pack sold**
Oyo	20,568
Lagos	42,153
Ogun	10,007

4.7.1 Creating a Table
To create a table like the one above do as follows:

1. Position the cursor where you want to add a table

2. From the **Insert tab**, select **Table and Insert table**

3. Enter 2 columns and 5 rows

4. Click OK and MSWord creates the table

Or

1. From the **Insert Tab** select **Table** and highlight the appropriate number of columns and rows
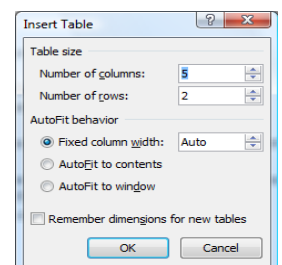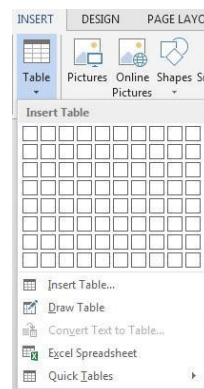
When you insert a table in Word you will notice a **Contextual Tab** on the Ribbon called Table Tools and two additional tabs named Design and Layout. From these tabs you can change the design and layout features of the table. N.B. You must have clicked into the table to have these tabs be visible.
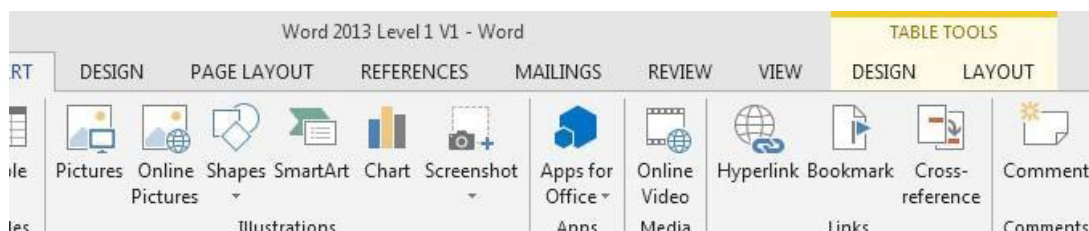
4.7.2   Merging Cells

You must have noticed that the first row in our example has just one column. This is because the

columns were merged. To merge cells together,

1.   Highlight the cells to be merged.

2.   Click the Layout Tab under Table Tools

3.   Select **Merge Cells** from the Merge group

4.   Click outside the table to view merged cells
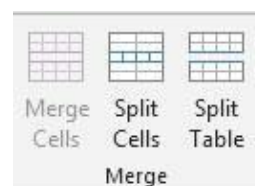
4.7.3   Splitting Merged Cells

1.   Highlight the cell to be split into cells

2.   Click the Layout Tab under Table Tools

3.   Select **Split Cells**

4.   Choose the number of rows and columns into which you want the cell or cells divided

5.   Click OK
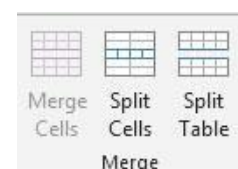
4.7.4   Aligning Text in Cells

If you want to align the text and graphics that you have typed in a table,

1   Highlight the rows and columns of the table

2   Click the Table **Layout tab**

3   Click the alignment icon of your choice in the **Alignment Group**
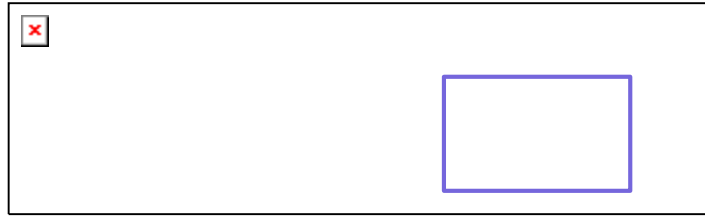
4.7.5   Displaying Borders and Grids

Drawing a table does not mean that it would have border lines. From the Design tab there is a group *Draw Borders* which allows you to change the borders of a table. To make the border lines for your table visible, proceed as follows:
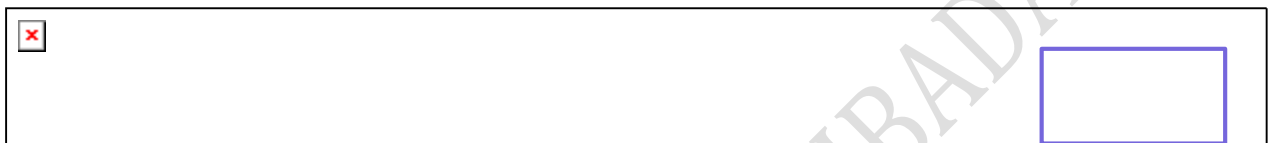
1.   Highlight the table

2. Click on the **Design tab**

3. Select 4½ point in the Line thickness box of the borders group

4. Click the bottom border button or apply any borders you want
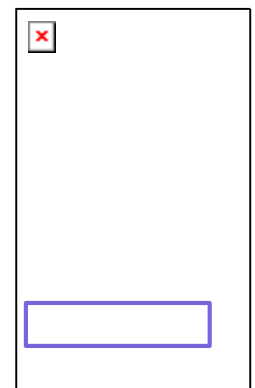
4.7.6   To Shade Cells

1. Highlight cells to be shaded

2. Click the drop down arrow next to the **Shading** button on the **Design Tab**. Click on the depth of shading required e.g. White Darker 25%

3. Click anywhere on the blank screen to remove highlighting. The selected cells are now shaded

4.7.7   Applying Design to a Table

1. Click anywhere into the table

2. From the **Design tab** in the **Styles group** you can select any of the styles available and this will be applied to the entire table

3. The styles will format the table with different borders font and shading

Summary

In this lecture we have studied more about MSWord, especially how to manipulate elements, create

tables, as well as format the layout of the pages of your document.

Post Test

Create the table below:

Total amount spent on food items by month		
Food item	Month	
	November	December
Bean	3300	2300
Rice	5000	8500
Total	**8300**	**5400**

References

https://www.ucc.ie/en/media/support/computercentre/trainingmanuals

Introduction

In the previous lectures, we have studied the use of MSWord to type and format text, because MSWord is a word processor. This chapter will introduce you to another of Microsoft's application that belongs to the spreadsheet package group. You will get to learn the environment of MS Excel.

Objectives

At the end of this lecture, you should be able to:

1.   Know how to launch Microsoft Excel 2013 on Windows 7, 8 and 10.

2.   Know how to navigate around the MS Excel 2013.

3.   Identify icons and what they mean or stand for.

5.1   Launching Microsoft Excel

The following sections will instruct you on how to launch MS

Excel, depending on the environment.

Using Windows 7

1.   Click on the **Start** Button
2.   In the Search Program and Files box type Excel

3.   Click on **Excel 2013** from the Program results
4.   The Microsoft Excel 2013 program will open.

Search box
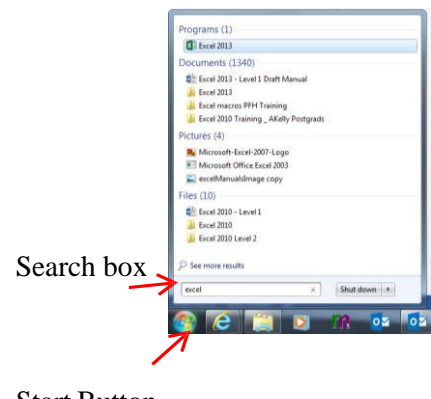
Start Button

Using Windows 8

1.   Press the Windows key on the keyboard.

2.   Type Excel

3.   Click on **Excel 2013** under the Apps results
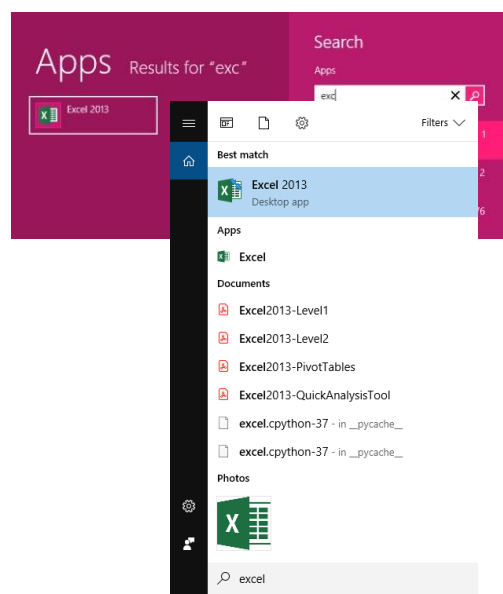
In Windows 10 environment:

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1. Click the **Start** button

2. In the Start Search field (left) type Word

3. Select Excel 2013 from the search results

5.2 Getting Started with Excel 2013

Once you have successfully launched MS Excel, you will be automatically directed to the start page (below). Then, you'll see templates for budgets, calendars, forms, and reports, and more. If you already have in mind the data you want to type in MS Excel, the do as follows:

1. Click on **Blank workbook** to create a new workbook.

   or

2. Click **Open Other Workbooks** to work on an existing workbook.
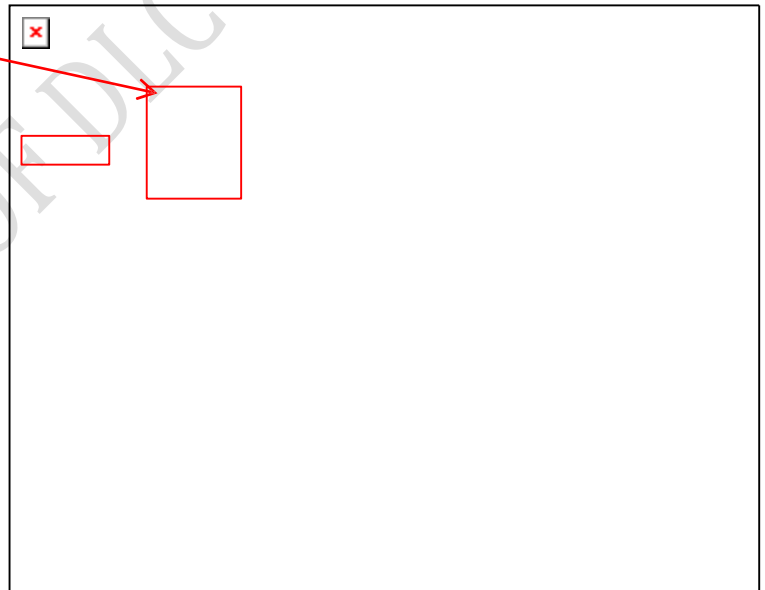
Once you have successfully created a new workbook, it is then time to get to work. However, it will be important to look at the Excel Window so that you know what is where.

5.3 The Microsoft Excel Component

Three most important components of MS Excel is which you need to understand first are:

5.3.1. Workbook

A workbook is a separate file just like every other application has. Remember the MSWord file is called a document. Each workbook contains one or more worksheets. You can also say that a workbook is a collection of multiple worksheets or can be a single worksheet. You can add or delete worksheets, hide them within the workbook without deleting them, and change the order of your worksheets within the workbook. In addition, a workbook can store chart sheets; a chart sheet displays a single chart and is accessible by clicking a tab.

5.3.2. Worksheet

A worksheet is made up of individual cells which can contain a value, a formula, or text. It also has an invisible draw layer, which holds charts, images, and diagrams. Each worksheet in a workbook is accessible by clicking the tab at the bottom of the workbook window.

5.3.3. Cell

In Excel, a cell is the smallest but the most powerful part of a spreadsheet. You can enter your data into a cell either by typing or by copy-paste. Data can be a text, a number, or a date or other formats. You can also customize it by changing its size, font colour, background colour, borders, etc. Every cell is identified by its cell address, cell address contains its column label and row number (If a cell is on 11th row and on column C, then its address will be C11).

5.4 Excel Window Components

Before you start using Excel, it's very important for you to understand what is where in its window. The next figure shows all the major components which you need to know before entering the world of Microsoft Excel.
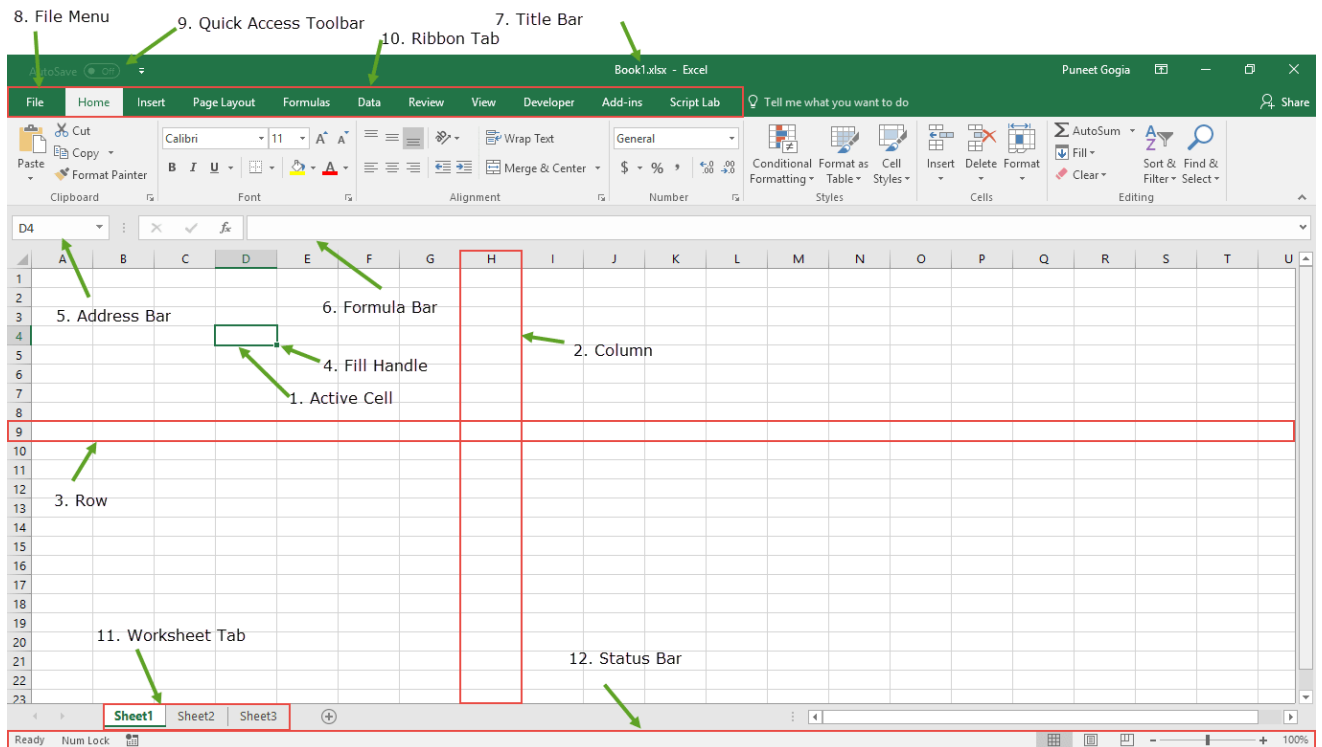
No. 1. Active Cell

The active cell is a cell which is currently selected. It will be highlighted by a rectangular box and its address will be shown in the address bar. You can activate a cell by clicking on it or by using your arrow buttons. To edit a cell, you double-click on it or use F2 to as well.

No. 2. Column

A column is a vertical set of cells. A single worksheet contains 16,384 total columns. Every column has its own alphabet for identity, from A to XFD. You can select a column by clicking on its header, that is the alphabet.

No. 3. Row

A row is a horizontal set of cells. A single worksheet contains 1,048,576 total rows! Every row has its own number for identity, starting from 1 to 1048576. You can select a row by clicking on the row number marked on the left side of the window.

No. 4. Fill Handle

It's a small dot present on the lower right corner of the active cell. It helps you to fill numeric values, text series, insert ranges, insert serial numbers, etc.

No. 5. Address Bar

The address bar is the small input bar at the left side of the window. It shows the address of the active

cell. If you have selected more than one cell, then it will show the address of the first cell in the range.

No. 6. Formula Bar

The Formula bar is an input bar, below the ribbon. It shows the content of the active cell and you can

also use it enter a formula in a cell.

No. 7. Title Bar

The title bar will show the name of your workbook, followed by the application name ("Microsoft

Excel").

No. 8. File Menu

The file menu is a simple menu like all other applications. It contains options like (Save, Save As,

Open, New, Print, Excel Options, Share, etc).

No. 9. Quick Access Toolbar

A toolbar to quickly access the options which you frequently use. You can add your favourite options

by adding new options to quick access toolbar.

No. 10. Ribbon Tab

Starting from the Microsoft Excel 2007, all the options menus are replaced with the ribbons. Ribbon

tabs are the bunch of specific option group which further contains option.

