Computer Proficiency License (CS001)
Virtual University of Pakistan
Computer Proficiency License

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Computer Proficiency License (CS-001)
Module 01
Introduction to Training Environment & Computer Basics

CPL stands for Computer Proficiency License, also known as VU-CPL. It is a computer based training course offered to all who are interested in learning of the usage of computer applications, after going through this course you will become comfortable and confident about computer usage.

You can become proficient in the knowledge of computer utilization by learning through http://cpl.vu.edu.pk/ that is developed specifically for this course. It has six modules.

Module 1 – Introduction to Computers
Module 2 – Using the computer and managing files
Module 3 – Word processing
Module 4 – Spreadsheets
Module 5 – Presentation
Module 6 – Internet and communication

Objectives

The objective of the above mentioned six modules is to provide sufficient knowledge about the computer and its utilization for you to perform your daily computer related tasks with ease and confidence.

Training Environment of CPL

The website has been developed for this course and it has its own training environment. Homepage has six module wise hyperlinks. You can browse these modules and sub-topics using a mouse click.

What is a computer?

Computer is an electronic device that takes data, instructions and information as input and produce output (information) after processing it.

It is a machine that processes thousands of instructions in less than a second and produces outputs as instructed or programmed.
Advantages of computers

1- Efficiency
Machines are more efficient than humans. They can perform millions of calculations with less effort in no time.

2- Reliability
Work done by computer is more reliable than one done by humans. Computers perform according to the instructions given to it that makes output or results produced by these more accurate and reliable. For example, a computer can do millions of error free calculation in less than a second.

3- Storage
Computers give you an advantage of storing large amount of data in one place. For example, you can store the data of whole library in one computer.

4- Fast results
Computers are capable of doing many difficult tasks in very short time. Every day the processing speed of computers is increasing to make them work faster. Latest computers are capable of performing thousands of instructions and calculation in less than a minute which used to take hours with old PCs.

Basic terms for computer

Input
Whatever goes into the computer is called input. For example, text, graphic sounds, etc. In everyday life the example for input is a voting slip in a ballot.

Input Devices
An input device is any peripheral (piece of computer hardware equipment) used to provide data and instruction to a computer, for example keyboard and microphone. Everyday life example is a hand that is used to put the voting slip in a ballot box. Thus hand is input device for ballot box.

Output
Anything that comes out of a computer is called output. For example sound of a playing video in computer is the output.
Output Devices

An output device is a hardware used to get the output from the computer. For example, headphones are output device and used for listening sound in computer.

Processing

Computer is given the data and instruction as input, which is processed to create output in the form of information. Data is a raw form of symbols, numbers, images, etc, whereas information is an organized, meaningful and useful form of the data. For example, some data (student roll number, name, total marks, obtained marks etc) from the mid exam is entered. Computer process the data, and creates a report of pass and fail students. This report is more organized and useful for us, and thus information rather than just data.

Storage

Storage, also referred as memory, is the ability of a computer to store data, information or instructions. It can save digital data on RAM, hard disks or removable memory.

Storage Devices

Storage devices are used to store data when they are not being used in memory. The most common types are USB drive, hard disks and CD-ROM and DVD.

Hardware

Hardware refers to the physical elements of a computer. Examples of hardware in a computer are the keyboard, the monitor, the mouse and the processing unit.

In contrast to software, hardware is a physical entity, while software is a non-physical entity. Hardware and software are interconnected, without software; the hardware of a computer would have no function.

Software

How does a computer use its hardware?

The term software refers to programs or sets of instructions that the computer uses to perform computer operations. Software can also be described as a collection of routines, rules and symbolic languages that direct the functioning of the hardware. Software is capable of performing specific tasks, as opposed to hardware which only perform mechanical tasks what they are mechanically designed for. We can think or write instructions, but cannot touch them.
Characteristics of software

Software is intangible (you cannot hold it like hardware).
It is weightless.
It does not exist as hardware.

Software is used to operate the computer.

Types of Computers

There are five basic types of computers.

Super Computers

Are the fastest computers, and because of their speed and memory, are capable of performing operations that would not be practical for PCs or mainframes.

Advantages of super computers

High speed
Most Accurate
Most Expensive
Examples
Titan-Computers, k-Computers and Tianhe-2

Mainframe Computers

Mainframes are computers where all the processing is done centrally, and the user terminals are called "dumb terminals" since they only input and output (and do not process).

Mainframes are computers used mainly by large organizations for critical applications, typically bulk data processing such as census. Examples: banks and airlines.

Examples
PTC, PIA, Banks and other organizations in Pakistan use mainframe computers

Servers

A server is a central electronic machine that exchange data with all linked machines.

Examples
Dell, HP and Acer
Microcomputers

PC is an abbreviation for a Personal Computer, it is also known as a Microcomputer. Its physical characteristics and low cost are appealing and useful for its users. Throughout the 1970s and 1980s, home computers were developed for household use, offering some personal productivity, programming and games, while somewhat larger and more expensive systems (although still low-cost compared with minicomputers and mainframes) were aimed for office and small business use.

Examples
HP, Dell, IBM and Apple Macintosh

Game Console

Game Console is a device that allows one or more person to play game. These are portable devices.

Examples
Microsoft XBOX 360, Nintendo WII and Sony PlayStation

Mobile Computers

A portable computer is a small personal computer designed for mobile use. A portable computer integrates all of the typical components of a desktop computer, including a display, a keyboard, a pointing device (a touchpad, also known as a track pad, or a pointing stick) and a battery into a single portable unit.

Example
Laptop computers

Mobile Devices

Mobile device is a computing device that can set in hand easily. It has less computing power than personal computers.

Example
Book Reader, Digital Camera and smart phones

Embedded Computers

An embedded computer is a small and less computing power device that can be fixed as a component in any product.
Example
DVD Player, Digital TV and Photo Copy Machine

Summary
In this lecture we learnt:

- What is a computer? How it is used in our daily life?
- Advantages of computer
- Basic computer terms, e.g., storage, output, input etc.
- Types of computer
Objectives

The objective of this lesson is to provide information about:

- Computer hardware
- Computer components and parts
- Computer components and functions

Computer Hardware

Hardware refers to the physical elements of a computer. Examples of hardware in a computer are the keyboard, the monitor, the mouse and the processing unit.

System Unit

It refers to the box that encapsulates the processor, motherboard, CD drives, hard drives, memory, ports etc.

Terms related to the system unit

Following are the terms for external parts of computer casing.

- **Computer casing** is the box that houses the computer **Power** button is used to **switch on** the computer.
- **Lights** shows the running status of the computer
- **CD ROM** is the input device used to read data from CDs.
- **USB Disk** is the A small, portable flash memory that plugs into a computer's USB port

Ports and Pin Sockets

It is an interface that links computer with other peripherals and monitor.

- **Power Connector** is a socket used to supply power in computer
- **Power cable** is used to supply power to monitor.
- **USB Port** is a point of connection between a computer and other electronic devices such as webcam, scanner, printer, mouse and keyboard.
- **Keyboard port** is a socket used to connect keyboard to the computer.
- **Mouse port** is a socket used to connect a mouse to the computer.
- **Serial port** is a socket on a computer that is used to connect scanner, mouse etc. It got 9pins.
Parallel port is a socket at the back of the computer to connect printer. It got 25 holes.
Pin sockets are used to connect speakers, microphone.
Drive bay is a socket where hard drives are installed using screws
Power supply provides power to processors, motherboard etc
Mother board holds together the central processing unit (CPU), memory and connectors for input and output devices.
Processor is a brain of computer and does all the processing.
Fan is used to cool down the processor to avoid it from being damaged
RAM chip is random access memory used by computer system to keep the running program here.

Interface cards

Sound card is the interface used to produce sound via speakers
LAN card is used to develop a network (more than one computer connected to each other)

How does computer works?

Following diagram explain how a computer works In a very generic form. Data goes into memory as input and from there it goes for processing. After processing it goes back to memory, from memory it is sent as output or it is stored.

Summary

In this lesson we learnt information about:
- Various hardware components of computer
- System unit lights, buttons on it, front panel
- Ports such as serial ports, parallel ports, USB ports, Pin sockets
- Drive Bay, Power supply, Motherboard, Card slots, RAM slots, Processor, Fan
Objectives

The objective of this lecture is to provide answers to the following questions:

✓ What is a keyboard?
✓ Keyboard keys
✓ Function of keyboard keys

Keyboard

It is an input device to give computer some input. It is like pen in writing. It is called keyboard because it is comprised of a board with keys installed. Every key sends unique information to the computer.

Process of key pressing

A keystroke is a single press of a key on a keyboard.

Keyboard types

There are different types of keyboards. Standard keyboard is the most commonly used keyboard. Key arrangement can be different for these keyboards. Some may have special keys for other tasks than just typing. These special keyboards are usually used for multimedia purposes like video editing, sound design etc.

Basic Keyboard keys

There are usually 104 keys on standard keyboard. Pressing the key once and releasing it is called a key stroke.

Character keys

These are used to enter alphabetic characters. These characters become uppercase when pressed with shift key or caps lock is on.

Numeric keys

There are 10 numbers or numeric keys (1, 2, 3 to 9 and 0) on standard keyboards. These are used in the same fashion as typewriters’ keyboard to enter numbers. These become symbols or punctuation marks when pressed with the shift key.

For example

1- Shift + 8 will print *
2- Shift + 4 will print $ 

**Special keys**

Shift, ALT and Control (Ctrl) keys are special keys and when pressed with other keys, perform special operations. For example ctrl+c will copy the selected file or text, shift+ character key will print that character in capital.

**Escape keys**

It is used to escape/exit from certain type of applications.

**Function keys**

F1, F2, …, F12 are called function keys. These are used for different purposes. For example F5 is used to refresh the web page in internet browser. F1 will open help window.

**Arrow keys**

There are four keys (arrow Keys) for cursor navigation.
- Left arrow key, Right arrow key
- Up arrow key, Down arrow key

**Numeric keypad**

On the right side, a separate area is reserved for numeric keys, mathematical operational keys (+, -, *, /), enter, dot and Num Lock key.

**Space Bar**

It is horizontal wide key, in the lower most row. It generates space between two characters.

**Punctuation keys**

These are keys to enter punctuation and are located on the right side of alphabet keys.

**Enter key**

Enter or return key cause cursor to go to next line, form or window to perform its default function.

**Application key**

It launches the menu with the keyboard rather than the usual right mouse button.

**Toggle keys**
Caps lock, Num lock and Scroll lock keys are toggle keys. At the top right corner, there are three small lights to show the status of these locks. When pressed one, corresponding light is turned on.

The keys on the numeric key pad act as numbers and dot. When this key is pressed again and the corresponding num lock key light is switched off, the key act as arrow keys, home key, pg up, pg down and end keys.

Characters become capital when the caps lock is on.
Scroll key modifies the functionality of arrow keys. When the scroll lock is on, the arrows keys would scroll the window instead of moving the cursor.

**Print screen key**

It is the key which is used to save (capture) all the contents of the screen in a temporary area.

**Insert key**

Key use to insert or overwrite character(s) within a word is called insert key. The key acts as toggle key. If it is in the insert state than any character pressed while the cursor is placed within a word gets inserted. If the key is pressed and it is in the overwrite state than any char pressed while the cursor is placed with get overwritten.