No. 11. Worksheet Tab

This tab shows the all the worksheets which are present in the workbook. By default you will see,

three worksheets in your new workbook with a name of Sheet1, Sheet2, Sheet3 respectively.

No. 12. Status Bar

It is a thin bar at the bottom of the Excel window. It will give you an instant help once you start your

working in Excel.

Let us now study some of these components in details.

5.5   The File Menu

Just as in MSWord 2013, the File menu
changed in Excel 2013. However, this is still
where you go to access functions such as
creating a New file, Saving a file, Save As,
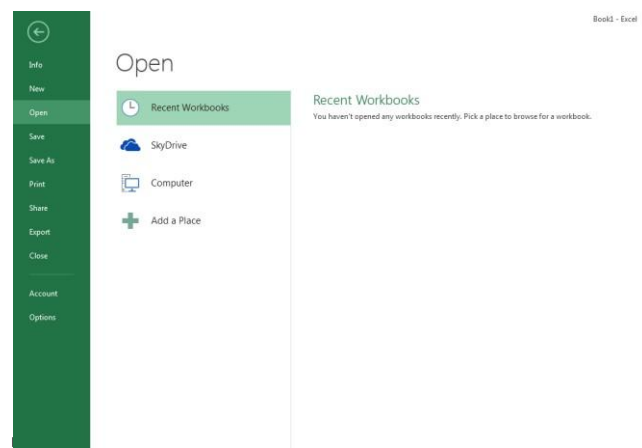
Close, Print (and Print Preview). To close the File menu click on the [⊕] button on the top left or press Esc on the keyboard.

5.6   The Ribbon Menu

The menus and toolbars in Excel have been replaced with the Ribbon, which is part of the Microsoft Office Fluent user interface. The Ribbon is designed to help you quickly find the commands that you need to complete a task.   Commands are organized in logical groups, which are collected together under tabs. Each tab relates to a type of activity,   such as writing or laying out a page.

Tabs

There are 7 standard tabs in Microsoft Excel 2013. Tabs are used to organize together related groups of commands. The commands work in the same way as before e.g. if you want to make a piece of text appear in bold font, select the piece of text

using the mouse, on the home tab, in the font group, click on the bold command button.
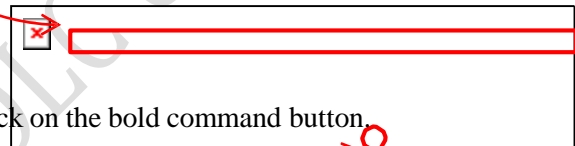
Dialog Box Launcher

At first glance, you may not see a certain command from a previous version of Excel. Some groups have a small diagonal arrow in the lower-right corner [▣].   The arrow is called a Dialog Box Launcher. If you click it, you'll see more options related to that group. Those options will often appear in the form of a dialog box that you may recognize from a previous version of Excel.

5.7   Quick Access Toolbar

The Quick Access toolbar is located on the upper left hand corner above the File Menu It is a customizable toolbar that contains a set of commands that are independent of the tab that is currently displayed this means that the buttons remain the same no matter what tab is currently open. By default it contains save, undo and re-do buttons.

By clicking on the arrow to the right of this toolbar you can quickly add other commands from the list or you can use the method outlined below. The position of the quick access toolbar can also be moved to below the Ribbon

Summary

In this lecture, we have been introduced to the MS Excel application environment.

Reference

https://www.ucc.ie/en/media/support/computercentre/trainingmanuals

LECTURE SIX

MICROSOFT EXCEL 2013 (II)

Introduction

In this lecture, we will learn more about the Microsoft Excel application.

Objectives

At the end of this lecture, you should be able to:

1. Know how to navigate around the MS Word 2013.

2. Know how to format your data

3. Identify the different shapes of the mouse pointer and what they mean or stand for

6.1 The Worksheet Tabs

As you already know, the Excel worksheet contains an array of cells. The name of the sheet appears

on a tab at the bottom of the workbook window. By default, the first worksheet is called "Sheet1".

However, the name can be changed to properly depict what data is recorded in it.

6.1.1 Renaming a Tab
It can be useful to name the sheets you are using. To do so

1. Right Click on the tab of the sheet to be named

2. Select **Rename**

3. Type the name of the sheet

4. Press enter on the Keyboard.
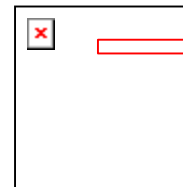
Alternatively, double click on the sheet tab and type the new sheet name

6.1.2 Adding a new sheet
It is useful to organize and store related information within the same file but on separate sheets. New

sheets can be added to a workbook at any time

1. Click on the insert worksheet button

2. A new sheet will be created.
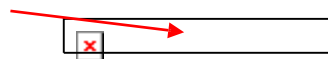
Alternatively, right click an existing sheet tab and select **Insert.** A new sheet will be inserted to the left of the worksheet. To move from sheet to sheet, click the sheet tabs.

6.1.3 Changing the Tab Colour of a Worksheet
1. Right click on the sheet tab and click Tab   Colour…

2. Select the required colour

6.1.4 Deleting a Worksheet
To delete a worksheet, do the following:

1. Right click on the sheet tab and select **Delete**.

2. The following warning appears
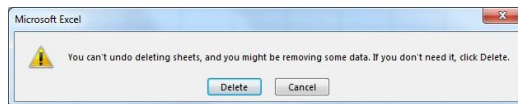
3. Click **Delete** to permanently that worksheet.

Alternatively, from the **Home Tab** in the **Cells Group** click on Delete and select **Delete Sheet**.

Warning: The Undo button will not undo the deletion of a worksheet

6.2   Saving an Excel File

It is usually advisable to save your Excel file, before you begin adding content to the file. At least you are sure you will not lose the file mistakenly. The following steps will guide you to save your Excel file.

1. Click on the File menu and click *SaveAs*
2. Double click on Computer and the Save As window appears
3. Select which folder you wish to save the file and type the file name in the filename box

4. Click on Save.
5. Once you saved the file the name of the file appears at the top of the screen.

6.3   Closing a Workbook

Once you are done working on your Excel file, you will have to close the file. The following step

should be used:

1. Click on the **File** menu

2. Select **Close**

Alternatively you can

1. Click on the **X** button on the top right of the screen.

2. You will be prompted to save if you have any unsaved data in the file.

6.4   Cells

Now that we know how to create and Excel file as well as how to save. We will

move on to how to enter data in your Excel file. All data entered in the Excel file

is placed in cells. A cell must be selected, that is, made active before entering the data. To make a cell

active, click into the cell using the mouse. The active cell address is displayed in the Name Box and a

dark border appears around the cell. A cell can hold different types of data.

6.4.1   Types of Data
There are various types of data allowed in MS Excel, such as Text, numbers (integers, decimals) which

can be formatted to display as currency, dates or a formula may be typed into a cell. By default, text

aligns to the left of the cell whereas numbers, dates and formulas are right aligned.

6.4.2   Entering Data in a Cell
To enter data in an Excel cell

1. Select the cell you wish to enter the data into and type.

2. As you type, the data appears in the active cell and in the formula bar.
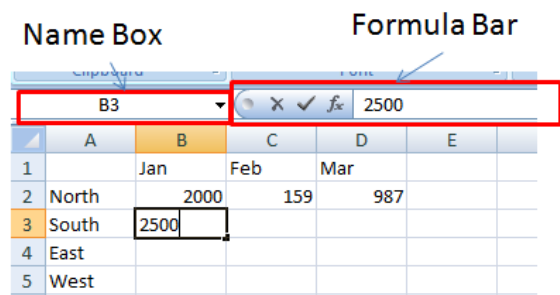
A cancel mark and an enter mark appear between the name box and the formula bar. Click on the tick

mark upon completion of your entry or if you wish to delete the entry click on the x.

OR

Alternative ways of completing the entry of data in a cell include the following:

a. Press the **Enter** key – this completes the entry and moves you down one cell below the active cell.

b. Press the **Tab** key - this completes the entry and moves you one cell to the right of the active cell.

c. Press one of the **Arrow** keys – this completes the entry and moves you one cell in the direction of the arrow.

d. Use the **mouse** to move to another cell.

6.4.3   Editing a cell

1. Double click on the cell you wish to edit and move the cursor to where you wish to type. Alternatively, select the cell you wish to edit then click into the formula bar and make the required change.

2. To *replace* existing data in a cell, simply click on the cell and type the new data and press enter.

3. To *delete* data in a cell, select the cell and press the **Delete** key on the keyboard.

6.4.4   The Mouse Pointer

In MS Excel, the shape of the mouse pointer changes shape depending on where it is positioned on the worksheet. Each shape carries out a different task.

1. If the mouse is moved to the centre area of a cell the mouse shape will be a **white**

2. Click into a cell and move the mouse to any part of the border of the cell. The mouse pointer changes to a **double headed arrow –** this is used to move and drag the contents of the cell to a different location.

3. Click into a cell and move the mouse to bottom right of the cell. The mouse pointer changes to a + **symbol.** This is used for autofill or to copy contents of a cell.
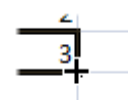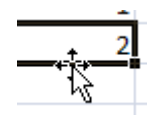
Autofill

If you need to enter a set series e.g. months of the year or days of the week you can type one of the series and then fill the rest of the series by using the autofill handle. If the entry in the cell is not part of a series the same data is filled into the other cells. If the cell contains a formula, the formula is copied into the other cells but the cell references will change (because excel uses relative cell referencing by default).

Example

1. Click into cell **B1** and type Jul. Rest your mouse to the bottom right of the cell until the autofill handle appears.

2. Click and drag over the two cells to the right of cell B1. Aug should appear in cell C1 and Sep in cell D1.

3. Now click into cell **B2** and type 50000 using the autofill click and drag into the two cells to the right of cell B1. 50000 should now be copied into cells C2 and D2.

Note: In Excel 2013 you can autofill in any direction

Examples of series that can be auto filled

Initial selection	Extended series
1, 2, 3	4, 5, 6,...
9:00	10:00, 11:00, 12:00,...
Mon	Tue, Wed, Thu,...
Jan	Feb, Mar, Apr,...
Jan-07, Apr-07	Jul-07, Oct-07, Jan-08,...
15-Jan, 15-Apr	15-Jul, 15-Oct,...
2007, 2008	2009, 2013, 2011,...
1-Jan, 1-Mar	1-May, 1-Jul, 1-Sep,...
Qtr3 (or Q3 or Quarter3)	Qtr4, Qtr1, Qtr2,...
text1, textA	text2, textA, text3, textA,...
1st Period	2nd Period, 3rd Period,...
Product 1	Product 2, Product 3,...

6.4.5   Cell Alignment

By default when you type text in an Excel cell, the text aligns left, however, numbers and dates are aligned right. Fortunately, you can change the alignment of a cell or group of cells by using the commands in the Alignment Group on the Home Tab.
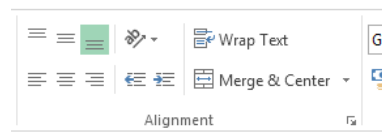
The direction of the Text can also be changed here. Try it now!

Text Wrapping

There are times you will type some text in a cell and part of the text is hidden because the column with is small. If you want text to appear on multiple lines in a cell, you can format the cell so that the text wraps automatically. To do this, follow these steps:

1.   Select the cells that you want to format.

2.   On the Home tab, in the Alignment group, click Wrap Text.

3.   Data in the cell wraps to fit the column width.

When you change the column width, data wrapping adjusts automatically, because the data in the cell wraps to fit the column width. If all wrapped text is not visible, you may need to increase the row height.

Merging cells

Just like in MSWord, where you can merge cells together, Excel allows you that opportunity as well.   The set of commands for ***Merge and Center***, joins the selected cells into one large cell and centres the data within the cell. Use these steps:

1.   Select two or more adjacent cells that you want to merge.

2.   Click on the Merge and Centre button in the Alignment Group.
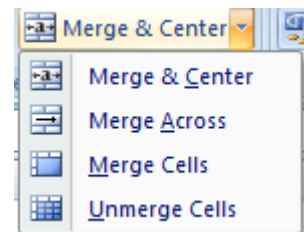
Ensure that the data that you want to display in the merged cell is contained in the upper-left cell of the selected range. Only the data in the upper-left cell will remain in the merged cell. **Data in all the other cells of the selected range will be deleted**. The merged cells can always be unmerged with the command from the same group.

Summary

In this lecture, we have been introduced to the MS Excel application environment. We learned how to create, populate and save an Excel file. We also learned the different shapes that the mouse pointer can have.

Reference

https://www.ucc.ie/en/media/support/computercentre/trainingmanuals

LECTURE SEVEN

MICROSOFT EXCEL 2013 (III)

Introduction

In this lecture, we will learn more about the Microsoft Excel application.

Objectives

At the end of this lecture, you should be able to:

1. Know how to navigate around the MS Word 2013.

2. Know how to format

3. Identify icons and what they mean or stand for

7.1 The Home Tab

Just as in MS Word, the most commonly used features of Excel are located in the Home Tab. Some of the group commands are even similar to those in MS Word. The home tab would include many of the formatting options.
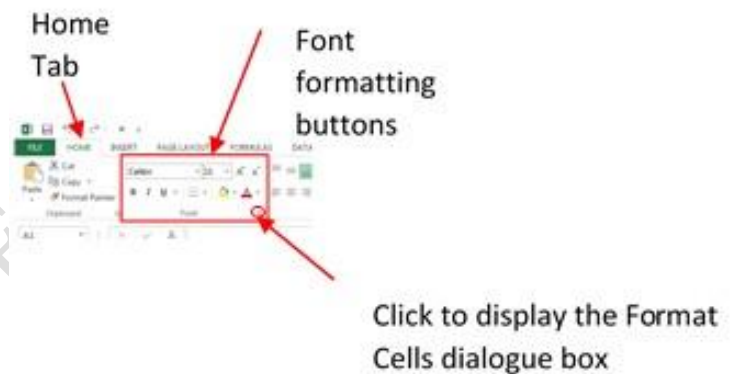
7.1.1 Formatting in Excel

The majority of the options available for changing the format of the text in cells are located on the Home Tab, in the Font Group. Here you can change the selected Font Style, Size, Colour and more. To go about it use the following steps:

- Select the cells to be formatted

- Click on the formatting option required. Note that resting your mouse over an option will display a screen tip detailing the function of the button.

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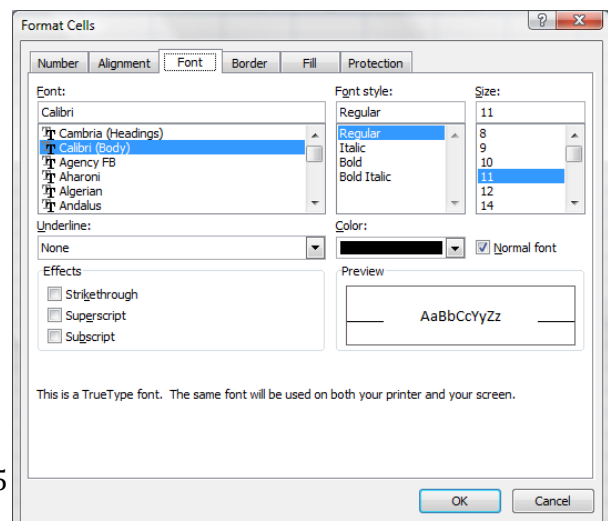
- To see all the font formatting options available click on the small arrow on the bottom right hand corner of the group.

- The Format Cells window will open.

7.1.2. Using Styles

There are a large number of styles that can be used to format the cells in a worksheet. Styles can be used to help you quickly identify particular items of data.

1. Select the Cells the background of which you want to format.
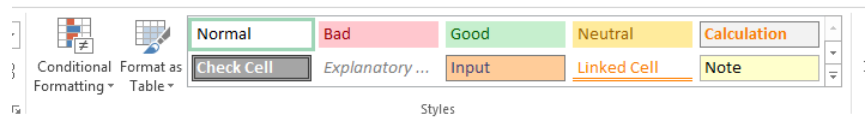
2. In the Styles Group on the Home Tab select any style of your choice.

7.1.3 Formatting your Spreadsheet

There are times you may want your data to look stylish. The *Format as Table* function can assist with that. It may also contain a style that suits the data you have. To apply style to you spreadsheet, do the following:

1. Select the cells you wish to format

2. In the Styles Group on the Home Tab

3. Click on the **Format as a Table** button and choose a format of your choice

If you later decide that you'd prefer your data in its original form (i.e. not in a table), you can convert it back to a range of cells. Click anywhere in the table and then on the Table Tools tab, on the Design table, under the Tools group click on the *Convert To Range* button.