**Home key / End key**

It is used to go to start (home key) or end (end key) of the document.

**Page up key / Page down key**

It is used to go to previous (page up key) or next (page down key) page.

**Delete key**

The key used to delete characters.

**Backspace key**

The key used to delete the preceding characters.

**Non-Typing Keys**

Alt, Ctrl and shift keys are non-typing keys. They don’t print anything when pressed. These when pressed with other keys, modify the usual operation of that key. For example, Alt + F4 close the active window.

**Tab key**
Tab key is a typing key and used to put more than one space within characters or words.

**Other Input Devices**

**Microphone**

Microphone is used to input the sound to computer. It is used in motion pictures, radio and television broadcasting etc.

**Scanner**

Scanner is a device that scans images, papers etc to store them in computer for later use.

**Digital camera/Web cam**

These are input devices that input still images or video to computer.

**Summary**

In this lecture we have learnt:
- What is keyboard? What is its use?
- Keyboard types
- Standard keyboard keys
Objectives
The objective of this lesson is to provide information about:
- What is software?
- Types of software
- Tasks performed by software.
- Version of software

Computer Software

Software is a set of instructions. It cannot be touched. Hardware does not work without software. It gives instructions to hardware to perform some functionality.

Software versions

Software is developed and is periodically updated. When a software is updated and a new copy of this updated is available in the market it is called a new version of a software.

For example

<table>
<thead>
<tr>
<th>Operating System</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows 95</td>
<td>1995</td>
</tr>
<tr>
<td>Windows XP</td>
<td>2001</td>
</tr>
<tr>
<td>Windows Vista</td>
<td>2006</td>
</tr>
<tr>
<td>Windows 7</td>
<td>2009</td>
</tr>
<tr>
<td>Windows 8</td>
<td>2012</td>
</tr>
</tbody>
</table>

Types of Computer Software

There are three basic types of computer software.
System Software

It maintains and control computer hardware. There are two kinds of system software.

1. Operating system
2. Device drivers

Operating System

Operating systems manage and coordinate the activities of the computer hardware and other software.

Device Drivers

It manages hardware. Like a driver of a car. Operating system tells what to do to driver and then driver is responsible for action. For example operating system knows which driver to access when a print is required and then printer driver is responsible to take the print.

Utility Software

It manages hardware, operating system or application software and perform specific task. It performs tasks like maintenance, troubleshooting, virus scanning etc. Disk scanner and antivirus are example of utility software.

Application software

Software belongs to this category helps in daily life tasks like calculation, presentation, text editing etc. This is most commonly used type of software.
**Word processor**

It is complex form of text editors that use to provide use the basic functionality of saving, editing, updating, formatting text. These got spell and grammar checkers. MS word is most common and widely used word processor.

**Spread sheet**

It helps in accounting and finance work. It contains cells (Rows and Columns) that contain a value. Different formulas can be applied on these values using by default functions. MS Excel is most commonly used software for developing spread sheets.

**Presentation software**

MS PowerPoint is presentation software that is used by business people, educators, students and trainers to present some idea or information in form of text, image or sound. It consists of pages or slides that may be arranged in a consistent style to give a feel of presentation.

**Microsoft**

It is the one of the biggest software companies in the world. It has developed famous windows and application software like MS word, MS excel, MS power point etc.

**Summary**

In this lecture we learnt:

- What software is?
- Types of software
- Users and functionality of software
- What is meant be version of software?
Objectives
The objective of this lesson is to provide information about

- What is a computer mouse?
- Function of computer mouse
- Some other pointing devices

Pointing devices
Devices used to point things at the computer screen are called pointing devices. For example mouse, track pad, etc.

Mouse

Mouse is a pointing device that works by detecting motion relative to its supporting surface. Furthermore:

There are many types of computer mouse available in the market. They usually have different shapes or buttons, but they work almost in the same fashion.

Mouse Buttons

There are two buttons on standard mouse
1- Right mouse button 2- Left mouse button

Single Click

Press mouse button one time

Double Click

Press mouse button two time instantly.

Dragging

Drag an object such as an icon, first move mouse cursor over it. Then press and hold left mouse button and move object to the desired location.

Mouse Pad is a surface used to sense the mouse motion.
Mouse Pointer/Arrow/Cursor shows the position and motion of mouse on screen.
**Track Pad**

Track pad (also known as touchpad) is a pointing device consisting of a sensitive surface that translates the motion of a user’s finger to a relative position on screen.

![Track Pad Image]

**Track Ball**

Trackball is a pointing device with a ball placed in a socket with sensors to detect the rotation of the ball.

![Track Ball Image]
Objectives

The objective of this lesson is to provide information about
- Computer storage
- Types of storage
- Commonly used storage devices

Storage

Process of storing information in computer is called storage. The devices used to store data are called storage devices.

Advantages of storages

Information at different places can be saved in computer and can be re-used when needed.

Types of storage devices

1 - Primary storage devices
2 - Secondary storage devices

Primary storage devices

Storage devices which are installed at the mother board are called primary storage device. It is also called memory.

Types of primary storage
There are two types of primary storage devices
1- ROM 2- RAM

**ROM**

ROM stands for read only memory. It is a storage device from which only stored information can be read. It can’t be modified, delete or removed. It is like something written on stone that cannot be removed or changed once written. It is permanent storage devise and data remains safe on ROM even when computer is off.

It contains information related to computer startup process which is written at the time of memory manufacturing. Computer cannot start without ROM.

**RAM**

RAM stands for random access memory. It is like something written on sand which is temporary and would be erased. It is temporary memory, also called volatile memory. RAM stores information which is currently processed by computer. When power off, it loses all the information. Data can be read, stored, modified or delete from the RAM.

**Size of storage**

Byte is the unit for measuring memory. 1 byte means 1 character

For example Pakistan is consisting of 8 bytes.

| Byte is small unit | 1024 bytes = 1 kilo byte (kb) | 1024 kilo bytes = 1 mega byte (mb) | 1024 mega byte = 1 giga byte (gb) |

**Secondary storage devices**

Why is secondary storage devices needed?

RAM stores info temporary, whereas we can’t store information on ROM. So we need some place to store information, even when computer is off. It is also called non-volatile storage devices. For example USB disks, hard disks, compact disks, magnetic disks etc.

**Advantages of secondary storage devices**

1- More data can be stored as compared to primary storage devices 2- Information remains there even if power is switched off.
Types of secondary storage

1- Magnetic disks  
2- Optical disks

Magnetic disks

Hard disk is considered in this category.

Hard disk

It is made of hard material, sealed in casing. More than one hard disk can be sealed in a casing to increase the storage capacity in computer. Data is stored in circular form. Storage capacity of hard disk is very high and high volume of data can be stored here. Don’t bring near magnets and should not place in high temperature area.

Optical disks

It is called optical disk because laser beam is used to read and write the data. Diameter is 4.75 inch, whereas width is less than 1/20th of an inch. It is easily portable device.

There are four types of optical disks

CD ROM

CD stands for compact disk and ROM stands for read only memory. It is read only storage device, mostly used for audio, videos, etc. 600 MB to 800 MB data can be stored. It is easy portable devices. CDs should not be scratched.

Write once read many (WORM)

It acts as CDROM after data are written on it once. It is used to store data, information.

Re-writeable CDs

CDs which can be read and write many times are called re-writeable CDs.

DVDs

DVD stands for digital versatile disk. It was invented to store video only that is why previously it was called as a digital video disk. Its capacity is much greater.

DVD ROM – Data can be read from it, but cannot be written, changed or deleted.
DVD RAM – It works like re-writeable CDs. Data can be read, written, stored or removed from it. Storage capacity is huge from 4.7 GB to 9.4 GB. It is easily portable.
Other storage devices

Magnetic tape

It is like an audio cassette. Data is saved in line. Data saved first would be read first. It has huge storage capacity. Keep it away from magnet to save from damage.

Summary

In this lecture we learnt about:

- Different storage devices (RAM, ROM)
- Magnetic devices (HD, FD)
- Optical devices (CDs, DVDs)
Computer Proficiency License (CS-001)
Module 01
Security

Objectives

The objective of this lesson is to provide information about
- What is meant by security of computer?
- Risk associate with computer.
- Methods of protection against these risks

Security Risks

There are risks associated with hardware, software, data etc that can cause a big loss to
the owner. One should do preventative actions to avoid these security risks.

Types of risks

1- Hardware theft
   Save hardware/computer from stealing by placing it somewhere safe.

2- Virus
   Computer virus is software that damage computer. For example, it may cause
   your computer to restart when you open MS word.

3- Antivirus
   Antivirus software is used to eliminate virus from computer. It scans hard disk
to find virus and terminate them. It also stops entering new virus into
computer. A new version of antivirus helps to prevent viruses to damage
computer or data.

4- Unauthorized access
   If you don’t want someone else to access your data in computer, you can
   protect your computer/data with password. It will reduce the risk of
   unauthorized access to your pc. Password is a unique word that identifies the
   user.

5- Backup
   Data saved in your computer may lose due to some reason. In case of having
   its backup (same data at some other place/storage device) you can access and
   use it. Backup is the process of copying data. For example, you have prepared
   a presentation and due to virus attack it got damaged or deleted. If you have
   its backup file at some secondary storage media like floppy, etc, you can
   restore the presentation from that device.
   Backup utilities help to organize backup data (that data being copied).
6- Software piracy

If someone copy and sells the software of any developer or company without its permission, than he is doing piracy. It is of the biggest problem, software industry is facing now. Copying and selling software in such manner is against software copyright act.

According to the copyright act if someone steals the software Or

Copies or sells it without the permission of the owner/developer
Legal action is taken against him.

Summary

In this lesson we learnt:

- What is hardware security?
- Different types of security risks
- What is meant by computer virus?
- What is meant by anti-virus?
- What does data backup means?
- What is software piracy?
Objective

The objective of this lesson is to provide information about

➢ What is output?
➢ What are the types of output?
➢ What are the commonly used devices?

Computer Output

It means taking something out from computer.

Types of Output

In general computer output is of 2 types

1. Soft copy
2. Hard copy

Forms of Output

Text, Image, Sound, Multimedia (2 or more forms are combined for example text, image, sound)

Output devices

Printer – Print text or image being safe in computer on paper
Monitor – Output display
Speakers – Output sounds being played in computer
Multimedia projectors – Output multimedia

Printer and its types

Printer

It is an output device that prints image or text being safe in computer. The output is hard copy.

Types of printer

1- Dot matrix

Dot is a spot of ink, whereas the matrix is a particular arrangement of dots.
It works like a typewriter and consist of pins. A pin makes a dot and combination of dots forms characters and illustrations. Printing speed of a dot matrix printer is around 300 char/sec.
Examples are Epson LQ 58 E, Microline 420

2- Line printer

It works like Dot matrix printer, just it prints a complete line at a time. It contains a chain of pins that helps to print an entire line. It is superior in speed and quality. Usually a line printer prints 200 lines/min.
Examples are Tolly T6218, Printrox P5220

3- Laser printer

It produces high quality graphics by using the same technology as in photocopy machine. It prints a complete page at a time and works like a photopier. It can print upto 6 pg/min. For printing laser printers use powder ink that is available in cartridge. These printers are quite expensive.
Examples are HP laser jet 4300, Samsun ML 1710

4- Inkjet printer

It has nosals which make dots to print. Inkjet printers are low in cost.
For example Lex mark Z35 Color Inkjet printer, Epson stlys C82 Color inkjet printer

Monitors and its types

Whatever is on screen is called display. Monitor is like TV and it output the softcopy of software and programs in computer. Like regular TV, it has some buttons as well that includes Power button and display adjustment buttons.