Once the data is converted back to a range, the table features are no longer available. Note**:** that the formatting that was applied to the table is still present.
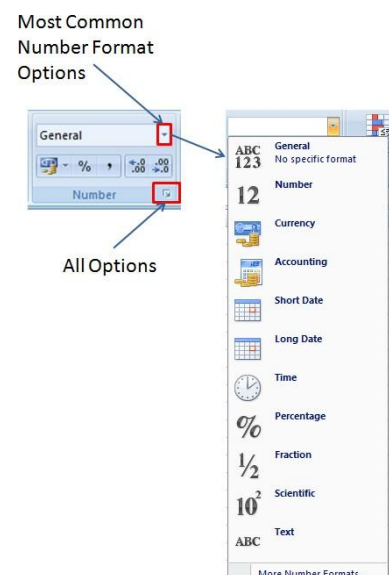
7.1.4 Data Formatting

Other than text an excel workbook will also contain data such as

numbers dates and currency. To differentiate between say 20% and ₦200 you would need to format the numbers.

1. Click on the Cells to be formatted

2. Click on the Arrow to the right of the word General in the Number Group on the Home Tab.

3. Select your required Formatting

The default currency setting for your computer may be € (depending on your computer's Region Settings). If you want to display a different currency symbol carry out the following:

1. Display the Format Cells window by clicking on the arrow on the bottom right of the Numbers Group on the Home Tab

2. Click on the Number tab

3. Select Currency from the list of Category's

4. Change the Format as required.

5. Click on OK
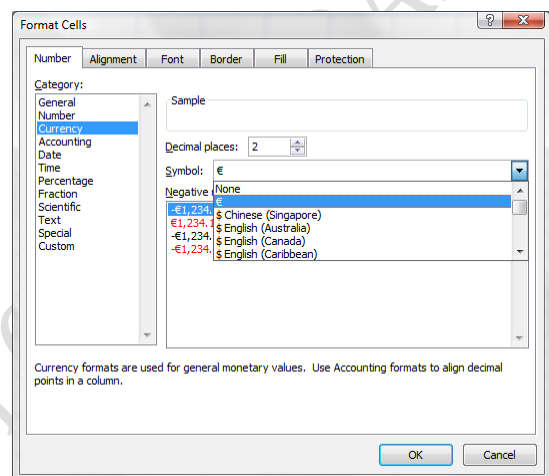
The default date style, percentage and so on can also be changed here.

7.2   Duplicating and Moving Data

To duplicate data means that an electronic 'image' is taken of the original data and placed in an area known as the clipboard. The process used is called *Copy and Paste*. The buttons associated with these commands are located in the Clipboard Group in the Home Tab.

7.2.1   Using Copy and Paste

Copy and paste has become one of the most useful tool in duplicating or moving data. It enables users to copy portions of their file to other locations either with the same file or into another file in the same application or even into another file in another application. To do these:
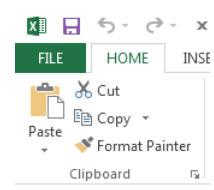
1. Select the range of cells you wish to copy.

2. Press Ctrl+C to copy the content of the cells. A flashing border appears around the outside of the selected cells.

3. Click into the cell where you want the first cell of your selection to appear.

4. Click on the paste button. The data still remains in the original range of cells but you now have a copy of the data in the new location.

You can continue to paste into other locations in the worksheet if you wish. When you have finished pasting pressing the **Esc** key on the keyboard to turn off the flashing border. The flashing border will turn off automatically when you carry out another task.

7.2.2   Using Cut and Paste

To move data from one location in a worksheet to somewhere else either within the same worksheet or to a different worksheet/workbook the process used is *Cut and Paste*.

1. Select the range of cells you wish to move.

2. Click on the **Cut** button. A flashing border appears around the outside of the selected cells.

3. Click into the cell where you want the first cell of your selection to appear.

4. Click on the **Paste** button. The data is now gone from its original location and now appears - in the new location.

7.2.3   Paste Options

There are a lot of options available when using paste. Click on the arrow under Paste to display options. These option include: Paste formulas, Keep source formatting, Paste Values, paste add etc.
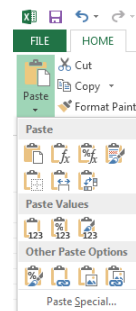
7.3   Rows and Columns

Occasionally you will need to add extra rows or columns into the middle of your data. The buttons for doing this are located in the Cells group on the Home tab.

7.3.1   Inserting a Row

When new rows are inserted they are inserted **above** the row where the cell pointer is positioned.

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1. Click on the row below where you want the new row to be inserted.

2. Click on the Arrow below the Insert button in the Cells

3. Select **Insert Sheet Rows**

4. A new row will be inserted above the one that was selected.
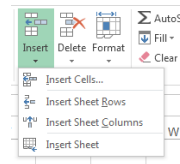
Alternatively,

1. Select an entire row by clicking on the row heading to the left of the row

2. Right click on the highlighted row and select **Insert** from the shortcut menu

3. A blank row is inserted above the selected row.
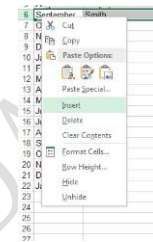
7.3.2   Inserting a Column

Just as you can insert a new row in the middle of your data, you can also insert a new column in the

middle of you data. When new columns are inserted into a sheet they are inserted to the **left** of where

the pointer is positioned. Use the following steps:

1. Click on the column to the right of where you want the new column.

2. Click on the Arrow below the Insert button in the Cells

3. Select **Insert Sheet Columns**

4. A new column will be inserted to the left of the selected column

Alternatively,

1. Select an entire column by clicking on the column heading above the column

2. Right click on the highlighted column and select insert.

3. A blank column is inserted to the left of the selected row.

7.3.3   Inserting a Cell

1. Right Click on a cell and select Insert

2. If a single Cell is required choose from the top two options from the insert window that appears

3. For a new row or column choose the appropriate option from the bottom two options.
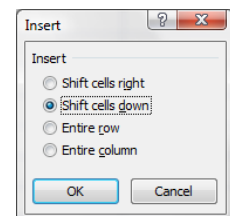
Note: Be careful when inserting individual cells as when existing data is moved or shifted related

information may no longer by lined up as you need it. If this happens use the UNDO button to

return the data to its previous location

7.3.4   Deleting Columns or Rows

There are times you may want to delete some data in between you set of data. As such, you will need

to delete the entire row or column. Any of this can be achieved as follows:

1.   Select the column/row to be deleted by clicking on the column/row heading
2.   Right-click and from the shortcut menu choose Delete.

Note: Pressing the delete key on the keyboard will delete the data in the row/column but the blank

row/column will remain.

7.3.5   Changing Column Widths or Row Heights

These commands enable you to change the width of the column or the height of rows so that the data

contained therein will all be visible. Even when you wrap the text, the complete text in the cell may

not be visible. Let see how we can manipulate the column widths or row heights.

Column Width

1.   Position the mouse to the right of the column header of the column you wish to adjust the
     width.
2.   The mouse changes to a double arrow.
3.   Click and drag the mouse to the right to widen the column or to the left to make the column
     narrower.

To change the column width for the best fit

1.   Double click on the line dividing the columns instead of dragging the mouse

2.   The column is sized to the width of the widest entry in that column

Alternatively

1.   Click on any cell in the Column to be adjusted by width

2.   Click on the Arrow below the Format button in the Cells Group on the

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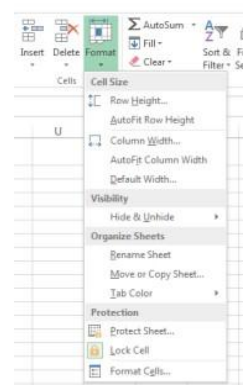
Home Tab

3. Click on *AutoFit Column Width* to have Excel choose the best fit

4. To specify an exact width select *Column Width* and in the box that displays type the exact width required.

Row Height

To adjust the row height, do the following:

1. Position the mouse on the top edge of the row header of row you wish to adjust it's height

2. The mouse changes to a double arrow

3. Click and drag the mouse to increase or reduce the height of the row.

To change the row height for the best fit

1. Double click on the line dividing the rows instead of clicking and dragging the mouse.

2. The row is sized to the height of the highest entry in that row.

Alternatively

1. Click on any cell in the Row to be adjusted by height

2. Click on the Arrow below the Format button in the Cells Group on the Home Tab

3. Click on AutoFit Row Height to have Excel choose the best fit

4. To specify an exact height select Row Height and in the box that displays type the exact height required.

7.3.6   Selecting the Entire Worksheet

There may times you want to apply some sort of formatting to the entire spreadsheet. In such cases you need to select the entire worksheet. This can be achieved by clicking in the top right corner of the worksheet (the box above the Row 1 header and to the left of the column A header) and then applying the required formatting. The formatting selected will then be applied to the entire worksheet.

To select entire worksheet

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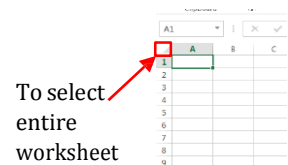
7.4   Freezing and Un-freezing Panes

Freeze Panes are used to keep an area of a worksheet visible while you scroll to another area of the worksheet, you can lock specific rows or columns in one area by freezing the panes. On the worksheet, do one of the following:

- To lock rows, select the row **below** the row or rows that you want to keep visible when you scroll.

- To lock columns, select the column to the **right** of the column or columns that you want to keep visible when you scroll.

- To lock both rows and columns, click the cell **below** and to the **right** of the rows and columns that you want to keep visible when you scroll.

On the View tab, in the Window group, click the arrow below Freeze Panes and then do one of the following:

1. To lock **Row 1 only**, click Freeze **Top Row**.

2. To lock **Column A** only, click **Freeze First** Column.

3. To lock more than one row or column, or to lock both rows and columns at the same time, use **Freeze Panes**. Ensure you active the correct cell first e.g. if you wish to freeze the top 4 rows and the first 2 columns click into cell C5 – excel will freeze the rows above and the columns to the left of the active cell.
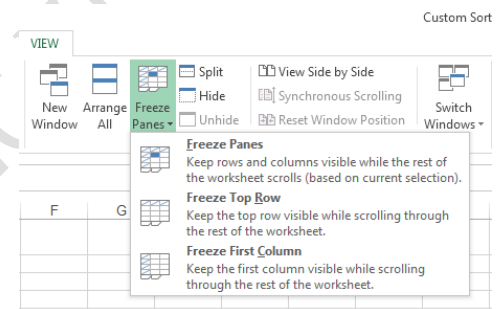
Un-Freeze Panes

To unfreeze panes do the following:

1. Click on to the View Tab, in the Windows Group and click on the arrow below Freeze Panes

2. An Unfreeze pane option will now be available

3. Click the Unfreeze Panes option

Summary

In this lecture we have learned more about Microsoft Excel. In particular we learned how to format

the data you have entered in your Excel file which included formatting the data, or formatting the cell itself, adjusting the cell height and width.

Reference

https://www.ucc.ie/en/media/support/computercentre/trainingmanuals

LECTURE EIGHT

MICROSOFT EXCEL 2013 (IV)

Introduction

In this lecture we will learn how to perform some calculations with the data you have typed.

Objectives

At the end of this lecture, you should be able to:

1. Understand the use of formula to calculate

2. Know how to draw and format charts

3. Know how to print document

8.1   Formula

Formulas are used to perform calculations in the worksheet. All calculations are based on formulas, which link cells together. The default calculation method in Excel is automatic, if a value changes in the worksheet any formula referring to that value will automatically recalculate. In Excel, the following symbols are used to represent the 4 basic Mathematical Operators:

+   Addition

-        Subtraction

*   Multiplication

/   Division

To start a formula in Microsoft Excel we type the equal sign '='. The equal sign tells Excel that the succeeding characters constitute a formula. In Excel you can type in your own formula or you can choose from some pre-set formulas called Functions (*Fx*) in Excel.

8.1.1   Entering a Formula
To enter your own formula, do the following:

1. Position the cell pointer in the cell that will contain the answer of the formula.

2. Type an = equal sign.

3. Click with the mouse on the cell to be calculated.

4. Type the mathematically operator to be used in the formula.

5. Click on the next cell to be calculated.

6. Repeat Steps 4 & 5, as required.

7. Press enter to return the result of the formula or click on the tick ✓ on the formula bar. The result of the formula is displayed in the worksheet cell. The actual formula controlling the result will be displayed in the formula bar of the worksheet.

You can build your own formula, making use of brackets to assist Excel in knowing the sequence of the calculations. Alternatively, you can select from the pool of Functions available to build you formula.

8.2   Functions

In Excel, a function is a predefined formula that operates on a value or values and returns a value or values. Many Excel functions are shorthand versions of frequently used formulas. For example, the *Sum* function lets you add a series of cell values by simply selecting a range of cells.

Formula=A1+A2+A3+A4+A5+A6+A7+A8

Function   =SUM(A1:A8)

As illustrated above, the sum function makes the formula a lot shorter and easier to create.

8.2.1   Elements of a Function
The following elements are common in all functions:
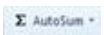
=   Every function must start with an equal sign

FUNCTION NAME   Every function must have a name

(….)   Every function must have arguments enclosed in brackets, however, there are a few exceptions such as the NOW() function which give you the current date and time.

8.2.2   Some Common functions

To insert functions in MS Excel, you can either click the arrow beside the Autosum on the

Home tab, this will immediately allow you to access the functions; Average, Count, Max &

Min. Alternatively, you can click on the Formulas Tab and select your function from functions library

or you can click the *Fx* button on the formula tab for all other functions.

AutoSum

The SUM function is the most commonly used function so to make it more accessible there is an

AutoSum button on the Home Tab in the Editing group as well. It is also located on the

Formulas Tab. Calculating the sum of a range of cells follows these steps:

1. Position the cell pointer in the cell that will contain the answer of the function. Usually this

    will be after a set of numbers either horizontally or vertically

2. Click on the AutoSum button

3. Excel will guess the range of cells to be calculated and it will insert the =SUM function. If the

    range of cells is not correct use the mouse to select the correct range of cells to be added.

Note: you can use the mouse and the **Ctrl** key to select non-adjacent cells!

4. Press return to display the results in the cell or click on the tick on the formula bar.

Alternatively

1. Position the cell pointer in the cell that will contain the result

2. Type in the sum function e.g. =SUM(B5:B7), remember always start with

    the equals.

3. Excel will prompt you with a list of possible functions, you can click on the

    function you require or continue typing it in.

4. Ensure the correct range of cells are typed

5. Hit Enter
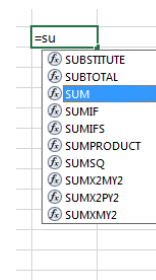
Average/Count/Max/Min

To use any of the functions above:

1. Position the cell pointer in the cell that will contain the answer to the function. Usually this will be under a column of numbers.

2. Click on the arrow to the right of the AutoSum Button

3. Select the required function from the list that appears.

4. Excel will guess the range of cells to be calculated and it will insert the chosen function. If the range of cells is not correct use the mouse to select the correct range of cells to be used. (use the mouse and the **Ctrl** key to select non- adjacent cells)

5. Press the Return Key on the keyboard to display the result of the function.

Note in 2013 there is a huge range of different functions. Click on the **Formulas** Tab to see the function library and also more advanced features such as defining names and formula auditing. I advise you to peruse this library. In Excel, once launch the insert function menu, you can actually type a short description of the function you want and Excel will produce a list of functions for you to select from. For each function, there is usually a description.
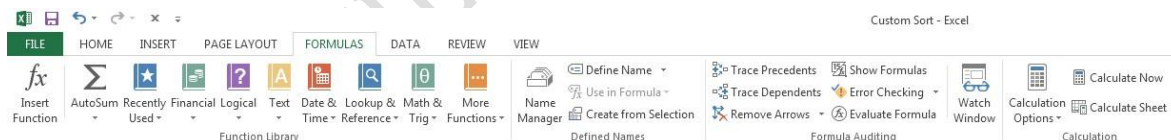
8.3   Charts

Creating a chart/ plotting a graph in Microsoft Excel is quick and easy. Excel provides a variety of chart types that you can choose from when you create a chart. Excel offers Pie, Line, Bar, and Column charts to name but a few. Showing data in a chart can make it clearer, more interesting and easier to read. Charts can also help you evaluate your data and make comparisons between different values. You can try
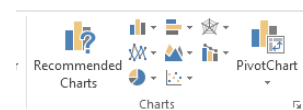
the **Recommended Charts** command, which is new to Excel 2013, on the Insert tab to quickly create a

chart that is just right for your data.

8.3.1   Creating a Chart
To plot a graph with your already typed data, use the following steps:

1. Select the data that you want to use in the chart – remember for non-adjacent cells use the **Ctrl** key with the mouse.