Types of monitors

1- CRT monitors

These are cathode ray tube monitors and commonly used for personal use.
Examples are Philips Professional Brilliance 107P, Samsun syncmaster 551v

2- LCD monitors

Liquid crystal is used for the screen which is also used in scientific calculator. It got advantage over CRT monitors due to look, lightweight and compact size.
These can be adjusted in less space.
Examples are Samsung Synmaster LCD, Sony LCD monitor
Speakers

Different types of computer speakers are available in the market. These speakers work very much like regular speakers. Examples Yamaha 5.1
Logitec z-640

Multimedia projectors

display and sound to have it on some screen. It works like a magnifying glass. Examples
Epson Powerlite 8118
Toshiba Digital Multimedia

Summary

In this lesson we have learnt:
- What are Computer Output and output devices?
- Types of output
- Commonly used device e.g Printer, Monitor, Speaker
Objectives

The objective of this lesson is to provide information about

- What is meant be Internet?
- Services available over the internet
- World wide web
- Email
- How to access internet?

Internet

Internet is network of networks. It doesn’t belong to any one and no one runs it. People around the globe access internet via telephone line or satellite.

How to access it?

Internet Service Provider (ISP) is a company or organization that connects the users with internet. ISP is always connected to internet and people who want to access internet, connect it via their local ISPs. It is used to share information and resources over internet.

Services over Internet

1- World Wide Web
2- Email

World Wide Web

Web meant net. It was originally designed to share information among scientific community. But now it is the most popular way of sharing information.

Web page is a resource of information written in html.

Web browser is software that is used to view webpage.

Popular Web Browser

Internet explore
Mozilla Firefox
Google Chrome
Website

Website is a collection of related web pages. Every website has a unique address to access it. It is called uniform recourse locator (URL). For example www.vu.edu.pk is the url for the virtual university’s website.

Links provide us the access to other web pages in website. You may have seen links like home, contact us, about us etc.

Advantage of web is availability of huge resource of information. For example temperature of different parts of world is available over the web and

How to reach the web?
1- Connect telephone line to computer
2- Connect to ISP
   a. Enter ISP phone
   b. Enter user name and password to connect
3- Open browser
4- Enter URL and browse internet

Email

It is like regular mail just with a small difference that you need computer to read, write or send email. It is used for communication between people who are at distance. Its delivery is faster, safer than regular mail. Probability of losing is very low and it can be viewed from anywhere in the world as it resides on internet.
Email address is used to send email from one computer to another. e.g info@vu.edu.pk is an email address to send email to Virtual University of Pakistan.

**Email client**
Email client is software to compose, sent, receive or read email. You can access your emails from anywhere in the world. All you need is email id and password provided. This ensures authenticated access to your emails. Password is a secret word, used to uniquely identify the user. Some famous email clients are MS outlook, Neo mail, Lotus notes.

**Popular Email Clients**
Gmail  
Hotmail  
AOL  
Yahoo Mail  
Microsoft Outlook

**Summary**
In this lesson we learnt about:
- Internet, web, email
- Web site, Webpages
Objectives

The objective of this lesson is to provide information about

- How to ON/OFF the computer?
- Desktop environment
- Introduction to “Windows 7”
- Operating System
- Identifying installed RAM
- CPU processing speed and its brand
- Computer configuration
- Use of help command

Starting the computer

Press the power button on system unit to start the computer. The area you will see on the monitor screen, after computer a start is called desktop. It is called desktop because you can use it like the top of the desk to place the icon or shortcut to your favorite programs or softwares.

ICON is a graphical representation of files, folders, disk drives, toolbar buttons etc. Name of the icon, file, folder etc is written just below it. The word icon came from the Greek word “eikon” which means image. Still religious pictures are called Eikon in Greek. In windows, these icons are links to software to open it with double click of the mouse. You can design such icons yourself as well.

Taskbar is the bar at the bottom area of desktop (monitor screen). Icons of our tasks and software being used will appear here. It is called taskbar because it shows the tasks being carried out in computer. Microsoft window’s icon (Start button) resides at the left side of the task bar. At the right side of this button, quick launch bar exist. Icons reside here open their respective programs with single click. System tray exist at the right side of the task bar, which may contains some icons like antivirus programs, firewall software etc. Icons in system tray represent programs which work in background. For example an antivirus program works consistently in the background to protect your pc from viruses and only icon display here. In the same system tray, there is a clock indicating the system time. It is called system clock.
How to shut down the computer?

Click on *start* (located at the bottom left side of the task bar on monitor screen). A list of program names and commands will appear. Click on the option “Shut down”. Clicking on Shutdown button will shut down your PC.

Pressing power butting of your computer during work may damage your pc and all data will be lost.

How to restart computer?

You may need to restart the computer.
Why we restart computer?

There can be several reasons for restarting computer. Like new installation of any software can ask for restart or computer suddenly stops working (halt).
To restart your computer, click on start button at the taskbar. Click arrow to next shutdown button to open the shutdown dropdown menu and select restart from the menu. It will shut down the computer and starts it again.
**Window and its structure**

Window is software developed by Microsoft which is usually called Microsoft windows. Window has different versions like window 98, window XP, window Vista, window 7 and window 8, window 10 etc. Although these versions are similar to each other but every new version is better than the previous with and provides new features as well.

**Basic windows properties**

Click on “My Computer” icon. A new screen will open. It is called computer folder. A blue bar at the top of the window has

1. Buttons to restore down Maximize/Minimize and Close the window.

![Minimize Maximize Close buttons](image)

Clicking on minimize button to hide window on taskbar. Desktop can’t be seen when any window is maximized. Clicking on cross button at right side of window will close window.
Status bar

It resides at the bottom of the window. It provides some information related to that window.

System Information

Right Click the “Computer”
Window open which contain system information for example, name of operating system installed on computer and RAM capacity etc.
Change system time and date

The notification area (system tray), which includes a clock and icons (small pictures) that communicate the status of certain programs and computer settings.
Click Time in system tray
Click Change date and time settings
Complete details visit: http://cpl.vu.edu.pk

Change System Sound
Click speaker icon in system tray to change volume
To adjust desktop background and theme:
Right click the desktop and choose Personalize
Select the desired theme. Or browse for more themes online.

Click Desktop Background, Window Color, Sound, or Screen Saver to customize any these options for the selected theme.
Help and Support

Microsoft provides extensive Help and support feature to do certain things on your computer. HELP AND SUPPORT functions by clicking on the START button and select HELP AND SUPPORT or Press F1 through keyboard.

Summary

In this lesson we learnt about the basic system properties
Objectives

The objective of this lesson is to provide information about
- Icons
- Working with Desktop Icons
- Basic Desktop Icons
- Areas of Desktop
- Changing the Size of Window

Icon

Icons are small pictures that represent programs, files, folders, or other things on the desktop. Objects with the same characteristics, like file folders, have the same icon.

Moving an icon

To move an icon, we have to select it first.
Click on icon and without releasing the button to the position you want to place Release the mouse.

Recycle Bin

It resembles to the waste bin, and got a recycle logo on it. It got all the deleted files or folders from the computer. If we want, we can restore deleted files from recycle bin but if once these files are deleted from the bin, we can not have them back.

To delete a file or folder
Right Click on file or folder
Choose delete
Or
Drag this file to the Recycle Bin
Or
Select it first by clicking on it once. Now press “Delete” button on keyboard.

Recover files from the Recycle Bin

1. Open the recycle bin
2. Do one of the following:
To restore a file, click it, and then, on the toolbar, click Restore this item. To restore all of the files, make sure that no files are selected, and then, on the toolbar, click Restore all items.

**Understanding files and folders**

In computer data is saved in form of files. We put these generated files in folders on hard disk. To access our desired file, we have to open associated drive and then folder(s). This is called the path to the file. For example we have a file “song1.mp3” in folder “Songs” which is placed in drive C. To access song1.mp3, first we will open drive C, and then folder Songs. In this case C:\Songs\song1.mp3 would be complete path.

**Window Explorer**

With the help of this window, we can browse the folders and files in our computer. Click on Start > All Programs > Accessories > Windows Explorer

It has two parts unlike any other window e.g. my computer’s window

1- List panel on left side

2- Detail section on right side

**Resizing and moving a window**

To resize a window, select window’s bottom right edge and drag inside or outside without releasing the mouse. We can resize a window by dragging any of its edge with mouse pointer. To move a window click on the title bar of the window, and move it without releasing the mouse.

With the help of scroll bars, we can see the content of window, which wasn’t visible before. There are two kinds of scroll bars in window.

1- Vertical scroll bar to scroll the window in up and down direction.
2- Horizontal scroll bar to scroll it left and right direction.

Application windows
Active and Inactive Window

No matter how many windows you have opened, you can work only at one of them at a time. Title bar color of the window that is in use is different from other windows. The window that is in use has a dark colored title bar and is called active window. The window that is not in use has a light colored title bar and is called inactive window.

Closing Application Window
Click button Or Click File and Choose Exit

Summary
In this lesson we have learnt:
- Basic Desktop Icons
- Areas of Desktop
- Changing the Size of Window
Objectives

The objective of this lesson is to provide information about

- Directories / Folders
- Widely Used Type of Files
- Copying, Saving and Backup of Files
- Deleting Files and Formatting Disk
- File Searching

Creating a folder

To create a new folder, right click on the empty area of the desktop and select New < Folder
New folders are always named as “New Folder” by computer. Folders within folders can be created. These are called sub-folders as they reside inside some main folder. The purpose of creating folders within folders is to organize our data in a structured form.

To view the properties of a folder

2. Right click on a folder. Go to Properties.

Window Properties Panel consists of many tabs, for example

1. General Tab – It will have Folder name, type, location on computer, size and number of files and subfolders, date and time folder was created on, attributes(read only, hidden)

To rename a folder, right click on the folder, and select Rename. Enter new name in place of highlighted text.

Widely Used Type of Files

Right click on Desktop choose New to view widely used files.
Creating Application File

To create a new file, right click on the empty area of the desktop. Go to New and click on the file type you want to create. For example to create a new word document, right click on the desktop, Go to New and select MS Word Document.

To view the properties of software, right click on the file. File Properties window will open.

To rename a file, right click on that file, and select Rename. Enter new name in place of highlighted text.

To select a file, simply do a single click on it.

File Attributes

To view file attribute
Right click on file
Choose Properties

File Properties Panel consists of many tabs, for example

1. General Tab – It will have File name, type, location on computer, size and date and time file created on, attributes(read only, hidden)

Selecting Files

To select multiple files

1. Click on area near to one file and than drag around all files you need to select.
2. Hold down *Ctrl key* and select all those files that need so be selected.
3. To select adjacent or icons in a row, press *Shift Key* and select those icons.

**To make backup files/folders**

1. Copy the file/folder to another secondary storage device like floppy disk.
2. Right click on the file folder and move your cursor to “Send To” option. Flash Drive
   Or copy file, open My Computer, Open Flash Drive and Paste in it.

**Formatting a USB Drive**

Attach USB drive with computer. Open My Computer and right click on the icon of the USB Drive. Right click on USB drive, select the “Format...” option. Choose quick format and click on start button. USB drive will be formatted and all data will be removed.

**Searching File**

Open My Computer
Write file name in search bar

**Summary**

In this lesson you have learnt

- Directories / Folders
- Widely Used Type of Files
- Copying, Saving and Backup of Files
- Selecting files
- Process of formatting USB drive
Computer Proficiency License (CS-001)
Module 02
Print Management

Objectives
The objective of this lesson is to provide information about
- How to install a printer?
- Be able to take prints
- Change the default printer
- View job print status from the print manager

Printer
Printer is hardware. It outputs hardcopy (print on paper) of some file on your computer.

Installation
Installation or setup means to connect a printer with computer and copy necessary software on the computer. It can be divided into (1) Hardware Installation and (2) Software Installation

Hardware Installation
Connect the main power cable to power socket
Put the USB cable into USB socket
Switch the main power on.
LED on the printer panel will be on. Operating system detected the printer but unable to install because operating system does have required printer software driver.
Software Installation

Insert the CD containing printer-driver in *CD Rom* and than click on the *next* button. Computer will copy and install all the required driver files and set it as default printer.

**Printing from installed printer**

You can use any of these to get the print of your document.

1. Open your *MS word* file.
2. Click on *File < Print..* and press *Ok*.
3. Press *Ctrl + P* to get the print of your document.

**Printing in Network Environment**

1. Open your *MS word* file.
2. Click on *File < Print* or Press *Ctrl+P*
3. Choose Printer name from Printers list
4. Click Print
Print job status

To view the print job status

1. Click on the start < Devices and Printers
2. Click on the printer icon representing printer, you sent prints to
3. A new window for this printer will open which will display the information such as Document Name, status, Owner, Pages, Size, Submitted date/time and port etc.
4. Or click Printer icon in system tray.

Summary

In this lesson you have learnt:

- How to attach and install a printer with computer
- How to take prints of any file
- How to use printer
- How to view job status
Objectives

The objective of this lesson is to provide information about

- Creating a New Document
- Saving a Document
- Opening a Document
- Opening Multiple Documents
- Typing Text

Open MS word Application

To open a MS word Application First Click on Button or press button From Keyboard.

In the Start Menu Click on All Programs then find Microsoft Office there and click on it Chose Microsoft Office Word and Open it by single click.

After clicking on the last option “Microsoft Office Word” in the sub menu you will a dialogue box with “Microsoft Office Word” written on it. This dialogue box is called splash screen. After few seconds splash screen will disappear and MS word will be open.

P.S. This sequence of opening a word document is according to Windows 7, Sequence of Opening Microsoft word can vary on different versions of Windows.

Screen Layout

Default screen layout is the layout of MS word when it is opened. We can change the default layout according to our will.

In title bar, Name of the document with “Microsoft word” is written. If it’s a new document and not being saved yet, it will have temporary name like Document1, Document2 etc

A file created by word processing software is called document.

Menu bar is a bar just below the title bar of the document. It contains Sub menus (File, Edit, View etc.) to give specific instructions to word processor. For example File menu contains
commands like Save, Close, Exit for the open document. Edit menu contains editing related commands like cut, copy, paste for the text of word document.

**Different Toolbars**

At the Upper right side of the title bar, you can see three buttons

1- *Minimize* button – This button is used to minimize (An open window will appear as icon in task bar) the word document. To maximize this window, click on its icon at the taskbar.

2- *Restore* down button – This button is used to restore down the window to a smaller size on desktop.

3- *Close* button – This button is used to close the document.

**Scroll Bars and Rulers**

**Scroll Bar**

At the Right side and at the bottom of the Document There is Scroll bar.

- With the Right vertical scroll bar Document can be scrolled up and down.
- With the Bottom Horizontal Scroll bar we can scroll document left or right.

**Rulers**

Rulers are at the left side and on the upper side of the document.

- Upper Ruler shows the starting and ending of a line in the document.
- Left Rulers shows the starting and ending of the document.

Rulers can also be adjusted as per our need.

At the extreme bottom of the document status bar can be found. Status contains information about on which page we are right now how many words are present in the document.

**Opening a New Document**

To create a new document in Microsoft word from *File* menu we click on *New* and after that we select Blank Document.

From Keyboard we can use shortcut key + to create new Document.
Opening an existing Document
A document which was previously created can also be opened from File menu, click on the File then Open and from the file dialog box select the document of your choice and click open.

From Keyboard we can use shortcut key Ctrl + O to open a previously created document.

Typing Some Text
Text can be added on the Document white vacant area. Blinking Vertical line '|'can be found on the screen this is called cursor. Cursor shows the position of the text which will be entered next. Mostly this cursor is to right of the last word entered.

Saving
A Document can be saved in the computer hard disk for the later use, we can save document with some methods.

- First method is to click on the save button from Quick Access Toolbar.
- Second Method is from File Menu we can click on save Button.

- Third Method is to Click Ctrl + S From Keyboard.
After Clicking save from any of the above button a dialog will be opened, we can select the destination folder from there, and chose a name for our document and click the button save our document will be saved.

Opening Editing and Saving Again

We can open a file from File menu or by pressing short cut key Ctrl + O.
Open file menu contains much option to organize, select and open a particular word document. From the file types we can select different file types to display in the file menu.

**Opening Multiple Documents Simultaneously**

In Real life we require more than one document at the same time. Microsoft Word Provides same functionality of opening and working with multiple documents simultaneously. To open Multiple Documents at the same time we simply navigate to target folder and double click on the document file(s).

To switch between multiple documents we simply use short key $\text{Alt} + \text{Tab}$.

**Saving an Already saved Document**

A document which has already been created and saved to a location can also be saved to another location for example USB drive. To save a document to another location we use **save as** feature of Microsoft Word, First we navigate to File Menu then from file menu we will select **Save As** Option a new window will be opened, from this opened window we can select the destination folder and click the save button to save the document to new destination.

P.S. Remember after saving the file with save as feature will not remove the document from the previous folder, it will just make another copy of that document into new folder.

**Getting Help from Microsoft Office**

Help from Microsoft Word can be get in case someone cannot understand how to perform certain task.
To get help from MS Word we use help button at the upper right corner of the screen.

Or shortcut key from keyboard can be used.

**Closing a single document and closing Word**

To close a single document in MS Word from the File Menu select close option to close a single document.
To close the Microsoft word application click the cross button at upper right corner or press shortcut key from keyboard.
Objectives

The objective of this lesson is to provide information about
- How to adjust basic settings of MS word
- Inserting different type of data in MS word
- Inserting characters, Word sentence and Text
- Undo Command
- New Paragraph Insertion
- Special Character and symbols
- Page Break

Change Page Display Mode

We can change Display mode of MS word with the purpose of how page will be displayed to us.
Display mode can be changed to following option:
- Print Layout
- Full Screen Reading
- Web Layout
- Outline
- Draft
To change the display mode we need to click on View Ribbon Tab after clicking on View Tab on the very left we can find Document Views segment with different options of how the document will be displayed we can click on the required layout to set it for the current document.

Change Zoom level

We sometimes need make document bigger or smaller with the intention of viewing a document more clearly or view more than one pages at the same time.
To change zoom settings from view Ribbon Tab click on Zoom, a new window will be opened with different zoom levels select the required zoom level and press OK. Zoom level can be changed with some other methods as well from the bottom right of the document we can see + and – Signs with a bar we can adjust zoom level from there.
Edit Ribbon Tabs

To Edit ribbon tabs first right click on ribbon tabs and select customize The Ribbon Option From there.

A new window will be opened with many options in it. Below are some features we can use to edit our ribbon bar:

- In the right side menu we can check and uncheck a tab to show or hide it from ribbon tab.
- We can move a ribbon tab up or down with buttons to change its position in ribbon tabs.

Changing file Format

Sometimes we need to save a file in specific format so that it can be opened in other software as well.
To change file format from File Menu we click on Save As option a new window is opened, from this newly opened window we will click on save as option to change the file format and click save to save file.

Inserting Text

To insert text into already written document or text we simply right click on the required position and simply insert the text we want to insert.

Undo Command
To undo the last action in MS Word we click on undo button from quick access menu bar. We can do this with keyboard short cut key.

**Insert Special Character and Symbols**

Sometimes we need to insert mathematical symbols and characters which are not available on keyboard.

To this from insert tab we click on symbol on the right side. A small drop down will be opened with some symbols in it we can select the symbol if we want or click on more symbols to select from more symbols and Special characters.

**Selecting, Cutting, Copy and Paste Operations**

**Selecting Text**

Text can be selected using mouse left button or Using key from Keyboard. To select text we press and hold the mouse left button and move the mouse over the text to select selected text will highlighted, same with using shift key we press and hold shift key and press left or right arrow button or move mouse over the text to select.

**Copy, Cut and Paste Text**

We can copy or cut a text and later paste it in same document or another document.

- To copy selected text we use copy button from clipboard which is present at upper left corner of the application. Shortcut key from keyboard.
- To cut the text we use cut button from clipboard or use shortcut key from keyboard.
- To Paste the text we can use paste button from clipboard or use Shortcut key from keyboard.
Searching and Replacing

Finding Text in Document

To find a certain word or in a document we can use find feature of the MS Word, find button is on the upper right corner of the MS Word. Shortcut key from keyboard Ctrl + . Feature can be used to find a phrase in the document.

Finding and Replacing Text in Document

We can also replace a word in the document in MS Word; sometimes we need to replace a specific word in the document which has already been written for example we have a document in which President of Pakistan’s Name is Musharraf and we need to change it Mamnoon Hussain so it is better to use find and Replace feature of MS Word.

To use Find and Replace we will click on from upper right corner just below the find.

A new window will be opened with two text boxes, in the Find What field we will write the text we want to find and in the Replace field we will write the text we want to replace with the entered text and click Replace All Button to replace all or Simple Replace to Replace one by one.

Summary

In this lesson you are learnt
- Edit a document
- Selecting text in document
- Different command (Cut, Copy etc)
Objective

The objective of this lesson is to provide information about
- How to change font size and color?
- How to set alignment?
- Creating hyperlink
- How to add header and footer?
- Correcting spell mistakes

Changing Font Properties

Font is the style how the text will be displayed in the document. To change font from Home Ribbon bar we will use font segment.

This toolbar have many options in it below are some things we can do with it:

- We can change the font Style Arial to another one for example Times New Roman or Broadway.
- Font Size can be increased to make text bigger or smaller.
- We can make text highlighted or change text color.

Bold, Italic and Underlined

We can make Text bold by clicking on B or make it italicize by clicking on I or Make it Underlined.

Shortcut Keys for making text bold, italic or Underlined are as follows.

<table>
<thead>
<tr>
<th>Style</th>
<th>Keyboard Shortcut</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bold</td>
<td>Ctrl + B</td>
</tr>
<tr>
<td>Italic</td>
<td>Ctrl + I</td>
</tr>
<tr>
<td>Underlined</td>
<td>Ctrl + U</td>
</tr>
</tbody>
</table>
Indentation

We can add spacing before new lines and in between lines in MS Word.