2. Click on to the **Insert** Tab

3. In the **Chart Group** Select the Chart Type that you require.

    a. From the drop down list select the version of the chart you require or

    b. Click on the **Recommend Charts** button and select a chart layout that excel recommends for your data.

4. The chart will display on your worksheet and the Chart Tools Tabs will display

Once you click on a chart, the chart tools appear as shown in the figure below. There are two on them. The Design and Format tabs.
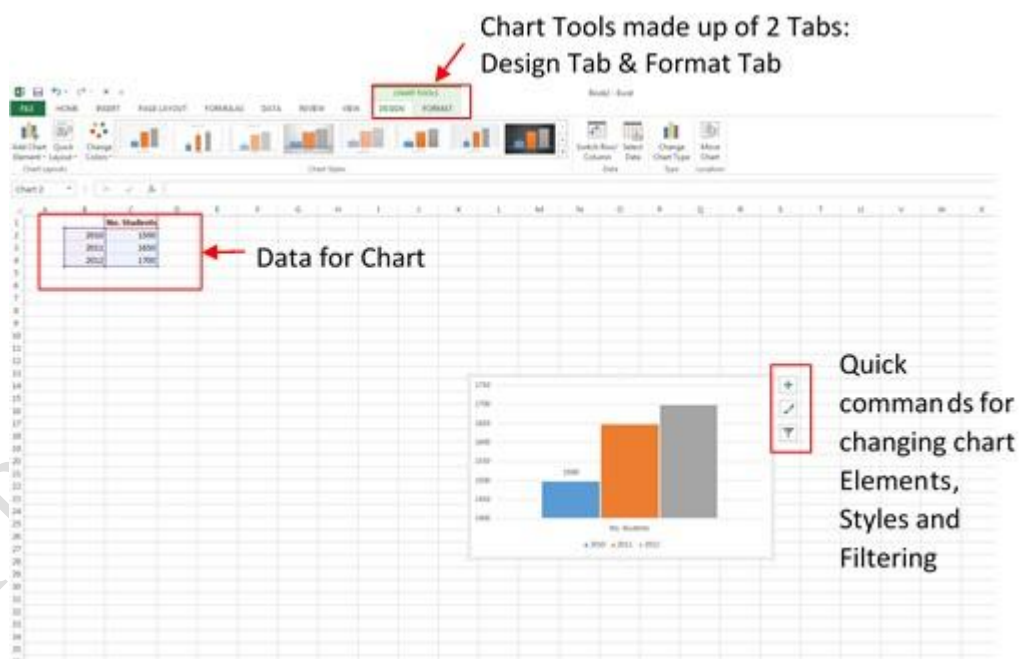
8.3.2   Chart Tools
Some of the chart tools include:

1. *Chart Layout* – with this tool, the Title and Legend of a chart can be repositioned using the different layout options.

2. *Chart Styles* – These can be used to change the look and colours used in a chart.

3. *Chart Data* – This can be used to change the data range or to swap the data over the axis.

4. *Change Chart Type* – Having created a chart, if you find it does not represent your data effectively you can use the change chart type option to try a different one.

5. *Chart Location* – Can be used to move the Chart to a separate Sheet within the Workbook instead of being presented as an object over the worksheet.

8.3.3   Modifying Chart Data

The data on a chart can be easily modified. Any changes made to the source data are automatically reflected in the chart. It is possible to delete a series from the chart, add a row of data or switch the order of a data series.

Deleting a Data Series

1. Click on the Chart

2. Data represented in the Chart will be highlighted by coloured lines

3. Delete the data no longer required or adjust the lines so that they encompass only the data to be represented in the chart

Adding a Data Series

1. Click on to the Chart

2. The data displayed in the chart will be highlighted in the work sheet by coloured lines.

3. Type the additional data beneath the highlighted data

4. Click on the coloured lines and stretch them so that they include the new data.

5. The Chart should update automatically.

Resizing a Chart

1. Click on the chart to select it.

2. A pale border will appear around the chart. At the corners on the border each length you should see a series of small dots

3. When you rest your mouse on one of the series of small dots a double-headed arrow appears.

4. Click and drag the edge to adjust the size of the chart as required. You can use the corner handles combined with holding the Shift key down to keep the proportions correct.

Deleting a Chart

1. Click on the chart to select it.

2. Press the **Delete** key on the keyboard.

8.4   Print Preview & Printing

Once you are done preparing your Excel file, you may want to print such a file. However it is best practice to preview your file before printing to be sure all is well. To preview your worksheet before printing

- Click on the File Menu and click on Print

- The following screen is displayed, showing a preview of your workbook to the right of the screen showing you the sheet exactly as it will print
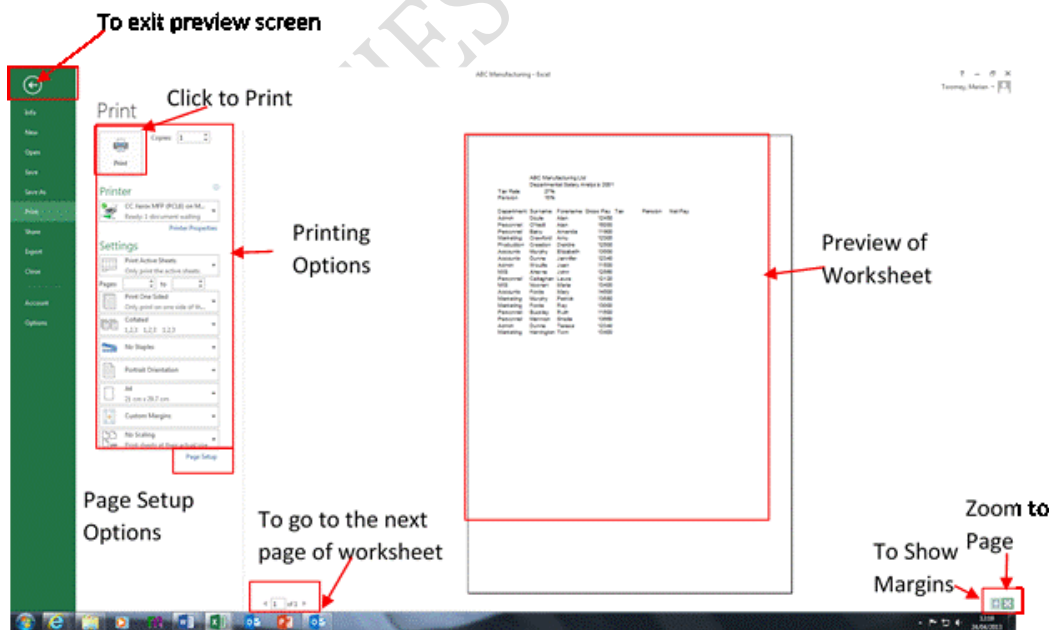
This screen also displays some other options you need for printing and page set-up. In the following

sections we will look at these in details.

8.4.1   Set printing options

To set printing options in MS Excel, you can do one or more of the following:

- To change the printer, click the drop-down box under **Printer**, and select the printer that you want.

Print Button

To select required printer

- To make page setup changes, including changing page orientation, paper size, and page margins, select the options that you want under **Settings**.

Various Print Options
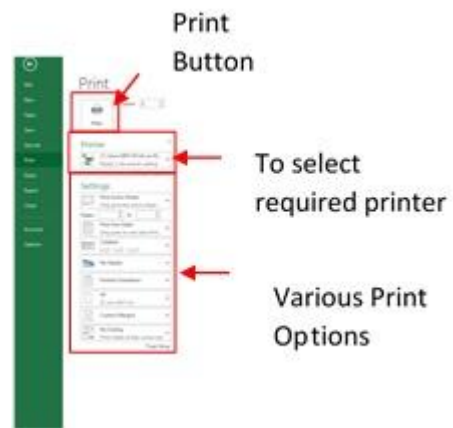
- To scale the entire worksheet to fit on a single printed page, under Settings, click the option that you want in the scale options drop-down box.

8.4.2   Printing all or part of the worksheet

- To print the active sheet or sheets, or the entire workbook, under Settings, select the option that you want.

- To print a portion of the worksheet, do the following:

Click on the arrow to view more options

Click the Home tab to return to the worksheet, and then select the range of data that you want to print. On the File tab, click Print.

Under Settings, click *Print Selection*.

Note: If a worksheet has a defined print area, Excel prints only that area. If you don't want to print only the defined print area, select the Ignore print area check box. To exit out of the print preview mode, just click on the Home tab (or any other required tab) or alternatively, hit the Esc key on your keyboard

8.5   Page Setup

If the sheet is not displaying exactly as you required for printing you can make some changes to its

setup. To make the changes, do the following:

- In **Print Preview** click on the **Page Setup** Button.

 Alternatively, if you are not already in the Print Preview

- Click on the **Page Layout** Tab
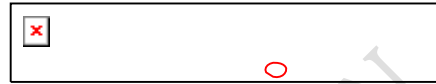
- Make changes to Margins, Orientation etc. using the Scale to Fit and Sheet Options Groups.

- You may also click on the arrow to the right of the **Page Setup** Group name to launch

     the **Page Setup dialogue box.**

8.5.1   Page Tab
- – *Orientation* you can select preferred orientation.

- – *Scaling*

Adjust to: can be used to force a worksheet to fit on one page or a

set number of pages regardless of the actual number of pages in

the worksheet

Fit To: choose the number of pages to fit the worksheet on.

You can also adjust other settings as you wish.

8.5.2   Margins Tab
You can adjust the top, bottom, left & right margins of the worksheet in the Margins tab. When

making adjustments please be aware that not all printers can print right to the edge of a page. Also,

ensure you leave adequate space at the top and/or bottom if you have included headers and/or footers

in the worksheet.

Centre on Page allows you to centre your data horizontally or vertically on the page.

8.5.3 Header/Footer Tab
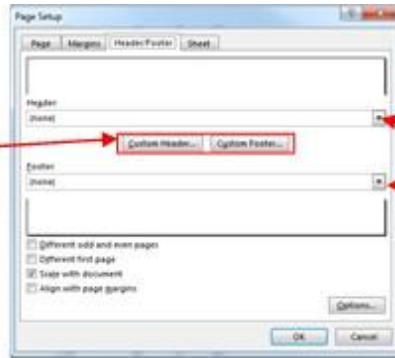
To add a header or footer in your Excel file, you can select from a list of predefined/ built-in headers and footers. This is done by clicking on the arrows and selecting any of your choice. Alternatively, you can set your own by clicking on the custom header or custom footer buttons.

8.5.4 Sheet Tab
- On the printed page it can to useful to have the first few column and rows visible on all pages Under the heading **Print Titles** select the Rows you want repeated at the top of each page by clicking into the box and then highlighting the required Rows using your mouse on the worksheet. (e.g. if you wish to repeat Row 1 & 2 the reference in the box should now display $1:$2) Repeat the same process for columns

- Under the heading **Print**, tick the **Gridlines** box, this will ensure that the gridlines will be printed out.
- When all the required changes have been made it is advisable to click on Print Preview before actually printing the worksheet.

Summary

In this lecture, we learned how use formula, functions as well as how to plot charts.

Post Test
1. Enter the following data in an Excel sheet and then use formula to fill-in the last two columns.

Product	January Sales (kg)	February Sales (kg)	March Sales (kg)	Total Sales	Average Sales
Rice	5000	4000	4500		

Beans	4000	4860	3005		
Yam	7000	6000	4500		

2. Plot a graph of the sales by Month for the three products in question 1.

Reference
https://www.ucc.ie/en/media/support/computercentre/trainingmanuals

CHAPTER NINE

MICROSOFT ACCESS 2013 (I)

Introduction

Microsoft Access 2013 is a relational database application in the Microsoft 2013 Office Suite that allows users to enter, manage and run reports on large amounts of data. In this lecture, you will learn the essential skills needed to use a database including entering data into forms and tables, running queries to search data, and producing meaningful reports.

Objectives
At the end of this lecture you should be able to:

1. Define what a database is
2. State the use of MS Access objects
3. Create a MS Access database

9.1   The Basics

As you already know, Microsoft Access 2013 is a database creation and management program. When you launch Access, the landing view you will be given is shown below.
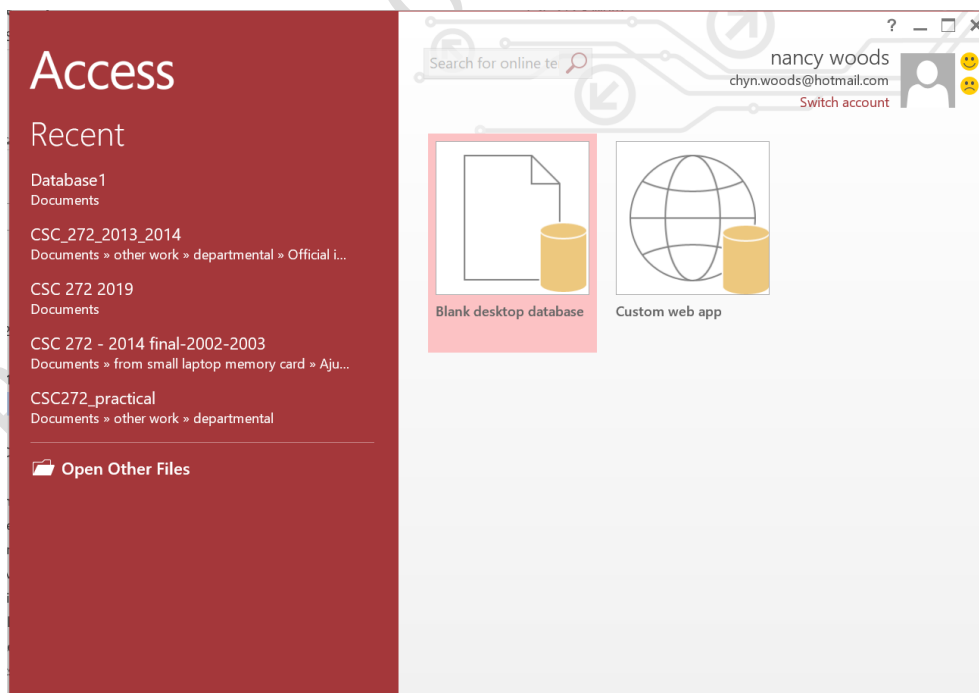
You would normally select ***Blank desktop Database*** to create your own database. You will then be expected to type a name for your database and specify a location to save it. Once you do that, your database is created, however it is still empty. In order for you to understand Access easily, you must first understand databases. Therefore in the next section, you will learn a little about databases and how they are used.

9.2   Database

A database is a collection of data that is stored in a computer system. Databases allow their users to enter data, access the data and analyze their data quickly and easily. Have you ever watched a store employee use a computer to see whether an item was in stock? Then you've seen a database in action. The easiest way to understand a database is to think of it as a collection of lists (tables). Think about the database mentioned above: the database of items in a store. What lists are contained in a database like this? Well, to start with, there's a list of customers names. Then there's a list of items in the store, another list with staff information, a list of contact information, and so on.

Most often the word "database" is used to describe a collection of related "data" stored on computers. An electronic database should allow you to store, sort, and retrieve data. You can create simple databases by creating an Excel spreadsheet. Well, Excel is great at storing and organizing numbers, Access is far stronger at handling non-numerical data, like names and descriptions. Non-numerical data plays a significant role in almost any database, and it's important to be able to sort and analyze it. For example, here we have a simple database of patients:

MedRec#	First Name	Last Name	DOB	Doctor
123-456	Jack	Okeke	06/08/72	Ola
987-654	Jill	Ade	08/27/65	Lewis
753-951	Mary	Balogun	12/08/51	Ola

Here is a simple database of doctors:

EmpID #	First Name	Last Name	Phone #
123-333	Ken	Ola	555-1234
123-334	Laura	Adebisi	555-4567
123-335	Yolanda	Lewis	555-7890

The thing that really sets databases apart from any other way of storing data is connectivity. We call a database like the ones you'll work with in Access a relational database. A relational database is able to understand how lists and the objects within them relate to one another. Relational means we can link together sets of data, we can relate the data. We can keep track of the patients, the doctors and when the patients last saw their doctors, what happened at each visit and so on. Access allows us to relate our data, without the repetition that may occur anywhere else.

Databases in Access are composed of four *objects*: tables, queries, forms, and reports. Together, these objects allow you to enter, store, analyze, and compile your data however you want. The figure below shows as sample database with its objects and their content.
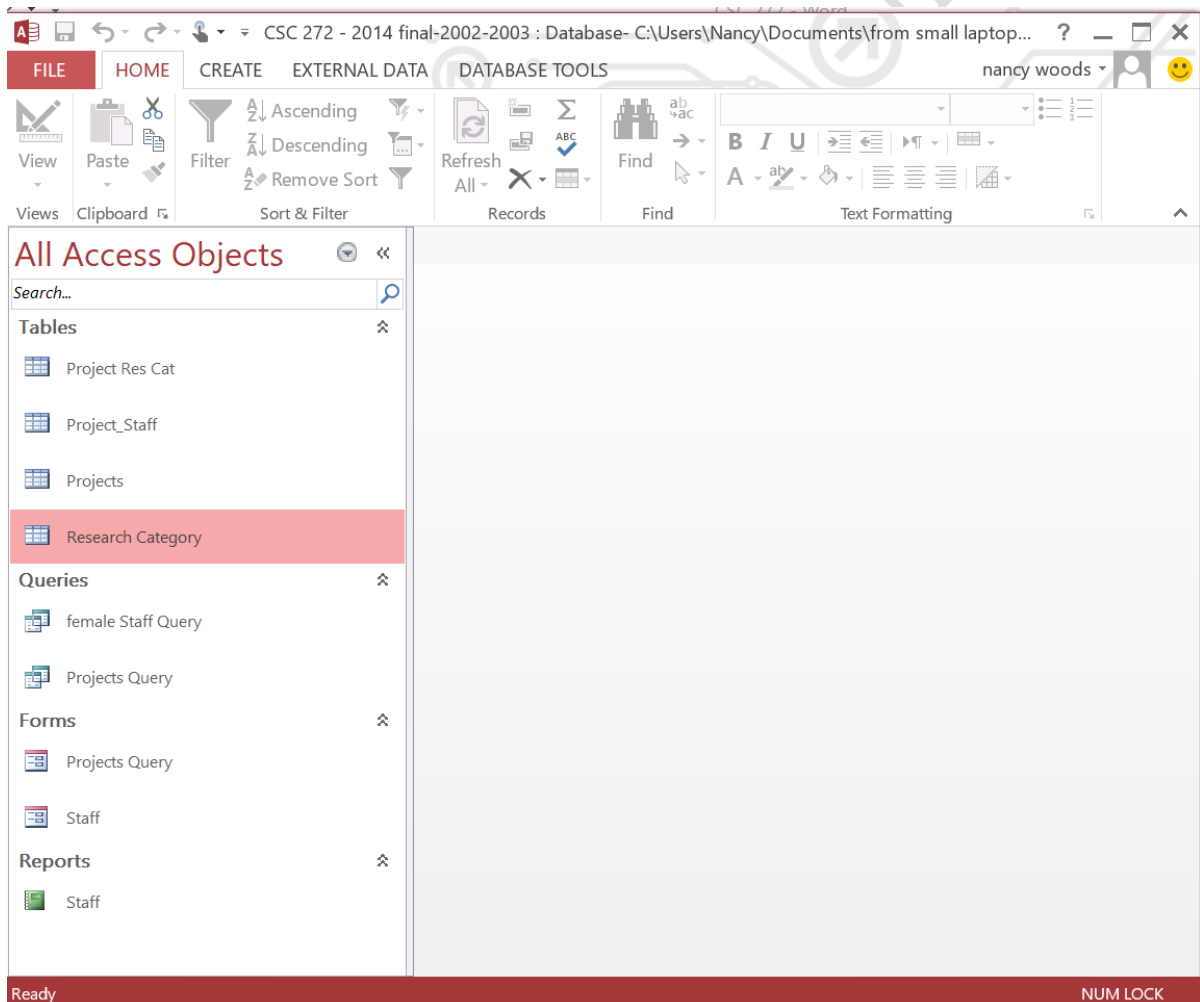
In Access the data is saved in **Tables**. As the data in the Tables change, the rest of the Access database will reflect the newest information.

Queries show the data in a tabular format. A Query can pull from multiple Tables and allow you to limit the records (rows) display by using criteria and showing only the fields (columns) you want. We can find provide Ken Ola with a list of his patients.

Forms can be created to provide a "user- friendly" side to your database. They are used to view and enter your data in an interactive formatted structure. Forms are also used to make menus and search windows that turn a simple data collection tool into a more interactive user- friendly application.

Reports are created to print out your data in a formatted structure. They allow you to group and organize your data. They can be used to create Form letters and mailing labels.

In the subsequent sections, you will learn more about each of the four objects and come to understand how they interact with each other to create a fully functional relational database. But first let us briefly learn what to keep in mind when planning a database.

9.3 Planning the Database

The most important part of creating a relational database is planning. This can be difficult when you are first learning to use Microsoft Access. Here are some questions that may help:

1.   Input -   What data do I already have for the database?

2.   Output -   What information do I want to get out of the database?

3.   Process -   What do I need to do to get there?

Sometimes it helps to plan the final Reports that you want from your database. For example, we want to have a chart of how many patients attended their appointments. Do we track the 'cancellations' vs. the 'no shows'? What about the late arrivals and the rescheduled? If we want to differentiate, we need

to make sure we are going to collect that data. This is why it's so important to plan everything, to try to predict the "what ifs" that may occur once you have your data collected.

The Tables are the core of your Access database; these structures store the data. Tables are essential to using any of the other Access Tools. When planning out your database try to remember the basic design rules for your Tables.

9.4 Design Rules

These rules will guide you when creating a database. Bear in mind that this course is NOT to teach you about databases. There is a course reserved for that, which you will learn subsequently. There you will be taught more about relational databases, entity-relation model and entity relation diagrams. These will help you understand more about databases. What we are learning here is just the basics to help us get around learning Microsoft Access. The following rules can guide you.

9.4.1 Organizing Data

Once you have an idea of the data you would like to collect, you need to decide how many tables you might want to use to organize the data efficiently. In Excel, we might keep several numbered columns to keep track of things, i.e. Medication1, Medication 2…, but in Access we should create a second table to track the numbered fields.

9.4.2 No Derived Fields

By using the relationships between our data sets, we can derive missing data. If we are creating a new appointment for a patient, we only need to put in their Medical Record Number (or other unique identifier). The patient's name, phone number, and other information can be derived from the Patient Table.

9.4.3   Data is broken down into Smallest Logical Parts
Pulling fields together in Access is often simple; pulling them apart usually requires human intervention. Think of this as breaking up the data into its smallest sort- able part.

9.4.4   Descriptive Field Names
It's tempting to use abbreviations when we are creating our data tables, but if the title we use is too vague or too abbreviated we may not be able to recall why we created that field. For example: -DOB – Date of Birth or Department of Babies? SN- Surname or Serial Number?

9.4.5   Unique Field Names
Be sure to differentiate between the field names in each Table. We can have a 'First Name' in our Patient Table and a 'First Name' in our Doctor Table but this can lead to confusion when we try to pull both Tables into one database object. So it is better to use Patient First Name.

9.4.6   No Calculated Fields
In Microsoft Excel, we can perform our calculations on the same sheet as our data, but a Table in Access is stagnant data, it does not change unless you make it change. Access will let you create calculations in Queries, Forms and Reports. Newer versions of Access do have a calculated field type for the table. This embeds a calculation in the record and is not always reflected in a data entry form.

9.4.7   Unique Records
It's important that each Table has a way to keep records unique. We can do this by setting one field (column) to be a Primary Key field. When a field is set as a Primary Key, Access will not allow any duplication nor blanks. When there is not a unique field in your data set, you can use an AutoNumber. AutoNumbers are incremented or random fields that are always unique.

9.5   Access Object - Tables
As already stated, Access consists of four main database objects: *Tables*, *Queries*, *Forms*, and *Reports*. Each object has at least two views, **Design** and "**Data**". The *Design View* is where we build the structure of that database object. The *data view* shows the output of the data and is different for

each object. Tables and Queries have a Datasheet View, Forms have a Form View, and Reports have a Report View, or a Print Preview view. Each kind of object has its own purpose. In this section we will discuss Tables.

Tables store data. The Tables are the true 'database' (base of data). These need to be created and properly linked (related) in order to effectively use the other Access tools. Tables are the core of your database, everything else in Access depends on the Tables.

The **Design View** of a Table is shown below.
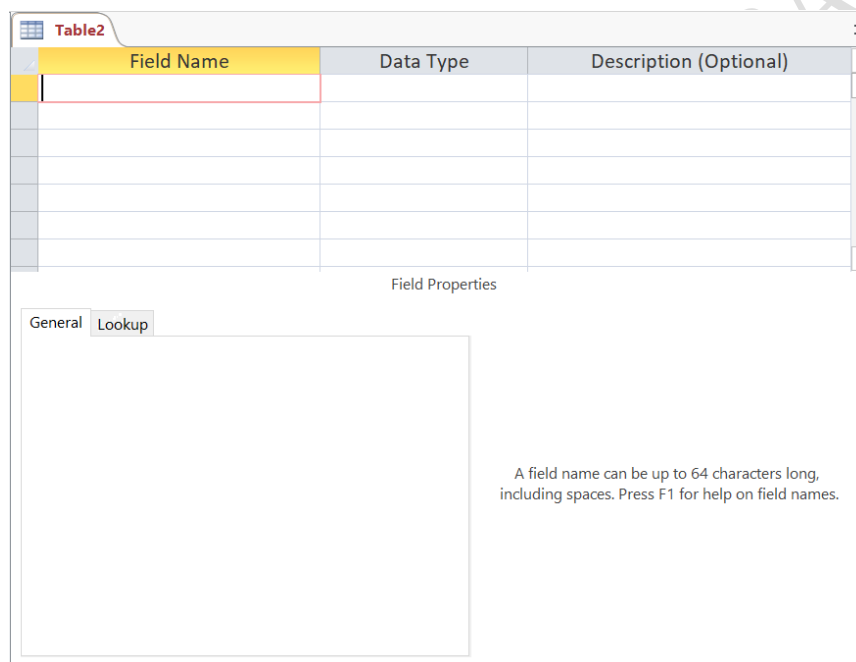
It allows you to create and modify a Table. You will be expected to specify the following characteristics of the table:

1. **Field Names** (i.e. column headings). This specify what each column will be labelled as. Examples are First Name, Last name, Gender, etc.

2. **Data Type**: This is the type of data stored in a field. There are various data types allowed, depending on the version of MS Access that you have installed on your system. Some examples are shown below:

Data Type	Description
Short Text	Allows any alphanumeric characters, up to 255 characters
Number	Limited to Numbers only
Date/Time	Allows Dates and/or Times only
AutoNumber	Creates a unique number for each record.
Yes/No	This is a binary field (only two answers, Yes/No, True/False)
Lookup Wizard…	The lookup wizard allows you to link the field to another Table or to type in a list of your own creation.

3. **Descriptions:** This is optional, however whatever you enter here will be displayed in the status bar in the Data view of Forms

4. Finally, you specify the **Properties** of each field, such as how many characters can be entered (text field size),or how the data is formatted (05/05/15 or May 5, 2015).

Below is an example of the design view of a Table called Visitinfo

You will notice that the first field named **VisitID** has a key-like symbol to its left. This signifies that this field, is the unique identifier for this table. As said earlier, every Table should have a field specified as it's primary key.

The **Datasheet View** of a Table allows you to create and modify *the data* within a grid structure based on the settings you specified in the Design View. The datasheet view of VisitInfo is shown below.

Database terminologies

There are some terminologies that are always used in database environment. These are briefly discussed here. A collection of fields make up a record. A collection of records make up a Table. A collection of Tables make up a database. Therefore:-

A Field – One column of a Table common to all the records. A field is more than just a column; it's a way of organizing information by the type of data it is. Every piece of information within a field is of the same type. For example, every entry in a field called First Name would be a name, and every entry in field called Street Address would be an address.

A Record – One row of a Table containing all data about a particular entry. A record is more than just a row; it's a unit of information. Every cell in a given row is part of that row's record. Each record spans several fields. Even though the information in each record is organized into fields, it belongs with the other information in that record. See the number at the left of each row? It's the ID number that identifies each record. The ID number for a record refers to every piece of information contained on that row.

A Table – One set of related data. Tables are good for storing closely related information. Let's say you own a bakery and have a database that includes a table with your customers'

names and information, like their phone numbers, home addresses, and email addresses. Because these pieces of information are all details on your customers, you'd include them all in the same table. Each customer would be represented by a unique record, and each type of information about these customers would be stored in its own field. If you decided to add any more information—say, a customer's birthday—you would simply create a new field within the same table.

A Database – Structured collection of related Tables.

Summary

In this lecture, we learned that a database is structured collection of related data that are store in Tables. Tables are made up of fields. Each complete entry in a Table is called a record. We also learned that in MS Access, there four main objects namely, Tables, Queries, Forms and Reports.

Post Test/ Exercise

1. Launch your Access application, type a name for your database and create a blank database. Create two tables named **Students** and **Courses**. The fields and sample data for both tables are listed below. I would leave you to decide which datatype the field should have. After creating the tables, switch to the datasheet view and add records to the data base for at least 20 students and 5 courses.

Students			Courses	
Fieldname	*Sample Data*		*Fieldname*	*Sample Data*
StudentID (PK)	53987		CourseID	CSC272
StudentSurname	Adesuwa		Course title	Information Management Systems
StudentFirstName	Alero		Course Unit	3
StudentGender	Female		Course Status	Required
StudentDateofBirth	15-May-1974		CourseDescription	This course will teach you how to use some Microsoft Apps…
StudentStateofOrigin	Oyo		LevelTaken	200

2. Create another database called Projects. Next create a table whose design view is presented below.

	Field Name	Data Type	Description (Optional)
🔑	PF-No	Short Text	
	FirstName	Short Text	
	Surname	Short Text	
	Gender	Short Text	
	Address	Short Text	

Switch to datasheet view and populate your table with the data below

PF-No	FirstName	Surname	Gender	Addre
AS-001	John	Diels	M	Chemistry Department
AS-002	Gerd	David	F	Physics Department
AS-003	Generose	Nzi	F	Mathematics Department
AS-004	Francis	Moon	F	Statistics Department
AS-005	John	Pillay	M	Agronomy Department
AS-006	Loiuse	Vroh	M	Botany Department
AS-007	Maria	Allen	M	Microbiology Department
AS-008	Ranajit	Band	F	Chemistry Department
AS-009	Kerstin	Ellen	F	Physics Department
AS-010	Richard	Hanna	M	Mathematics Department
AS-011	Oluwarotimi	Fashola	F	Statistics Department
AS-012	Hiko	Kikuno	M	Agronomy Department
AS-013	Sussie	Dixon	M	Botany Department
AS-014	Bert	Asiodu	M	Microbiology Department,

References

1. Pandora Rose Cowart, 2017, Microsoft Access Basics & Database Fundamentals
2. https://edu.gcfglobal.org/en/access2013

MICROSOFT ACCESS (II)

Introduction

In the previous lecture, we learned how to create a database and also create tables in the database. With Access, you can obtain better collection of results. You can create queries to analyze and filter your data that are stored in the Tables.

Objectives

At the end of this lecture, you should be able to:

1. Modify an existing table structure

2. Create and use MS Access Queries

10.1 Explore the Microsoft Access Ribbon

Before we go ahead to the lecture for this week, I would like you to open your MS Access and explore the TABS present in the MS Access ribbon. The ribbon has four standard Tabs named Home, Create, External Data and Database tools.

    a. **Home** tab – Clipboard, Sort & Filter, Spell Check, Refresh Data, Format text

    b. **Create** – Create a database object: Tables, Queries, Forms, Reports

    c. **External Data** – Import and Export data

    d. **Database Tools** – Advanced Features of Relationships and Data Analyzers

The ribbon also displays some other contextual tabs depending on which view of any of the Access object are activated. These contextual tabs are named Table Tool, Query Tool, Form Layout Tool and Report Layout Tool. With time you will learn how to use all the command in these contextual tabs extensively.

10.2   Modifying Table Structure

In the previous lecture, we learned how to create a database and also create tables in the database. It is possible that you may want to add another field to a Table or even rearrange the existing fields on a Table. In this section we will learn how to do these, using the table created in the post test question 2 of chapter 9. That is the *Staff* Table.

10.2.1   Rearrange Fields
To rearrange fields of a table, we use the following steps:

1.   Open the Table and switch to the Design view.
2.   In Design View, move Surname above FirstName, using *drag and drop method*.

        a. Click on the row heading, the grey box in front of the field name. Then Click/Drag the line above the FirstName

3.   Switch to the Datasheet View and Save the table

        Note: Data saves itself, structural changes have to be saved manually

You will notice that the fields have been swapped!

10.2.2   Adding Fields
1.   In Design View, create *Staff Birth Date* above *Address*, **Remember to select the appropriate data type**.
2.   Switch to the Data View, Save the Table and enter their birthdates.