To add new line space we press \[\text{Tab}\] button from keyboard.
To change line spacing we press \[\text{E} \rightarrow \text{E}\] button from Paragraph Tab of Home Ribbon Bar.

Changing Text Colors

To change Text colors in MS Word we use Font Tab from Home Ribbon bar. To change text color click on the \[\text{A} \rightarrow \text{A}\]. A dropdown will be opened with many colors in it we first select the text and then chose the color we want for the selected text.

Alignment and Justification

Sometimes we have a special need to align text right or in the center MS word makes it easy in the Paragraph Tab. \[\text{A} \rightarrow \text{A} \rightarrow \text{A}\] these are the alignment buttons we use to left, center and right align respectively.
Shortcut keys for Alignments of text are:

<table>
<thead>
<tr>
<th>Left Align</th>
<th>CTRL + L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center Align</td>
<td>CTRL + E</td>
</tr>
<tr>
<td>Right Align</td>
<td>CTRL + R</td>
</tr>
</tbody>
</table>

We can also justify text in MS Word by click on justify Button \[\text{A} \rightarrow \text{A}\] or use shortcut key CTRL + J.

Hyperlink

Sometimes we need to divert the reader of the document to a website, for this purpose we use hyperlinks.

To insert a hyperlink first select the Insert Ribbon Tab and from insert tab select a new window will be opened with Text to display and Address insert the link in the address and Text which should be displayed in the Text to display text box. The final link will look like this \[\text{Virtual University}\].
CTRL + K is the shortcut key to insert hyperlink from keyboard.
Borders

MS Word Provides the Facility to insert borders to a paragraph or to full page.

To insert borders we use Page Layout from Ribbon bar and select a new window will be opened with many options in it we can select the border width, color and style and then click OK to insert the border.

Bullets

To make points in the document we use bullets in MS Word.

To insert Bullets in Home Tab from Paragraph sub Tab we can click on to insert bullets. MS Word have different type of bullets which include numeric, alphabetic and styled bullets we can chose any of these as per requirement.

Templates

MS Word have many already well written and styled document samples which we can use as per our need these are called templates.

For example you want to write CV and cannot chose how to style it you simply use a template.

To use a template from the File Ribbon Tab we click on NEW and then click on . After clicking on this we will find many documents already well styled and we can chose the best style that suits us.

Finishing a Document Styles and Pagination

On a selected text we apply more than one style at a time, we can do this by simply clicking on more font button from Font Tab.

A new window will be opened and we can choose many styles to apply on selected text.

Changing Page Size/Setup
Sometimes we need to change page size or style on which we are typing as per our printing or other requirements.

To change page setup we first click on Page Layout Ribbon Bar then in the Page Setup

![Page Layout Ribbon Bar](image)

We can change Margins, Orientation and Size of the Page.

**Spelling and Grammar**

MS Word have built in Grammar we can use to correct spelling and other grammatical errors, whenever we write wrong spelling MS word automatically recognize it and underline it red to let us know that it wrong. We can right click on the underlined word and chose the correct spellings.

**Summary**

In this lesson you have learnt

- Change font size and color?
- Set alignment?
- Creating hyperlink
- Add header and footer?
- Correcting spell mistakes
Objectives

The objective of this lesson is to provide information about
✓ How to create tables using MS word?
✓ How to change column width and height?
✓ How to insert and delete columns and rows from table?
✓ How to format borders and change colors?
✓ How to use images in documents?

Tables – Introduction

An introduction We usually use text in our documents. We can also use charts, graphs and pictures in our document file. Tabular data makes it easier for the reader to understand the information provided.

Example of tabular data can be
Time table
Employee contact list
Product sales report
Drawing, charts and pictures can make a document look better and easy to understand.

Rows and columns can be inserted into already built table, to insert a row or column select the place where you want to insert row or column then right click on it and from options menu select insert then select insert row or column to the left, right below or above the current row or column.

Rows and columns can also be deleted from an existing table, to delete a row or column select the row or column and right click on it then select Delete cells option to delete the rows or column and data with it as well.

Changing Table Borders

Borders of a Table can be styled according to requirements and needs.

To change border of a Table first select the Table then select Design Tab from table Tools.

After clicking on design Tab click on Borders. A drop down menu will be opened with many features in it for different type of borders. We can select the border which we want to show/ hide. The last option in this drop down is Border and Shading. Upon clicking on Border and Shading a new window will be opened in this window we can select the border type, and color as per our requirements.
Inserting Pictures

A picture is worth thousand words.

MS Word allows us to use pictures in the document to make it more self-explaining. For example, we are writing an article about embedded computers, so, if we can show a picture of an embedded computer in the article, the reader will know without even reading the document that this article is about computers or more precisely embedded computers.

To insert a picture into MS Word, we have many ways, some are discussed below:

- First Method is to use Insert Tab from Ribbon bar. Click on Insert Tab and then click on Picture. A new window will be opened to select a picture from the computer disk.
- Second method is to drag and drop a picture straight from the folder to MS Word.

Pictures can be resized and rotated as well. To do this, we click on the inserted picture and then use the mouse to resize and rotate as per requirement.

MS Word also provides the functionality of using already created graphics known as clip arts to insert the clip art. The same method is used as for pictures: we click on the Insert Tab and then click on the Picture icon. A side bar will be opened from this bar, and we can search for a clipart online.

Summary

In this lesson, you learnt:

- Creation of tables in word processor
- Changing table columns width and height
- Insertion and deletion of columns and rows of table
- Formatting of table borders
- Use of pictures and images in document
Objectives

The objective of this lecture is to provide information about

- How to review and proof read a document
- How to use word processor to proof read
- How to remove spelling and grammar mistakes
- How to take print outs of a document
- How to make use of different printing options

Reviewing a document

When a document is prepared, it is thoroughly checked with different perspective. A document is checked for its layout and information provided in it. Documents are also checked for its spelling and grammar mistakes. We should review our document made with the help of word processing application.

A complete document review includes

1. Complete page layout
2. Page margins and numbering
3. Header and footer settings
4. Text and paragraph settings

A very important part of document review is spelling and grammar check. A word processor gives us a very important feature of spelling and grammar check. It indicates any spelling mistake in the document and points out any grammatical mistake as well. While writing in MS word, spelling mistakes are shown by red lines and grammar mistakes are shown by green lines. Using the spelling and grammar check feature, we can remove mistakes from our document.

There are two methods to correct such mistakes in document.

1. We can use the spelling and grammar check feature.
Go to the start of the document. Click Review tab and Click on button highlighted in the figure. It will open a new dialogue box with correct options. You can do the correction, ignore it or add it to dictionary.

2. We can use the right click of our mouse. Right click on the word with red line below it to see the available corrected options.

![Dialogue box image]

Words not included in computer dictionary are highlighted as mistakes. For example nouns like Places; Muslim names etc are considered as spelling mistakes. We can add such words in dictionary so that they are not considered as mistake next time. Right click on the highlighted word, and select “Add to Dictionary”

The green wavy line under the sentence represents a grammatical mistake. Computer is suggesting you to revise the fragment from the grammar perspective.

**Printing a document**

We can take prints of a document prepared in word processor. The files created using software and saved in computer called “soft copy”.

To take the print you can do any of the following.

1. Go to File < Print or

2. Press Ctrl + P

A dialogue box will open in case, either option is followed.
You will see different options available for print. You can select All, only current page, or page range for prints. Multiple copies can be sent to the printer at a time of a document with a single click.

**Select Printer**
If more than one printer is attached, we can select a printer we want to print from.

**Page Orientation**
We can select the available page orientation

- Landscape
- Portrait

**Page Sizes and Margins**
You can set page margins and select the required page size, for example, A4, Letter, and Legal.

Margins can be also chosen Narrow, Normal, and other.

**Summary**
In this lesson, you learnt:

- Review and proof reading of a document
- Using word processor to proof read
- Removing spelling and grammar mistakes
- Taking print outs of a document
- Different print out options
Objectives

The objective of this lesson is to provide information about

- What is mail merge and why we use it?
- What are the important steps of mail merge?
- How to create a mailing list?
- How to create a mailing list with a document?
- How to prepare mailing envelopes?
- How to take printouts of a merged document

Basic concepts

In merged mail we have some information that is merged with other letters to be posted after words. This mail can be our postal mail or electronic mail send by our pc. We use the mail merge feature provided by a word processor to merge our information with letters and prepare them for delivery.

Mail merge comprised of two steps.

1. Prepare your letter or invitation.
2. Prepare the list of people who will receive this letter.
3. Merge the information from the list into main letter.

For example we need to send university students a convocation letter. Such invitation or letter is addressed to different person. Text of the invitation will be the same but the name of the students and their addresses will be different.

1. To develop invitations using mail merge feature do the following steps
2. Click Mailings Tab.
3. Click Start Mail Merge
4. Click on \[ Step by Step Mail Merge Wizard... \] to start wizard. Mail merge pane will be opened at left side.
5. Select “Letters” radio button in the document type and click on the next: Starting
6. Document in the bottom of the panel.
7. Select “Use the current document” and click on the “Next: Select recipients”
8. Select “Type a new list” and click on Create… A new window will open with text fields. Enter information in text fields and click on OK. It will ask you to save the list. Enter “Students” and press enter. Click on “Next: write your letter”

Insert Merge Field
Click Mailing tab
Click Insert Merge Field available in “Write and Insert Field” menu
Select required field and Click Insert
Click Close

Edit Data List
It is very easy to edit a list or add/delete a record in list.

Click on the Mail recipient button available in Start Mail Merge menu in Mailing tab. A new window will open with list you develop. Select any entry and click on Edit button in the window to do any changes. Once you enter into the edit mode for the particular list entry, you can delete, find, sort and add new entry.

Mailing Envelopes
Mailing Envelopes can also be created using mail Merge feature we can use already created list or create a new one.

To create envelopes we click on from Mailings Tab. A new window will open select required options to adjust envelop according to need.

Now that we are set up the Envelop we can click on to select the list of people to print on these envelopes. We can choose previously created list from the disk.

After that we can click on and insert the fields one by one just like we did for the letters. Now after inserting and finishing it we can print these envelopes.

Printing a merged document
Click on the “Finish and Merge” button in Mailing tab then Click Print Documents and Select “All” from the Merge to Printer window to take prints for all records. Soon after you click on the OK button, a new window will open for printer. Click on Ok button to send print request to printer.

**Summary**

In this lesson you learnt:

- Feature of mail merge
- Important Step of mail merge
- Create mailing list
- Merging of letter / Document
- Creating mailing envelops
Computer Proficiency License (CS-001)
Module 4
Module 04 Introduction

Objectives:
The objective of this lesson is to provide information about

- Interface of MS Excel
- New Backstage view of Excel
- How to modify or change the Ribbon and Quick Access toolbar?
- How to make a new workbook?
- How to open an existing workbook?
- Select the cells
- Insert the contents in cells
- Delete the cells
- Cup, Copy and Paste the cells
- Fill the cells with fill handlers
- How to change the text, cell color and style
- How to align the text
- How to apply special formatting on Numbers and Dates

Starting spreadsheet software
Microsoft Excel is popular and widely used spreadsheet software.
To open the excel file
Click on start < All Programs < Microsoft Office < Microsoft Excel

In the start a screen will appear for few seconds. This is called splash screen. A new excel file will open, after this screen would disappear. The by default arrangement of toolbars panels and sheets is called default layout.