Now you know that a Table design is not static and can be changed at any point in time. What you may not be able to change is the datatype of a field that is already populated. Can you think why this is so? Next we will study another Access Object called Queries.

10.3   Access Object - Queries
Queries are a way of searching for and compiling data from one or more tables. Running a query is like asking a detailed question of your database. When you build a query in Access, you are defining specific search conditions to find exactly the data you want.

Queries are far more powerful than the simple searches you might carry out within a table. While a search would be able to help you find the name of one customer at your business, you could run a query to find the name and phone number of every customer who's made a purchase within the past week. A well-designed query can give information you might not be able to find just by looking through the data in your tables.

Queries show a selection of data based on criteria (limitations) you provide. Queries can pull from one or more related Tables and/or other Queries.

The **Datasheet View** of a Query looks like a Table. All data added or modified in a Query, will be saved in the Table. The **Design View** is where the structure of the Query is created. This is where we choose the record sources and fields, and set the sort order and criteria.

The figure above summarizes what is contained in a query. It is up to you to decide what you want in your query. Suppose for our Staff Table, we want to extract ALL the female staff on the list , how would we do that?

10.3.1 Create Male Staff's Query

To create the above query, we follow the steps below.

1. Navigate to the Create Tab and click on Query Wizard. You can also use Query Design, when you have mastered how to build queries. For now we will use Query Wizard.
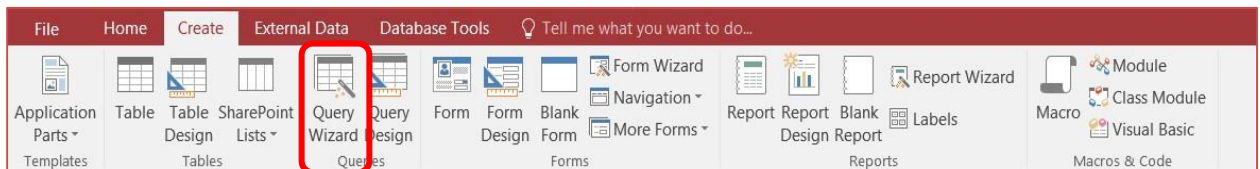
2. You will be asked a series of questions. First select simple query from the screen below.
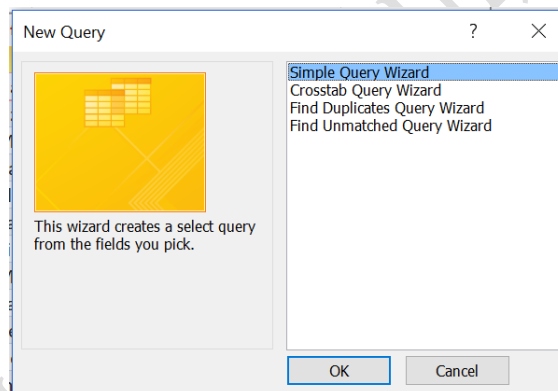
3. Next, click on the text area under Tables/Queries and select Table: Staff as shown below.

   This will display all the fields in that table in the area *Available Fields*

99
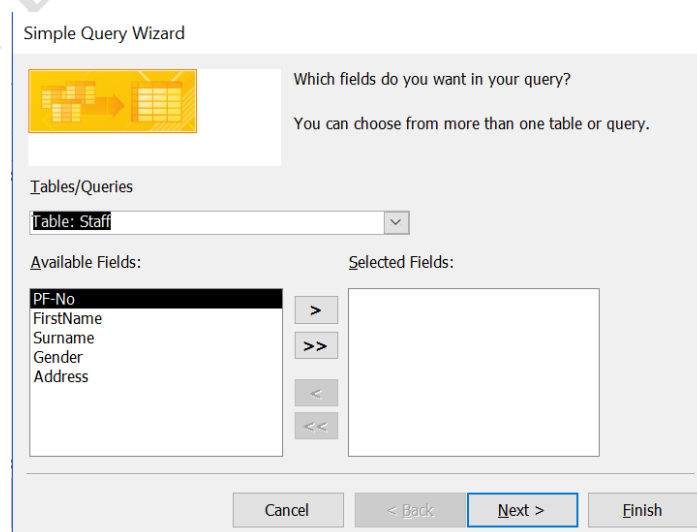
4. Next Click on FirstName and then on > to move that field to *Selected Fields* area. Do the same

   thing for Surname and Gender. You should have what is below.
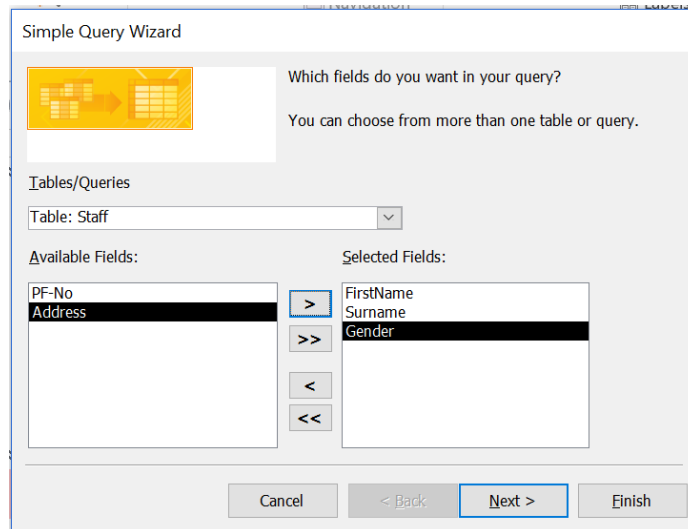
5.   Next you will be prompted to specify a name for your query. Type a suitable name, then select

   "Open the query to view information" then click on *Finish.* We are almost done!
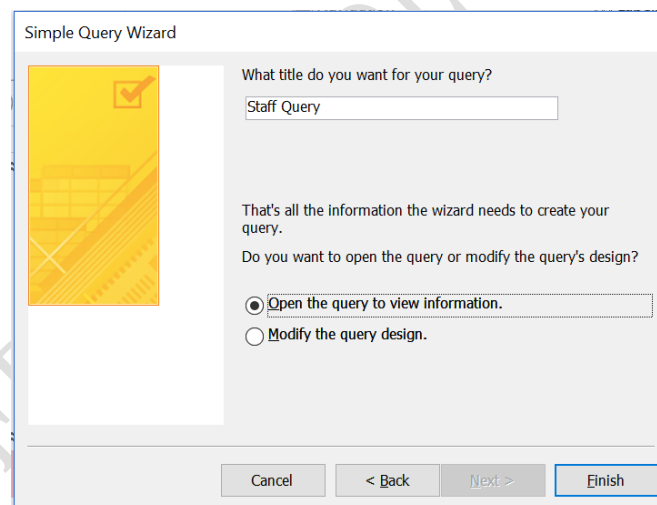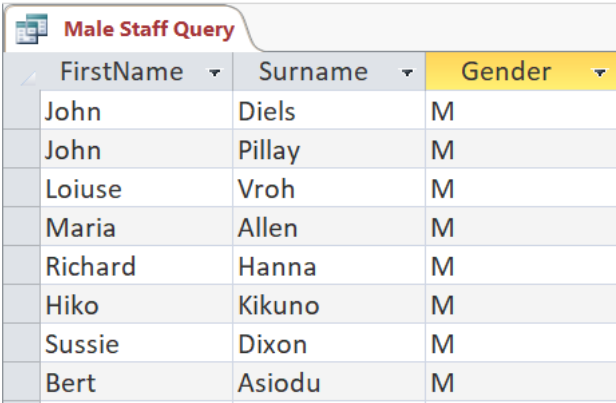
6.   MS Access will display the content of your query as a table. You will notice that it listed

   everyone in the Table as shown below. This is because we have not yet specified a criteria!

7. You can right-click on the Query and select Design view so you have what is shown below. Then under the Gender field, type "M". as shown below. Save the query and click on Datasheet view.

8. You data should now be narrowed down to the figure below!

FirstName	Surname	Gender
John	Diels	M
John	Pillay	M
Loiuse	Vroh	M
Maria	Allen	M
Richard	Hanna	M
Hiko	Kikuno	M
Sussie	Dixon	M
Bert	Asiodu	M

And we are done!

Summary

In this lecture, we learned how to query a Table in a database.

Post Test

1. Extract All the female staff from the Staff table

2. Extract all those that bear 'John" as first Name.

References

Pandora Rose Cowart, 2017, Microsoft Access Basics & Database Fundamentals

https://edu.gcfglobal.org/en/access2013

CHAPTER ELEVEN

MICROSOFT ACCESS (III)

Introduction

Although tables store all of your data, the other three objects—forms, queries, and reports—offer you ways to work with it. Each of these objects interacts with the records stored in your database's tables. In this lecture, we will learn how to create simple forms and Reports.

Objectives

At the end of this lecture you should be able to:

1. Create a form for a Table in a database

2. Create a Report for a Table in a database

11.1   Access Object - Forms

Forms are used for entering, modifying, and viewing records. You likely have had to fill out forms on many occasions, like when updating your sim card information, applying for a job, or registering for school. The reason forms are used so often is that they're an easy way to guide people toward entering data correctly. When you enter information into a form in Access, the data goes exactly where the database designer wants it to go: in one or more related tables.
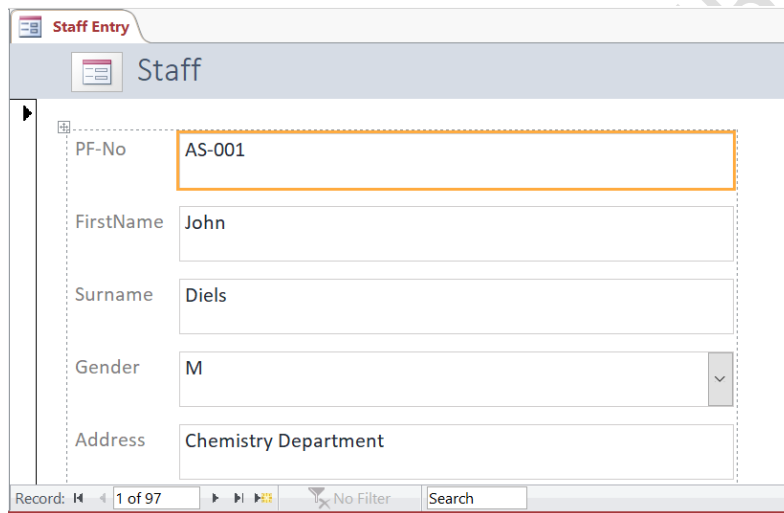
Forms make entering data easier. Working with extensive tables can be confusing, and when you have connected tables you might need to work with more than one at a time to enter a set of data. However, with forms it's possible to enter data into multiple tables at once, all in one place. Database designers can even set restrictions on individual form components to ensure all of the needed data is entered in the correct format. All in all, forms help keep data consistent and organized, which is essential for an accurate and powerful database.

11.1.1 Create Simple Form
1. Select Staff Table from left Navigation Pane so it becomes the default data source

2. On the Create Tab click on the **Form** button
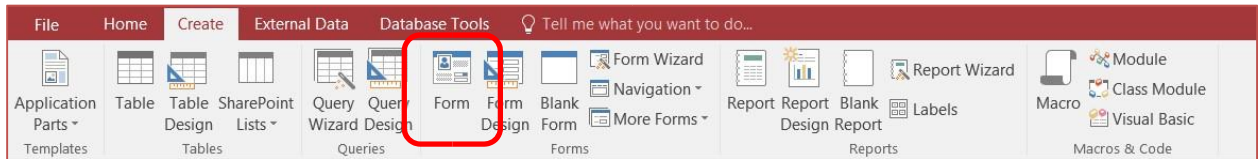
3. Access will take you to the Form's Layout view

   a. Place your mouse along the right border of the highlighted box and resize, if you

   want as shown below:

4. Alternatively, you can change to *Form Design View* as shown below to modify the form

   further.

5. Once you are done modifying the form layout, save your work and then change to form View to add more data to your Staff Table.

   a. Tab until you reach a new blank record, or use the NEW button on *Record Group* in the Home Tab

   b. Make sure to leave the record, move to another record or save

6. Open the Staff TABLE and view this new person you just added.

Note:

Access creates the structure of the form based on the structure of the table at that moment in time. If you make any structural changes like adding a new field, it will not magically appear on the form you already created, you'll have to go to the design of the form and add it.

11.2   Access Object - Reports

Reports offer you the ability to present your data in print. If you've ever received a computer printout of a class schedule or a printed invoice of a purchase, you've seen a database report. Reports are useful because they allow you to present components of your database in an easy-to-read format. You can even customize a report's appearance to make it visually appealing. Access offers you the ability to create a report from any table or query.

11.2.1   Create Simple Report

1. Select the Staff Table from left Navigation Pane so it becomes the default data source

2. On the Create Tab click on the REPORT button

3. The report opens in Layout View, adjust the columns to fit the data
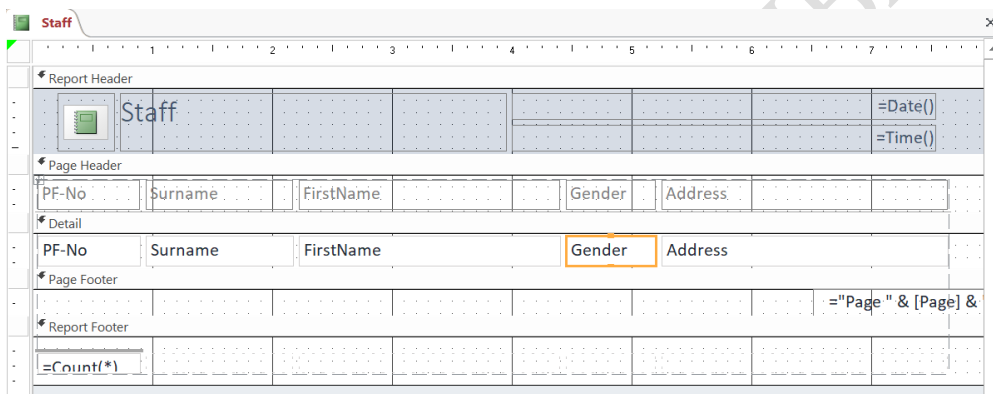
4. Right-click in an empty space and go to the Print Preview shown below.

PF-No	Surname	FirstName	Gender	Address
AS-001	Diels	John	M	Chemistry Department
AS-002	David	Gerd	F	Physics Department
AS-003	Nzi	Generose	F	Mathematics Department
AS-004	Moon	Francis	F	Statistics Department
AS-005	Pillay	John	M	Agronomy Department
AS-006	Vroh	Loiuse	M	Botany Department
AS-007	Allen	Maria	M	Microbiology Department
AS-008	Band	Ranajit	F	Chemistry Department
AS-009	Ellen	Kerstin	F	Physics Department
AS-010	Hanna	Richard	M	Mathematics Department
AS-011	Fashola	Oluwarotimi	F	Statistics Department
AS-012	Kikuno	Hiko	M	Agronomy Department
AS-013	Dixon	Sussie	M	Botany Department
AS-014	Asiodu	Bert	M	Microbiology Department,

Staff — Sunday, March 3, 2019 — 10:49:59 PM

5. Close and Save as **Staff**

Summary

Now that you have a good idea of how each object can be used, it can initially be difficult to understand how they all work together. It helps to remember that they all work with the same data. Every piece of data a **query**, **form**, or **report** uses is stored in one of your database **tables**.
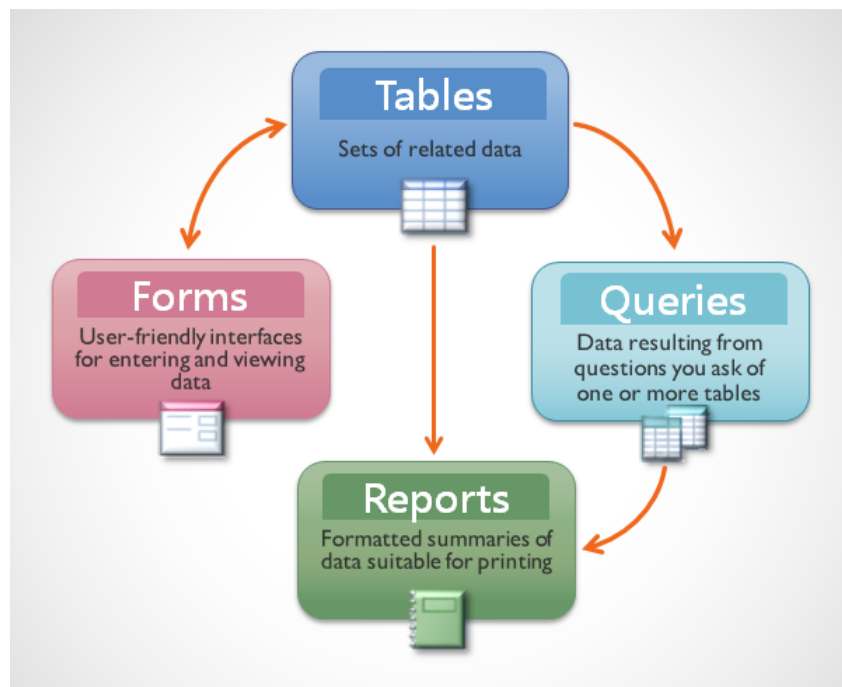
Post Test

Create Forms and reports for the Student and Course Table you created in lecture 9.