Purpose:
Main purpose of the spreadsheet is to calculate numeric data and to apply different formats on data.
Development of Spreadsheet softwares:

- In 1961, Prof. Richard Mattessich gave the idea of Electronic Spreadsheets.
- In 1978, Dan Bricklin designed an interactive visible calculator program consisting of four columns and twenty rows which was named as VisiCalc.

Purpose:

Main purpose of VisiCalc software was to get user’s data and then to manipulate user’s data.

Different Spreadsheet Softwares available in the market are:

- Gnumeric
- Kingsoft spreadsheets
- Spreadsheet (DHTMLX)
- LOTUS 1.2.3(Release 2.1)

Widly used softwares are:

- CA_ SuperCalc
- MultiPlan
- Quattro Pro®12
- Microsoft Excel

What is spreadsheet?

Spreadsheet is a collection of worksheets. Spreadsheet means to represent the accounting ledger’s book keeping record format. In other words, spreadsheet is a way of representing book keeping record of an accounting ledger.

What is Workbook?

Workbook is a collection of spreadsheets. MS Excel File is called a workbook.
What is Interface?

Screen which appears for the first time when you open MS Excel is known as an interface. MS Excel 2007 and MS Excel 2010 Interfaces are similar to each other.

There is a **quick access** toolbar on the top of the MS Excel interface. Below the Quick Access bar there is a **Ribbon bar**.

Ribbon bar consists of different tabs like:

**File, Home, Insert, Page Layout, Formulas, Data, Review, View**

Below ribbon bar there is a **Name Box** and **Formula bar**.

**Name Box**: Represents a cell reference that is a cell location and number. It shows a cell address.

**Formula Bar**: It is used to edit or change data by using the formula or text or function.

**Column**: A group of different cells from Up-to-Down is called a column.

**Row**: A group of different cells from Right-to-Left is called a row.

There may be one or more worksheets in a workbook. Workbooks are also known as spreadsheets.
By default, there are three spreadsheets in a workbook.

**About worksheets:**
You can scroll worksheets
Also you can Edit, Delete or add a worksheet.

*You can view a worksheet in three different ways:*
Normal view, Page Layout View and Page break preview (for overview)
By default, workbook is opened in Normal view when excel is opened.

**How to modify the ribbon or quick access toolbar?**
1. Right click on the Ribbon; a pop-up menu will open
2. Go to Customize the Ribbon option from the popup menu and click on Customize the Ribbon
3. A new Excel Option dialogue box will open
4. Click on the New tab button
5. Add or remove your desired commands by checking and unchecking the check box and then click on OK button.

**Compatibility View in MS Excel:**
Compatibility view enables all old features and disables all new and advance features of MS Excel. MS excel 2010 file format is .XLSX
Cell is the fundamental unit of MS Excel Worksheet.
Cell is a rectangular box or an intersection point of a row and column.
In cells Text, Formatting, Attributes, Formulas and Functions are inserted as a data.
How to Delete Cell Content?

Click on the Home tab from the ribbon bar then go to Editing group of commands and then click on Clear; select clear content form the clear drop down list.

OR

Select cell and press Backspace

To delete contents from multiple cells:

Select cells and press delete button.

Note: There is a huge difference between cell Deletion and cell content deletion.

To delete Cells from spreadsheet:

Select the cells which you want to delete
Click on Home tab from the Ribbon bar, then
Click on Delete
Select the row if you want to insert data below the row.
Select the next column if you want to insert a column before the selected column.
A formatted text enhances the readability of a reader.

Text Wrap:

Text wrapping is used to view complete cell content. It means cell content gets easily available by selecting to wrap text option.
Wrap text option exists under the Home tab of the Ribbon Bar.

Merge and Center Cells:

Select cells which you want to merge and center, then
Go and Click on merge and center dropdown list under the home tab, then
Select merge and center option from the dropdown list.

How to change the text, cell color and style?

Select the cells and then go to A^ button under the Home tab to grow font size
Select the cells and then go to A button under the Home tab to shrink font size
By default, Numbers are bottom Right aligned in a cell
While text is bottom left aligned in a cell.
By default, each cell of the spreadsheet is set as a general format cell setting.
Numbers are written in decimal format.
Currency and decimal are specially aligned right and left respectively.

**Short Date:**
22/03/2017

**Long Date:**
Wednesday, April 22, 2017

**Time:**
hr : mm: ss

**Percentage:** Data is written with percentage sign 400.00%

**Fraction:** Data is written with forward slash. For example, ¼ will be written same as ¼ in MS Excel.

**Note:** In general, ¼ will be written as 4-Jan.

By default, Excel converts any large number value into scientific notation.
By default, Excel is set in a text format.
More Number formats option is used to convert dollars into PKR etc.
Home<Number< More Number Formats Option.

**Summary**
In this lesson you have learnt
- Modify or change the Ribbon and Quick Access toolbar
- Make a new workbook
- Open an existing workbook
- Select the cells
- Insert the contents in cells
- Delete the cells
- Cup, Copy and Paste the cells
- Fill the cells with fill handlers
- Change the text, cell color and style
- Align the text and special formatting on Numbers and Dates
Computer Proficiency License (CS001)
Module 4
Saving an Excel File

Objectives:
The objective of this lesson is to provide information about

- How to Use Save and Save As Command?
- How to Save the Compatible file of Excel 97-2003?
- How to Save an Excel Work Book into PDF Format?
- How to make Excel Simple formula?
- How to use Add, Subtract, Multiply and Divide Functions?
- How to calculate values with cell reference?
- How to assign color and name to worksheet Tabs?
- How to copy, move, delete and add the worksheet?
- How to group and ungroup worksheets?
- How to freeze rows and columns?
- How to print workbook, worksheet and cells?
- How to set page orientation, title margin and breaks?

Save As: Save as command is used, when you are saving your file (Excel file) for the first time or when you want to save yours excel file with another version of the excel file. For Example, If you want to save your excel file created in MS Excel 2017 into MS Excel file 2003 then, Save as command is used.

When you save any file with a save as command then your original file will also remain at its original location.

By default, your file is saved in My Document folder.

Save: Save command is used to save your workbook on current location.

To recover your saved file, go to
File<Info<Version then,
Click on restore button from the popup menu.

By default, Excel auto saves an Excel file after every ten minutes.
A file will not auto save if you will close your excel file before 10min.

**Compatibility Mode:** Compatibility mode disables all new and advance features and enables only those basic features which are used to make only a workbook.

**Note:** Old version of excel can only be opened in an advance excel in its compatibility mode only.

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**Save as a PDF**

To save your workbook in Adobe Acrobat format is called to save as a PDF file.

**Purpose to save as a PDF:**
- Helps reader to read who do not have MS Excel
- Just Read your Workbook as a PDF file
- Reader cannot edit your workbook

**How save a file as a PDF?**

File < Save As select PDF from the drop down list of file type.

By default, Excel only converts that worksheet in PDF on which you are working currently.

**To convert whole workbook or all worksheets in PDF:**

Go to File < Save as then,

Click on Option button and select entire book option and then ok

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**Creating Simple Formulas**

**What is Formula?**

Mathematical equation which is used to perform different mathematical calculations is called a formula i.e. Similar to calculator that is used to perform different calculations.

**Standard Mathematical Operations:**
- + Plus: For Addition
- - Minus: For Subtraction
- * Asterisk: For Multiplication
- / Forward Slash: For Division
- ^ Caret: For Exponent
In MS Excel all formulas are applied with an equivalent sign.

**Note:** Excel will never tell you that either your formula is right or wrong.

**To create a simple formula in Excel:**
Select cell in which you want to show your result then, enter value in formula bar

**Creating Formula with cell reference:**
Select cell in which you want to show your result then, first write cell name and secondly its value in formula bar and in last press enter. For Example, If you want to select Column C and Row 3 then, write C3 in formula bar.

**To create a formula with point and click method:**
Select the cell in which you want to show result then, enter formula in it. For Example, 
=C3*C4

**How to Edit a Formula?**
Double click on the cell

OR

First select cell and then edit (or change) it in formula bar.

**Introduction to worksheets**
By default, three worksheet tabs named as sheet1, sheet2 and sheet3 are displayed on the bottom left side of the screen when you open MS Excel for the first time.

You can copy, delete, move, insert, rename and can also give colors to the spreadsheets.

**Rename Worksheets**
Right click on current (selected) worksheet then, go to rename and rename it.

**To Delete Multiple sheets from the spreadsheet:**
Press Shift tab and select different sheets which you want to delete then, right click on any selected sheet and finally click on delete.

**Move or copy worksheet:**
Right click on the sheet which you want to copy or move.
Go to move and copy option and then check create and copy checkbox and finally click on OK button.

**Result:** a new same worksheet with an updated version will be created.

**Move a spreadsheet:**
Drag the worksheet and then drop the spreadsheet when a dropdown arrow get appeared on the worksheet tab.

**To color a worksheet:** To color a worksheet means to give color to the worksheet tab.
Right click on worksheet tab then, go to tab color option and select color of your own choice, and finally click on OK button.

**Grouping and Ungrouping worksheets:**
Press Ctrl key from the keyboard and click on all those worksheet tabs which you want to group.

**Ungrouping the worksheets:**
Right click on worksheet tab then, click on ungroup option.

**Freezing worksheet panes**
You can freeze one or more sheets in Excel this is called Freezing Panes.
Freezing is very helpful when you scroll your worksheet.

**How to freeze a row?**
Select the next row to the row which you want to freeze.
Go to View tab i.e. situated on the Ribbon Bar.
After clicking on the view tab, select freeze pane option from the freezing command dropdown list.

Press Ctrl+F2 to view page print preview

**Note:** Print preview option has been removed from MS Excel 2010.
How to print a worksheet on a paper:
Click on File tab from the Ribbon bar, a back stage view will open
Click on Print option from the Back stage view, Different printing options e.g., Print, Printer and Setting will appear on the left side of the opening window and Page Preview will be displayed on the right side.
A document or worksheet can be printed in two different layout styles
1. Landscape Style
2. Portrait Style

Landscape Style: In Landscape style a worksheet is horizontally set
Portrait Style: In Portrait Style a worksheet is vertically set

It is better to print in Landscape when large numbers of columns are needed to print on the paper

How to reduce worksheet size?
Click on File tab, then
Click on Print option
On the left side under settings click on No Scaling dropdown list then,
Click on Fit sheet on one page, finally click on OK button.
Margin: Printed worksheet border content or distance from the text is known as the margin.

To use print titles:
- Click on Page Layout tab from the Ribbon bar select print title command from the page setup group of commands
- Page setup dialogue box will open
- Enter row value in the Rows to repeat at top textbox.

How to break a worksheet:
Select the column from where you want to break the spreadsheet, then
Click on Page layout tab from the Ribbon bar.
Go to Page setup group of commands and click on break dropdown list and then click on insert page break option to insert the break.

Summary
In this lesson you have learnt
- Save and Save As Command
- Save the Compatible file of Excel 97-2003
- Save an Excel Work Book into PDF Format
- Make Excel Simple formula
- Add, Subtract, Multiply and Divide Functions
- Calculate values with cell reference
- Assign color and name to worksheet Tabs
- Copy, move, delete and add the worksheet
- Group and ungroup worksheets
- Freeze rows and columns
- Print workbook, worksheet and cells
- Set page orientation, title margin and breaks
Computer Proficiency License (CS-001)  
Module 4  
Creating Complex Formulas

Objectives

The objective of this lesson is to provide information about
- How to write Complex Formulas in Excel?
- What are Relative and Absolute Cell References?
- What a Fill Formula and Copy Formula according to cell Reference?

Complex Formulas contains more than one mathematical formulas or functions
In complex formulas order of operations is very important.

Order of Operations:
Perform the operation in parenthesis ‘()’ first
Caret ^ in second
Multiplication / Division in third
Addition / Subtraction in fourth

Working with cell reference and absolute reference:
Generally, a cell reference is called a relative cell reference or simply a cell reference.
A cell reference with $ sign in the start is called an absolute reference.
By pressing the F4 key a function can be changed to its absolute reference.

Functions:
Function is a predefined formula for calculation.
For Example,
Sum formula in Excel is =Sum (B3:B12)
Each function has a specific order which is known as syntax.
Some common functions are:
Sum, Average, Product, Count

Arguments in a function tell you how or in which way the function will execute.
Reference of each cell is written in parenthesis with colon or comma.

: Sign represents cell range reference
=Count (C1:C5, C7:C10, C11:C15)
“,,” Comma Sign represents Individual value. It means comma sign in a function represents
an individual cell reference and value.

**Note:** Excel will not tell you either your function is true or false.

**Using Common Functions to represent Auto Sum:**
- Select the cell in which you want to show your result, then
- Go to Formula tab on the Ribbon bar, then
- Click on Auto sum dropdown list from the function library group of commands and
click sum from the options. Now select all those cells who’s Sum you want to
calculate and then, press enter key from the keyboard.

Auto sum dropdown list in Function Library Command group contains different options such
as Sum, Average, Count Numbers, Max, Min etc.
Function Library under the Formula Tab contains different group of formula commands. For
Example, Math and Trig formulas are used to calculate Mathematical and Trigonometric
functions.

**More functions category includes:** Statistical, Engineering, Cube and Compatibility
functions.
MS excel also contains very useful Date & Time functions. For Example, with the help of
date and time function current date of the system can be easily determined.
Similarly, NETWORKDAYS function is a very helpful function in MS Excel.
**How to use NETWORKDAYS Function?**
Select the cell in which you want to show your result.

- Go to Formula tab that is situated on the Ribbon Bar in MS Excel
- Click on Formula tab and select date and time dropdown list from the function library.
- Select NETWORKDAYS option from the date and time dropdown list

**Summary**
In this lesson you have learnt

- Write Complex Formulas in Excel
- Relative and Absolute Cell References
- Fill Formula and Copy Formula according to cell Reference
Objectives:

The objective of this lesson is to provide information about

- How to apply sorting in a worksheet?
- What is sorting?
- Way of arranging data in a specific order is called sorting.

Different types of sorting

- Alphabetically sorting
- Numerical sorting
- Sort by date and time
- Customized sorting
- Sort by cell color, font color or cell icon

Click on Data bar then, click on sort from the dropdown list

Data < Sort

Sort dialogue box will open.

Select column, sort on and order of your choice form the dropdown list.

You can also filter data of your own choice.

Tables Formatting:

You can also change the table color.

Click on home tab and select Format and table option

A dropdown list with different colors will open. Select the color of your own type from the list.
Template:
By default, template is a collection of different color combinations, affects, fonts and settings.
You can use MS excel built in templates by clicking on file tab then,
Click on new tab and selecting sample template from it.

Chart:
In MS Excel, a chart is a tool to represent our data graphically.

Purpose:
Charts are used to display our audience the hidden meanings of numbers and figures and their comparison.
Column Chart
Pie Chart
Line Chart
Bar Chart
Area Chart
Surface Chart

Different parts of a chart:
Title of the chart
Vertical Axis
Data Series
Legend
How to create a chart in a worksheet?
Insert < chart
To change the chart type
Right click on the chart
Select change chart type from the menu

Reviewing and sharing worksheets
Review < select track changes from changes group
Click on the Review tab from the menu bar, then
Click on the Track Changes dropdown menu from the Changes group of commands
Click on the Highlight changes option from the dropdown menu
A highlight changes dialogue box will open, now
Check the checkbox, that is, Track changes while editing. This also shares your workbook, then
Apply track of your choice and click on OK button.

Adding and Deleting Comments:
Comments are used to get some information about data.
Comments are used for our convenience.

How to insert a comment?
➢ Select the cell
➢ Go to Review tab on the Ribbon bar
➢ Click on review tab then,
➢ Click on comment option

Or
Select cell and then press Shift+F2 from the keyboard.

Use of Document Inspector:
Click on File tab
A back stage view will open
Click on Check for Issues drop down list then, select inspect document option from the list
By default, anybody can copy, delete or edit your worksheet data.

**Using Conditional Formatting:**

First of all select your spreadsheet data
Go to Home tab and click on conditional formatting drop down list from the group of style commands under the home tab.

**Pivot table:**

A kind of interactive table which automatically abstracts organizes and summarizes the data. Pivot table summarizes the data, making it easier to manage. Best of all, you can quickly and easily change the pivot table to see the data in a different way making it an extremely powerful tool.

Go to insert tab on the Ribbon bar
Click on the Pivot table dropdown list under the inset tab.
Select pivot table option from the dropdown list.

**Summary**

In this lesson you have learnt
- Sorting in a worksheet
- Apply track changes
- Add comments
- Working with Charts
Computer Proficiency Language (CS-001)
Module 5
Introduction

Objectives:

The objective of this lesson is to provide information about

➢ Environment of Microsoft PowerPoint 2010
➢ What is backstage view?
➢ What is Ribbon and Quick Access Toolbar?
➢ How to make a new presentation?
➢ Back stage view is new in MS PowerPoint 2010.
➢ How to add new slides?
➢ How to change presentation layout?
➢ How to arrange presentation slides?
➢ How to change slide view?
➢ How to add notes in a slide?

In past it was very hard to write and present at the same time. Power point is useful software to prepare any type of presentation. Power Point is such type of presentation software with the help of which we can create a dynamic slide presentation. Dynamic slide animation includes Animations, text, sound, pictures and videos.

Elements of a Slide:

➢ Text
➢ Videos
➢ Bullet List
➢ Pictures and Charts

You can add more than one slide in a presentation. You can play/view slide show any time by clicking on the Slide show option from the Ribbon bar.

OR

Simply press F5 from the keyboard.

Menu Bar: Menu bar contains different tabs. For Example, Home, Insert, Design, Transitions, Animations, Slide Show, Review, View, Acrobat
There are different group of commands under the each tab.  
For Example,  
Tables and Picture options are found under the Insert tab.

**To Customize the Ribbon:**
Right click on the Ribbon  
Click on the customize the ribbon from the menu list  
A new Power Point option dialogue box will open  
Click on the new tab from the dialogue box, then  
Add or remove different tabs of your own choice.  
Click OK

**Minimize or Show the Ribbon:**
Click on the ^ button from the Ribbon bar to Hide the Ribbon bar  
OR  
Right click on the Ribbon bar, then  
Click on the Minimize the Ribbon option from the menu list.

**The Quick Access Tool Bar:**
Tool bar on the top of the Ribbon bar is the Quick Access Tool bar  
Quick access tool bar contains different Shortcut buttons  
E.g. Save button, undo button etc.

**To add commands to the Quick Access Tool bar:**
Right click on the Quick Access tool bar, then  
Click on Customize Quick access toolbar  
A new Power point option dialogue box will open  
Add or Remove buttons of your own choice  
And then, click on OK button.

**Backstage View:**
Back stage view is a new feature in MS Power Point 2010.  
View which appears when you click on the file button on the Ribbon bar is called the Back stage view.

**Blank Presentation:**
Click on the File button from the Ribbon bar  
Backstage view will open  
Click on New a new menu list will open  
Since Blank Presentation is already selected.  
Click on Create button to create a new blank document.

**To open an existing Presentation:**
Click on File button, then
Click on Open  
A new dialogue box will open  
Browse and select the file and click on Open Button.

**Compatibility mode:**
Compatibility mode is used to convert the presentation.

**Slide Basics:**

7. **Objectives:**
- How to add new slides?
- How to change presentation layout?
- How to arrange presentation slides?
- How to change slide view?
- How to add notes in a slide?

In powerpoint there are placeholders to insert the text.

**Place Holder:**
That input area which shows us on the slide in form of dotted area.  
We can insert tables, charts and texts in the place holder.

**About slide Layouts:**
You can arrange your slide content in different ways.

**Customizing Slide Layout:**
Select the slide, then
Click on Home tab from the menu bar  
Click on layout dropdown list from the slides group of commands.  
Now you can select any layout of your own choice from the list of layout dropdown menu.

**Removing Place holder from the slide:**
Select the place holder boundary, then  
Press Backspace or Delete from the keyboard.

**How to insert text on in the place holder?**
Click on the home tab, then  
Click on Drawing Box from the group of Drawing Commands.

**To use a Blank Slide:**
Click on the Home tab, then  
Click on the layout dropdown list and select blank slide from the dropdown menu.

**Working with slides:**
Click on the home button from the Ribbon bar
Click on new slide dropdown button
Slide layout view will open
Select any one layout from the dropdown menu.

**Instantly generating a slide:**
Click on New Slide button in the slides group of commands under the home tab.
OR
Press Ctrl + M

By doing so a slide with the same layout will be created on which you are already working.

**8. To Copy and Paste a slide:**
Select the slide to which you want to copy, then
Click on click on the new slide dropdown button under the Home Tab and then,
Click on Duplicate Selected slide option from the dropdown list.

**To Delete a Slide:**
Select the slide and then, Press Backspace or Delete button from the keyboard.

**9. Managing Slides and Presentations:**

**About Slide Views:**
- Normal View
- Slide Sorter View
- Reading View

Click on the View tab from the Ribbon Bar, then
Click on slide sorter view from the presentation views group of commands

In slide sorter view you can arrange different files or see different presentation files.
Slide sorter view is also used to make it sure that all slides in the presentation exists and to check that there is no any extra slide in the presentation.

**Indentation and Line Spacing:**
You can change the Presentation with the help of Indentation and line spacing.

**10. What is Multilevel List?**
Different Indenting Levels in the slide shows multiple lists.

**To Indent Using the Tab key:**
Place the pointer in the start of the text and then, Press Tab key from the keyboard.

**To use the indent commands:**
Click on the Home tab from the Ribbon bar, then
Click on increase indent text button in the group of paragraph commands.
Similarly, Click on decrease indent text button in the group of paragraph command to decrease indentation.

When you further indent a list with already indented text then, it is called multilevel list.

**Fine Tuning Indent:**
By default, a ruler is hidden so you have to show it first.

**How to show a ruler?**
Click on the view tab from the Ribbon bar, then
Check the ruler checkbox from the show group of commands.

**To customize bullet spacing:**
With the help of first line indent maker or hanging indent you can adjust space between bullets and text.