References

Pandora Rose Cowart, 2017, Microsoft Access Basics & Database Fundamentals

https://edu.gcfglobal.org/en/access2013

<h1 style="text-align:center">LECTURE TWELVE</h1>

<h1 style="text-align:center">MICROSOFT POWERPOINT (I)</h1>

Introduction

Microsoft PowerPoint is widely used for making professional quality presentations in a variety of formats, including on-screen computer slide shows, black-and-white prints. You can also use it for speaker's notes and audience hand-outs. In addition, PowerPoint can be used as a drawing package for preparing pictures, forms, posters and leaflets

12.1   Starting Microsoft PowerPoint

To load Microsoft PowerPoint:

1.   Click on the **Start** button again but this time choose **All Programs**

2.   From the sub-menu choose **Microsoft Office 2013** then **PowerPoint 2013** – choose **Blank Presentation**

You are presented with the screen below, ready to enter information onto your first (title) slide:
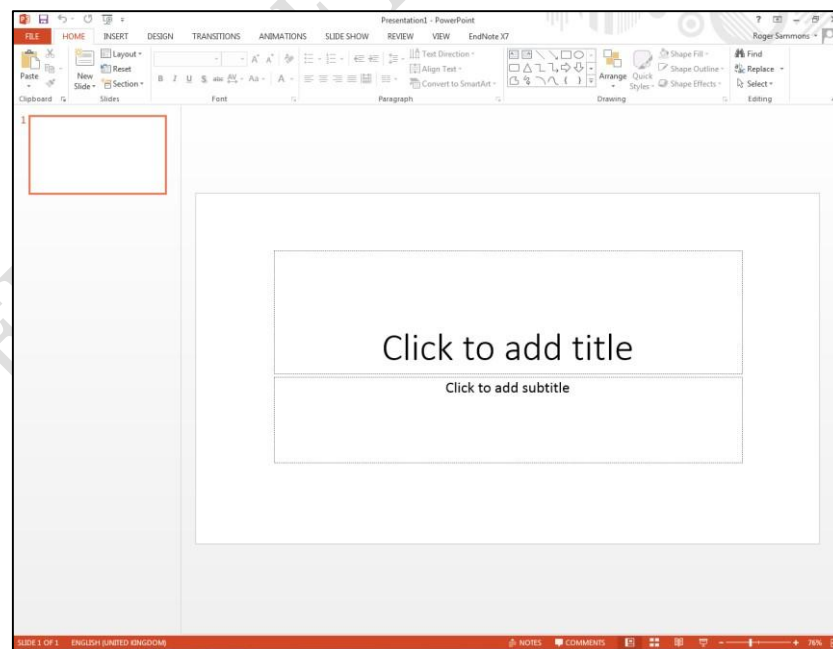
The main part of the screen is divided into two sections. The main section shows the current slide, while on the left, slide miniatures appear, allowing you to see the current slide in its context.

In the top left corner of the screen is the *Quick Access Toolbar* which contains icons to common commands just like the other programs we have already learned. Below this is the *Ribbon*, with *tabs* along the top. By now you are familiar with Microsoft Office Ribbon and their arrangement. Currently the *HOME* tab is displayed.

At the very bottom of the window, is the *Status Bar*. This shows various information, eg which slide you are currently looking at and the language you're working in. On the right-hand side of the Status Bar are icons to change the view of the slides and to zoom in or out.

12.2   Creating a New Presentation

Whenever you create a presentation, it is important that you give full consideration to your audience. In particular, don't try to crowd too much information on each slide and make sure that the text is big enough to be clearly readable. It is best to put not more than 6 points on a slide. At various points in this lecture, we will mention *good practice* so far as *accessibility* is concerned.

12.2.1   Entering Text onto the First Slide
The first slide has the layout for a *Title Slide*. The layout has two boxes with a dotted frame. These boxes are called *placeholders*. Those provided here can contain text. You will be meeting other types of placeholder later. Instructions on using each type of placeholder appear within its frame.

1. Click on *Click to add title* to activate the top main title placeholder and type the title of your presentation, **e.g. My Journey in UI so far**

Note that the default font is Calibri (Headings), the size is large (44 pt), and the title is centre-aligned in the placeholder. You can change this font as you wish.

2. Click on the lower placeholder, *Click to add subtitle*, and type ***your own name and Matric No.***

If you find the text on the screen a bit small to read then increase the magnification using the zoom facility in the bottom right-hand corner of the *Status Bar*. Use the slider or click on the **[Zoom level] (%)** button.

12.2.2   Saving a Presentation

It's a good idea to save your work at regular intervals whilst you are working on it rather than wait until you have finished the last slide. For example, you could save every 15 minutes or after completing each slide.

1. Click on the **[Save]** button on the *Quick Access Toolbar* (or move to the **FILE** tab and choose **Save**) – better still, use **<Ctrl s>** from the keyboard

2. Save the file in My Documents or any folder of your choice

The *File name:* has already been set for you but you can change this here if you want. PowerPoint automatically adds a **.pptx** extension.

3. Press **<Enter>** for **[Save]**

12.2.3   Adding New Slides

Now that you have saved your file, you can now add the next slide. To do this:

1. Click on the **[New Slide]** button on the left of the **HOME** tab in the *Slides* group (click on the icon not on the words *New Slide*) or simply press **<Ctrl m>**

A new slide appears in a different slide layout from the first called *Title and Content*. There are several different slide layouts available (which you can get to if you click on the words *New Slide* rather than the icon).
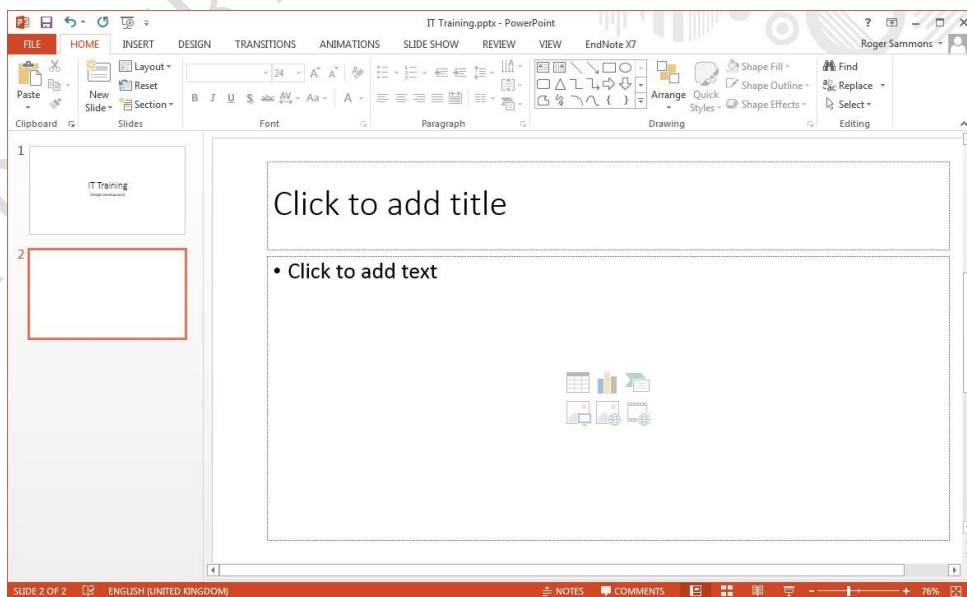
2. Click in the *Title* placeholder (where it says *Click to add title*) and type **Introduction**

3. Click in the *Content* placeholder (where it says *Click to add text*) to activate it

Tip: You can jump between placeholders by pressing **<Ctrl Enter>** on the keyboard; if on the last placeholder it creates a new slide.

4. Type in the details you wish to put on the slide, pressing **<Enter>** after each bulleted item. Remember to keep the text as short as possible because your presentation is a guide for you to talk. You are not expected to read the text on each slide as is.

- My name
- Level of study
- Course of study
- Year of Entry
- State of origin

12.2.4 Changing the Look of Your Text on the Slide
There are a number of ways that you could change the look of your text on each slide. You could, for example use these icons to: Bullets [×] Font `Calibri (Body) ▾` Font Colour [×]
Change Case [×] Line Spacing [×]
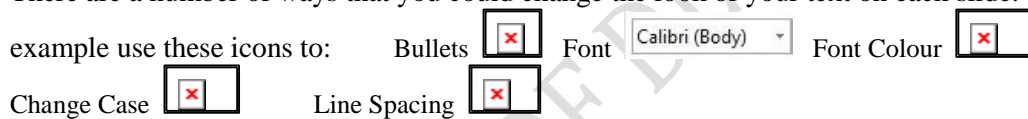
- change the bullet point character

- use a different font

- change the font colour

- change the case (upper, lower) of the text

- increase or decrease the line spacing between the bullet points

IMPORTANT: if you wanted to apply all or some of the above changes to *every* slide in a presentation, you would need to make the changes on the *Master Slide*. It's best to do this before you start typing your words onto the slides. You will look at Master Slides later.

To make changes to all your text you need to have the placeholder selected:

1. Click inside a placeholder, a faint rectangle will appear around all the content of the placeholder. Click on any part of that rectangle to select the placeholder

2. On the **HOME** tab in the *Paragraph* group, click on the down arrow next to the **[Bullets]** button

3. Choose the bullet character required (eg the tick marks or checkmark bullets)

You can also get to further choices after doing step **2** above by choosing **Bullets and Numbering…** at the bottom of the list. Here there are **[Customize...]** and **[Picture...]** buttons that allow you to choose nonstandard characters and pictures as bullets. Take care when choosing non-standard characters as they may result in poor accessibility - it's best to stick to those offered here, unless you know what you are doing. Note also that the size of the bullet point can be changed relative to the text, as can its colour.

To use a different font:

4. Click on the *down arrow* next to **[Font]** button on the **HOME** tab, and choose the font you want

5. Click on the *down arrow* next to **[Font Colour]** button in the *Font* group

6. Click on the square of the colour that you want (or click on **More Colours…** and select a colour from there then press **<Enter>** for **[OK]**)

To change the case of the text, eg turn all the letters to UPPERCASE or to lowercase:

7. Click on the **[Change Case]** button in the *Font* group and choose the case required

Finally, to change the line spacing of the bulleted points:

8. Click on the **[Line Spacing]** button in the *Paragraph* group on the **HOME** tab

9. Choose the line spacing required, eg **1.5** for *one and a half* line spacing

Note: the last item in the list, **Line Spacing Options…**, gives you access to further settings, eg to change the spacing before or after a paragraph.

You don't have to have bulleted points at all, if you don't want them for a particular line. To turn them off:

10. Click on the line you don't want bulleted (here, click on the first line in the list)

11. Next, click on the **[Bullets]** button (click on the icon itself, not the list arrow)

Your bullet point should now have disappeared.

12. End by redisplaying the bullet – press **<Ctrl z>** for **[Undo]**

12.2.5 Changing the Layout to Include a Picture

What if you decide that you would like to add a picture to illustrate this slide? The easiest way to do this, keeping what you've done already, is to choose a slide layout which includes a picture placeholder.

1. Click on the **[Layout]** button in the *Slides* group on the left of the **HOME** tab

You have various options as shown below:
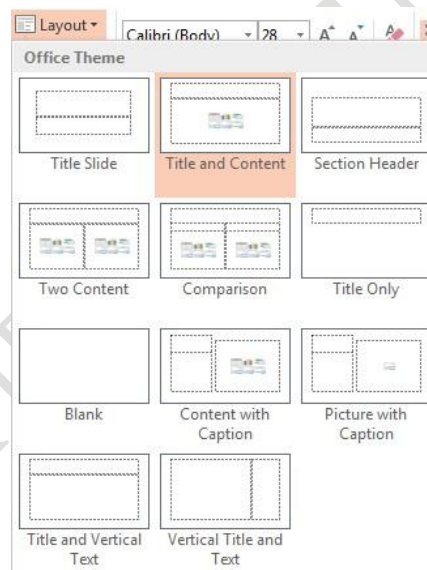
2. In the second row, click on **[Two Content]** – a new placeholder appears on the right

Tip: The advantage of a content layout is that it will automatically resize a picture to fit within it if the image is too large, saving you the bother of manually resizing large images.

12.2.6 Adding a Picture to your slide

This new placeholder has content icons (in the centre) as well as the usual bullet points at the top. These let you add a Table, Chart, SmartArt,

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Picture, Online Picture or Video respectively. To insert a picture, say **yours**

1. Click on **[Picture]** (the *first* icon in the *bottom* row) . This will take you to your computer to select a picture

2. Navigate to the folder that contains your picture

3. *Double click* on the picture you want, to add it to your slide

Your chosen picture will be inserted, and an extra *Picture Tools Format* tab is added to the *Ribbon just as in other Office applications that support inserting pictures*:

The buttons on this tab allow you to change things like the picture's *brightness*, *contrast* and *colour*. The *crop* tool lets you cut off unwanted areas by trimming down the edges of the picture. You can experiment with these options if you like. Clicking on the slide, away from the clip art, changes back to the *Home* tab. When you click on the clip art again, the *Picture Tools Format* tab reappears.

With the picture is selected, you can easily change its size, position or rotate it.

To change the size:

4. Point the cursor to one of the white circles or squares (*border handles*) around the picture then hold down the mouse button and drag the handle out (to make it bigger) or in (to make it smaller)

5. To reposition the image, point inside the picture placeholder then hold down the mouse button and drag it to the required position (or use the ***<arrow keys>*** on the keyboard)

6. To rotate the clip, move the pointer over the *circle* (top centre) then hold down the mouse button and move the mouse in a circular motion

Tip: To do the above steps more accurately, you can use the **[Height]** and **[Width]** buttons in the *Size* group and the **[Rotate]** button in the *Arrange* group on the **Picture Tools Format** tab.

12.2.7 Applying a Theme

A *theme* can make your presentation look more professional. The default theme uses black text on a white background. This is somewhat boring and simple, but good for accessibility. To see the different themes:

1. Move to the **DESIGN** tab – the ribbon changes to show a number of different themes:

2. Move the mouse pointer over any of the themes – the current slide will display the chosen theme
3. For more schemes, click on the **[More]** button at the foot of the *scroll bar* on the right of the themes
4. Click on your preferred theme - both slides should now display the new theme

Tip: If you *right click* on a theme you can choose whether to **Apply to All Slides** or **Apply to Selected Slides.**

Usually, all the slides in a presentation will have the same theme but, if your presentation is split into different sections, then you could consider using a different theme for each section.

Most of the themes use contrasting text and background colours to maximize accessibility, i.e. light text on a dark background or dark text on a light background. This helps to make the text clearer and easier to read.

Note that some themes contain pictures or patterns that could cause viewing problems for certain people. You can always apply a different theme later if you decide the current one is unsuitable.

Note also the *Variants* group to the right of *Themes.*

5. Move the mouse over the variants to see alternative colour schemes – there's no need to

choose one **6.** Press <**Ctrl s**>to **[Save]** your presentation again

12.2.8   Adding More Slides
Now that you have created the first two slides in your presentation. You can create additional slides.

For each new slide, select the layout you want for the slide, then type its content.

Create 5 more slide with titles as listed below and fill in the content of the slides

>   Slide 3   Academic Background (information about your secondary school)

>   Slide 4   Academic Achievements (your academic achievements in you so far)

>   Slide 5   Personal Achievement

>   Slide 6   University of Ibadan Organogram

>   Slide 7   My Department

>   Slide 8   Conclusion

A few points to note:

•   Slide **3** is identical to slide **2**, apart from the text and picture. You could duplicate slide **2** and

     then modify the text on the new slide - *right click* on the slide miniature and choose **Duplicate**

     Slide

•   On slide **6** , a **Title and Content** layout is used to produce an *organisation chart*.
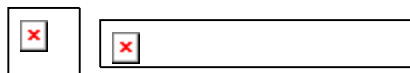
1. In the content box , click on the **[Insert SmartArt Graphic]** icon

2. Within the *Choose a SmartArt Graphic* window, click on **Hierarchy** on the left

3. Select the *first* **Organization Chart** layout on the right and click **[OK]**

4. Enter the information that you want in the boxes - to add/cut boxes or shapes *right click* on

them then choose the appropriate option from the *shortcut menu* (you can also <**Delete**>

them)

Remember to save the latest version of your presentation - press **<Ctrl s>**. At this point, it's also worth doing a spell check on your presentation – to do this, move to the **REVIEW** tab and then click on the **[Spelling and Grammar**] button on the left.

12.3   PowerPoint Views

It is possible to view your presentation in a number of different ways. To switch between views:

- **Either:** Move to the **VIEW** tab and choose one of the icons in the *Presentation Views* group

- **Or:** Use the buttons at the bottom *right* of the window (just to the left of the Zoom options)

  The table below gives a better idea of what the 4 different view buttons give you:

View	On Screen	Use To
Normal View	Shows the slides in miniature and in full, plus any notes underneath	Edit contents of slides; try out animation effects
Slide Sorter	Shows a miniature of each slide in the current order	Add, delete and move slides; rehearse timings
Reading View	Plays the presentation on screen from the current slide	Practise presentation and have access to other tasks
Slide Show	Plays the presentation on screen from the current slide	Practise presentation

From the **View** tab on the Ribbon, there is also the: **Notes Page** view

- **Notes Page** gives a view with more space for speaker's notes under the slide. Here, you can type up exactly what you plan to say for each slide. The notes can then be printed out so you have them to consult when giving an actual presentation

Note: The **[Reading View]** icon here plays the presentation from the very beginning.

12.3.1   Moving through the Slides
There are several ways to move between slides, when preparing a presentation in *Normal* view:

- Click on the required slide miniature in the left-hand section of the screen

- Use the scroll bar on the right of the main display - drag the indicator up or down (the current slide details are displayed as you do so)

- Use the double arrow buttons (**[Previous Slide]** and **[Next Slide]**) at the foot of the scroll bar

- Press the **<Page Up>** or **<Page Down>** keys

- Use the **<up arrow>** or **<down arrow>** keys

Decide which of the above best suits you and then try moving through your current presentation.

12.3.2 Deleting and Hiding Slides

The easiest way to delete slides is in *Slide Sorter* view, especially if you have a lot of slides to deal with:

1. Click on the **[Slide Sorter]** button

2. Click on the slide to be deleted (eg slide **3**) then press the **<Delete>** key

3. To reinstate the deleted slide (you were just practising), press **<Ctrl z>** for **[Undo]**

You might want to temporarily *hide* a slide, instead of deleting (I actually prefer this option) – for example, if you are giving the presentation to a different group of people for whom that slide is not appropriate. You could also have extra hidden slides which you could add in if you had plenty of time or if someone asked a particular question during the show. When a slide is hidden it remains within the PowerPoint file, but is not displayed during the presentation. To hide a slide:

4. *Right click* on the slide to be hidden (in *Normal* View you have to right click on the slide

   miniature)

5. From the *shortcut menu* choose **Hide Slide -** you'll find that the number underneath the slide

   now has a line through it indicating that it's hidden

6. To show the slide again, just repeat steps **4** and **5**

Tip: To display a hidden slide when running a show, press the **<h>** key on the keyboard or type in the slide number and press **<Enter>**.

12.3.3 Changing the Order of Slides

As with deleting slides, the easiest way to move slides around is within *Slide Sorter* view:

1. Make sure you are in *Slide Sorter* view

2. Point to the slide or select a group of slides (by holding down the shift key and using the mouse to click on each slide) you wish to move then hold down the mouse button and drag the slide(s) to the new position

3. Release the mouse button when the slide(s) is correctly positioned

Note: In *Normal* view you can change the order by moving (*drag & drop*) the slide miniatures up and down the left panel. In both views, you can also cut/copy and paste slides via the *Clipboard*.

12.3.4 Creating Notes Pages
In *Notes Page* view, you can create notes that you can print out and use as a guide during your presentation. Each printed page contains an image of the corresponding slide and its notes.

1. Select one of your slides then, on the **VIEW** tab, click on the **[Notes Page]** icon

2. Click in the *notes placeholder* below the copy of the slide (where it says *Click to add text*)

3. To see what you are typing, click on the **[Zoom]** icon on the ribbon, select **100%** and click **[OK]**

4. Type in some notes for yourself

5. Close the notes page view by clicking on the **[Normal]** button (on the *Status Bar* or **VIEW** tab)

Note: You can also add notes in *Normal View* (where it says *Notes* on the *Status Bar*).

Summary

In this lecture we have learned how to create a PowerPoint file which is usually called a presentation, add slides to the presentation and beautify the slides by applying a theme.

References

http://www.reading.ac.uk

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MICROSOFT POWERPOINT (II)

Introduction

In the previous lecture we learned how to create a PowerPoint file. We also learned how to add slides to the presentation and beautify the slides by applying a theme. In this lecture we will learn how to make our presentation 'come alive!"

13.1   Running the Presentation

Once you have made the slides for a presentation, you can run the show. If you use the **[Slide Show]** button on the *Status Bar* then it begins from the currently-selected slide; if you press **<F5>** then it starts from the first slide. On the **SLIDE SHOW** tab you can choose from either **[From Beginning]** or **[From Current Slide]**.

Tip: You can also run a presentation from the current slide using the key combination **<Shift F5>**.

1.   Click on slide **1** to ensure the show starts from the very beginning

2.   Click on the **[Slide Show]** button on the *Status Bar* (or use **<F5>**)

3.   To move forward one slide, click the left mouse button

Note: <Enter>, **<n>**, *<right arrow>*, *<down arrow>* or the *<spacebar>* on the keyboard can also be used to move forward.

4.   To move back one slide, press the *<left arrow>* key (or **<p>** or *<up arrow>*)

You can also click the *right* mouse button to display a popup menu. This presents you with a number of useful tools, including:

- **Next** and **Previous** to move back/on one slide, respectively

- **Last Viewed** - useful if you have jumped to another slide (out of sequence)

- **See All Slides** – you can use this to jump to another slide in the presentation

  Note: you can also jump to a particular slide by typing in its number and pressing **<Enter>**

- **Zoom In** – lets you select and magnify part of a slide – use **<n>** to move directly on to the next slide

- **Black Screen** or **White Screen** temporarily suspends the presentation (press any key to show it)

Note: you can also activate these by pressing **<b>** or **<w>** on the keyboard while running a show

- **Show Taskbar** displays the Windows *Task Bar* if you want to jump to another application

- Choose **Laser Pointer** or **Pen** (which can be used to draw on the slide) or **Highlighter** to highlight text. To activate the pen while running a show press **<Ctrl p>**; **<Ctrl a>** redisplays the pointer

- Choose **Ink Colour** to change the colour of the pen

- Use **Eraser** or **Erase All Ink on Slide** to remove any pen marks you may have drawn

- Use **Arrow Options** and **Automatic** to set your pen back to a pointer;

Note: to leave the slide show at any time, press the **<Esc>** key

After the last slide, PowerPoint displays a black *End of slide show* screen. If you have added ink annotations to your slides you are asked if you want to keep them (the original slides will be changed if you do); you are then returned to the previous view.

13.2   Animating your Presentation

Presentations are greatly improved by adding animation. PowerPoint gives you a wide selection of built-in animations, both when moving between one slide and the next and within each slide.

13.2.1   Slide Transitions

Instead of simply moving abruptly from one slide to another during a presentation, slide transitions allow slides to dissolve into each other, using a variety of different special effects. These can make your on-screen presentation look even better and more professional, but don't get too carried away!

1. Check you are in *Normal* view and that the first slide is selected

2. Move to the **TRANSITIONS** tab to see the following ribbon:

Dominating the ribbon is the *Transition to This Slide* group. As you click on an icon, you'll see the transition effect on the slide (there is also a *More* arrow that will show you all the different transition effects in one window). The **[Effect Options]** button lets you change the direction of the effect. *Timing* (the group to the right) lets you change the speed of the transition effects.

3. Choose one of the transition effects for the first slide (the **[More]** button shows all the effects)

Note that a *small star* symbol appears to the left of the first slide miniature - this indicates that a transition has been setup on this slide. Next, explore the options available:

4. Click on **[Effect Options]** and change the direction of the effect

5. Increase the *Duration:* of the transition to slow it down and see the effect more clearly.

Another useful feature moves on a slide automatically (without you having to click the mouse button):

6. Under *Advance Slide*, set the next slide to appear *After:* a set number of seconds

7. Move to the next slide and repeat steps **3** to **6**, choosing different effects

8. Finally save your presentation (press **<Ctrl s>**) then run it **(<F5>)** to see the effects - press **<Esc>** when you've seen enough

Having different transition effects between slides may add interest but it isn't good practice. It distracts from the talk and isn't good for accessibility. It's best to stick to one transition throughout (and only use a different one for effect, if you need to). To standardise the transition:

9. Remove the current effects by choosing **[None]** (the first in the list) then click on **[Apply to All]**

10. Next, choose your preferred transition (repeat steps **3** to **6**) then click on **[Apply to All]**

11. Finally, press **<F5>** to see the effects

13.2.2   Animation Schemes

PowerPoint allows information on your slides to appear one item at a time. This stops your audience

from reading ahead of you, making them concentrate on each point individually. Try the following to

animate a set of bullet points:

1.   Move to the **ANIMATIONS** tab then click on a slide with a bulleted list on it (eg slide **2**)

2.   Click on the bullet points then move the mouse over the *Animations* icons and watch the

     effects

3.   Click on the **[More]** button at the foot of the *Animations* scroll bar to see more animations:
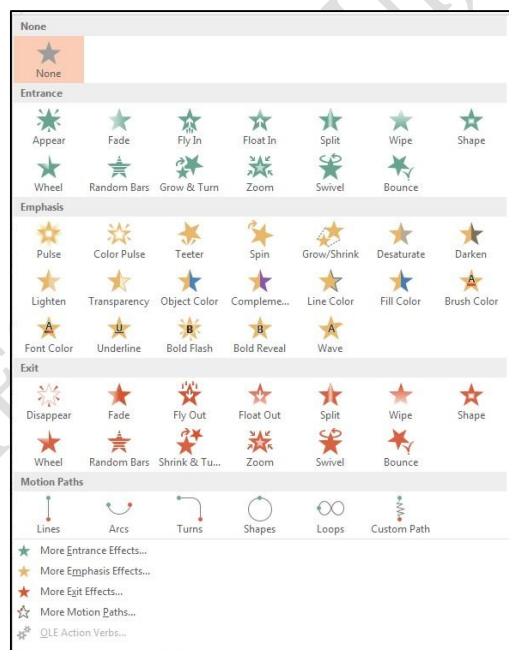
Try setting up various animations for your slides:

4.   From the list of animations choose one of them, eg *Fade*

5.   Click on **[Effect Options]** (if active) and see what is available

6.   Repeat steps **3** to **5** for another slide with bullet points, choosing a different animation

Tip: As with slide transition, it isn't a good idea to use too many different animations as they can distract the viewer. Always bear accessibility in mind and avoid some of the more 'exciting' animations.

13.3 More Advanced Features

13.3.1 Adding a Header/Footer, Date or Slide Number
You can add header/footer to your slides. To add information at the top/bottom of your slides:

1. Move to the **INSERT** tab on the *Ribbon* then, in the *Text* group, click on **[Header & Footer]**
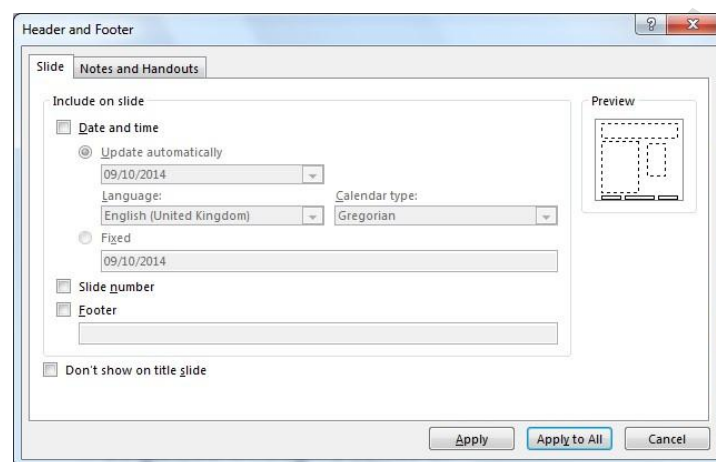
2. Turn on the **Date and time** option - **Update automatically** will refresh the date to show today's date whenever you open the presentation and also allows you to choose from a range of display formats

3. To add slide numbers, turn on **Slide number**

4. To add footer text, turn on **Footer** and type your text

5. You probably won't want any of this to appear on your *Title Slide* so turn on **Don't show on title slide**

6. To add this information to all of the slides, click on **[Apply to All]**

You should find that all of your slides, apart from the first *Title Slide*, now have some information at the top or bottom.

13.3.2 Rehearsing Timings
It's a good idea to rehearse your presentation before actually giving it in public to an audience. PowerPoint even lets you set up specific timings for each slide or section of a slide (eg for each bullet

point) so that the presentation runs automatically. This is especially useful if you want the show to run unattended (eg at an Open Day). To see how this works:

1. Move to the **SLIDE SHOW** tab and click on **[Rehearse Timings]** in the *Set Up* group

The first slide appears as normal but a *Rehearsal* toolbar is displayed in the top left-hand corner of the screen. A clock is already running! In fact there are two clocks - the one on the left shows the time for the slide, the other the total time for all the slides.

2. When you are ready, move onto the next slide as usual - if the timing is wrong and you want to start the clock for that slide again, click on **[Repeat]** (the button between the two clocks)

3. Repeat step **2** for each slide

4. At the end of the presentation you are asked if you want to save the timings - click on **[Yes]**

5. Click on the **[Slide Sorter]** button - the timings for each slide are shown beneath them.

6. Press **<F5>** to run the presentation again (to see how it looks with timings - you don't do anything). Note that you can always override the timings by clicking the mouse button or pressing **<Enter>** as usual.

If you decide that you don't want to use the timings then you can easily disable them:

7. Untick the box to the left of **[Use Timings]** in the *Set Up* group on the **SLIDE SHOW** tab.

13.4   Printing from PowerPoint

13.4.1 Choosing a Slide Format
If you intend to use PowerPoint for anything other than on-screen slideshows, you will need to set up the size of the *slides* you are producing.

1. Move to the **DESIGN** tab then click on the **[Slide Size]** button in the *Customize* group - the following dialogue box appears:
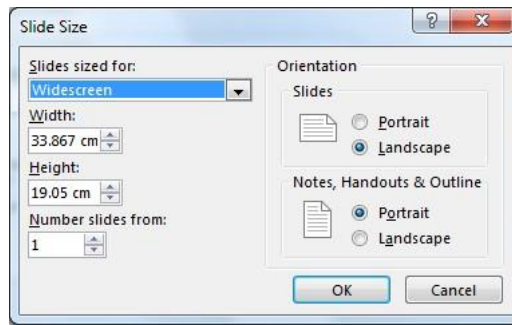
2. Click on the list button for *Slides sized for:*

- **On-screen Show -** the default, for on-screen slide shows (there are a few different sizes)

- **A3** and **A4 Paper -** customized for standard A3/A4 format

- **35 mm Slides -** customized for production of 35mm slides

- **Overhead -** customized for overhead transparencies

- **Banner -** customized for banner headings, eg on a display board

- **Custom -** specified paper size. For producing Research conference posters.

13.4.2 Printing the Presentation
You can print any part of the presentation - the slides, notes or handouts for your audience.

1. Move to the **FILE** tab and choose **Print**

2. If necessary, specify the required *number of* **Copies** and *print range* in **Settings/Slides:**

3. Below the **Slides:** box choose what you want to print from the various choices:

- **Full Page Slides** - prints one slide per page

- **Notes Pages** - prints a page containing the slide in miniature plus any extra notes you typed in - use this for your own copy of your presentation

- **Outline** - prints out just the text on the slides

- **Handouts** - lets you print several slides (1, 2, 3, 4, 6 or 9) on a page which saves paper if you want to distribute copies of your presentation to your audience

13.5   Closing the Presentation

You have now finished your introduction to PowerPoint.

1. Save the latest version of your PowerPoint presentation by pressing **<Ctrl s>**

2. To close PowerPoint, click on the red **[Close]** button

Tip: A quick way to close any *Office* application is to press **<Alt F4>**; **<Ctrl F4>** can be used to close a file.

Summary

In this lecture we have learned how to animate the objects on each slide as you wish. We also learned how to add headers and footers to your slide and how to print your presentation

Reference

http://www.reading.ac.uk