**Line Spacing:**
To format line spacing, Click on Home tab from the ribbon bar and then, Click on Line spacing dropdown menu from the group of paragraph commands. Select the line spacing from the line spacing dropdown menu.

**11. Presentation Notes for the Presenter:**

**How to number the Slides?**
Click on Insert tab from the Ribbon Bar, then
Click on slide number button from the Paragraph group of commands.
A new Header and Footer Dialogue box will open
By default, Slide tab is selected
Check the slide number check box under the Slide tab, then
Click on OK button.

**Bullets and Numbering:**
By default, alignment is set to center.
Justify option is used when there is a huge text the page.

**How to convert text into smart graphics?**
Click on Convert to smart dropdown list button from the Paragraph group of commands under the home tab, then
Select the smart graphic of your own choice from the Convert to smart dropdown list.

**12. Applying a theme:**
By Default, a theme is the collection with color combinations, different fonts, affects and settings.
Theme can be changed any time when you need.
How to change the theme?
Click on the Home tab from the Ribbon bar, then
Click on new from the back stage view
A new menu list will open
Select on Themes button under the Home heading.
Now you can apply any theme from the given themes.
Click on OK button to apply the theme.

Elements of the Theme:
  • Color of the theme
  • Theme Fonts
  • Shape Styles

How to apply themes?
Click on the Design tab from the menu bar, then
Select any theme from the themes group of commands.

How to insert image in a slide?
You can insert image in a slide with the help of Picture, Clipart and Screenshot commands.

How to insert an image from the file?
  ➢ Click on the Insert tab from the Ribbon bar, then
  ➢ Click on the picture from the image group of commands
  ➢ A new Insert Picture Dialogue box will open. Select the picture and click on the insert button.

Slide Master:
With the help of slide master we can set the contents of all other slides.
Click on the View tab from the Ribbon bar, then
Click on the slide master view command from the master Views group of commands.

Summary
In this lesson you have learnt
  • Environment of Microsoft PowerPoint 2010
  • Backstage view
  • Ribbon and Quick Access Toolbar
  • Make a new presentation
  • Back stage view is new in MS PowerPoint 2010.
  • Add new slides
  • Change presentation layout
  • Rrange presentation slides
  • Change slide view
  • Add notes in a slide
Computer Proficiency Language (CS-001)
Module 5
Move, Copy or Delete the text

Objective

The objective of this lesson is to provide information about

- How to change slide orientation?
- How to add notes for presenter?
- How to use spell-check program?
- How to print a slide in different views?
- How to insert different objects?
- How to fill colors in objects?
- How to scale and move the objects?
- How to create charts in slides?

Use copy and paste commands to duplicate the text:
Select the text, then
Click on Copy command under the home tab
OR
Press Ctrl+C from the keyboard.
and
Press Ctrl+V to paste the text.

Use Cut and Paste commands to move text within the presentation:
Select the text, then
Click on Cut command under the home tab
OR
Press Ctrl+X from the keyboard.
and
Press Ctrl+V to paste the text.

Delete the Selected text:
Double click on the text to select the text.
Press Delete Button from the keyboard.

Copy, Move or Duplicate the images:
Select the image, then
Click on Copy command under Home tab and then
Click on Paste command under the Home tab.

Text Formatting:
Select the text and then,
Click on the Home tab from the Ribbon bar, then
Click on Font size dropdown menu to increase or decrease the text file.
Similarly, you can apply different text formatting on the selected text with the help of Font group of commands.
Text formatting includes Text color, Font size, Font Style, Text shadow, Bold, Italic, Underline, text shade etc.

Increasing or Decreasing Font Size:

How to Increase Font Size?
Select the text and then,
Click on $\text{A}^+$ button to increase the font size
$\text{A}^+$ will increase 2 scale on each click. But after 20 scale unit it will increase with 4-scales

How to Decrease Font Size?
Select the text and then,
Click on $\text{A}^-$ button to decrease the font size
$\text{A}^-$ will decrease 2 scale on each click. But after 20 scale unit it will decrease with 4-scales

Clear the Formatting:
Select the text and then,
Click on Home tab from the menu bar, then
Click on $\text{Aa}$ button from the font group of commands.

Character Spacing:
$\text{AV}$ is used to insert character spacing on the selected text.
Different character spacing options are:
Very tight, tight, Normal, loose, very loose and more spacing.

Case:
$\text{Aa}$ is used to change the case of the selected text.
Different options with $\text{Aa}$ are:
Sentence Case, Lowercase, uppercase, Capitalize each word, Toggle case.

Using spell check for presentation text:
Select the text, then
Click on the Review tab from the Ribbon bar, then
Click on the Spelling command under the Review tab
OR
Simply, press F7 from the keyboard after selecting the text.

Graphics and Charts:
Draw the objects:
To add various forms of shapes:
Click on the Home tab from the Ribbon bar, then
Select any shape from the drawings group of commands.

Change the attributes of the shape:
To change the color and line type of the shape:
Select the shape, then
Go to the drawing group of commands under the Home tab.

To Create an Organizational chart:
What is chart?
A tool with the help of which we can represent our data graphically
Different kinds of a chart are:
Column chart, Pie chart, line chart, bar chart, area chart and surface chart.
Different Parts of a chart:
Title of the chart
Vertical axis
Data Series
Legend (usually, it is about x-axis data and scale)

How to insert a chart?
Click on the Insert tab from the menu bar, then
Click on chart button from the illustrations group of commands.

Right click on the chart to change the chart type.

Import other objects, texts, spreadsheet, table chart or graphics to the slides:
Go to object command under the Insert tab from the menu bar
Insert Object dialogue box will open
Select Create from file radio button and then,
Click on Browse… button to Browse the object and then, click on OK button

Add border objects to an object or picture:
Right click on the object, then
Click on format object option
A new format object dialogue box will open

Printing and Distribution:
First thing is to select a suitable presentation slide view for a presentation.
Click on the Design tab from the ribbon bar, then
Click on the page setup button from the page setup group of commands
Page setup dialogue box will open
Use different Page setup features and click on OK button.

**Change Slide Orientation Landscape or Portrait:**
By default, direction of a slide is Landscape.

**How to change a slide in portrait?**
- Click on the design tab from the ribbon bar, then
- Click on the Slide Orientation dropdown menu and then,
- Select portrait from the menu list.

**Preview the presentation in slide outline as a slider sorter:**
Click on View tab form the menu bar, then
Click on slider sorter command from the group of Presentation View commands.

**Print slides in various views and outputs:**
Click on File tab from the Ribbon bar
Backstage will open after under the file tab, then
Click on Print command from the backstage view.
Print menu list will open.
Print menu list contains different options like Print, Printer settings etc.
**Note:** Collated option under settings in Print Menu list is used to print your slides in the form of groups.

**Slide Show Effects:**
16. Objectives:
- How to set animation effects in slides?
- How to change animation effects?
- How to add transition between slides?

**Preset animations:**
Select the text, then
Click on animation tab from the ribbon
Under Animation tab option; there are animation, advance animation and timing group of commands.

**Note:**
You can view animation preview with the help of Preview button under the animation tab.
Summary

In this lesson you have learnt
- Move, copy and paste commands
- Insert different objects
- Fill colors in objects
- Scale and move the objects
- Create charts in slides
- Animation effects in slides
- Change animation effects
- Add transition between slides
- Change slide orientation
- Add notes for presenter
- Use spell-check program
- Print a slide in different views
Objective

The objective of this lesson is to provide information about

- How to create a slide show?
- How to use on-screen navigation tools?
- How to hide slides?
- How to insert smart Art Graphics in a presentation?
- How to modify colors and effects?
- How to change the organization of graphics in the presentation?
- How to insert hyperlinks?
- How to insert Action Buttons?
- How to insert table?
- How to apply Table style?
- How to format the Table using different commands?
- Rehearsal and Practice of Presentation
- Record the slide shows in advance
- Other Options in PowerPoint

We will now discuss how to change Animation effect which has been set already. To do this click on Animation Pane from Advance Animation Tab from Animations Ribbon Tab. A new side Bar will be opened on the right side. On this side bar we can play animation using play button.

From this Animation pane we can change the settings of effect or totally remove it.

1. Transitions

Transition is the effect when we move from one slide to another slide. To apply Transition on a slide we use Transition Tab from Ribbon Bar.

Transition can be applied to a slide which will be displayed when that slide is opened from previous slide or directly.

Every Transition has some special properties associated with it for example an effect will be from left to right or from right to left. These settings can be accessed from Eff. To apply a Transition to a slide from Transition tab we can select a Transition effect which will be applied to that Slide. We can also use Apply to All option to apply the current Transition to all the slides.
**To View a slide show and Deliver Presentation**

**Objectives**
In this Lesson we will learn
- How to create a slide show?
- How to use on-screen navigation tools?
- How to hide slides?

1. **Deliver Presentation**
Now that we have completed our presentation with all the effects and Transitions it’s time to start slide show and Deliver Presentation.
To start slide show click on Slide Show from Ribbon Bar. This tab have many options to start slide show, slide show can be started from the beginning or from a current slide.
To start from beginning we click on From Beginning or Press F5 keyboard to move to next slide we can press space bar or arrow keys.

2. **On Screen Navigation Tool**
When slide show is started we can see on bottom left of the slide Navigation Buttons.
It has four buttons:
- Arrow buttons on left and right for the navigation to move previous and next slide respectively.
- The pen button is used for the option to show/hide pen from slide, we can use the pen to quickly draw or highlight a point or some important word.
- The last button is navigation button which provides us option to move to specific slide.

**Hide the Slides**
We can hide a slide in MS power point if we do not want it to show in the slide show for any reason.
To do this, select the slide you want to hide and click on slide Show from Ribbon Bar and then from that tab click on button from that tab. Slide will be hidden from slide show but it will be shown in the side bar with all slides with a cross on it.

**Smart Art Illustrations**

**Objectives**
In this lesson you will learn
- How to insert smart Art Graphics in a presentation?
- How to modify colors and effects?
- How to change the organization of graphics in the presentation?

1. **Insert Smart Art Graphics**
To insert smart art go to **Insert** Tab from Ribbon bar and then click on . A new window will be opened with many Smart Graphics in it which is categorized, select the required smart art and press OK button that Graphics will be inserted to current slide.

**2. Add Text Smart Art Graphic**

After inserting Graphics we can observe that on the left side of that graphics Arrows button are generated click on these arrows button and we can see that a left pane is opened with text boxes in it, we can add the required text into these boxes which will be applied to the slide’s Graphics.

**3. Convert Existing Text to Smart Art Graphic**

To convert existing text to smart art right click on the text already written then from the dropdown select convert to smart art chose your required smart art and click OK from the new window.

Smart art can also be converted back to text, to do this select the smart art and then click on design tab and select convert option and from two options select convert to text.

**4. Change the organization of Smart Art Graphic**

To change the organization of smart art Graphics select a smart art and click on design tab after that click on , a new dropdown will be opened we can click on the one of the options for example if you want to add shape above the selected shape we will click on add shape above.

**5. To Move shapes to higher or lower level**

We can change the position of shape to higher or lower level to do this click on design tab and then select promote or demote option from left side to move shape higher or lower.

Shortcut keys can also be used to demote shape press key. And press Backspace key to promote shape.

**6. Rearrange shapes on the same level**

To rearrange shapes on the same level click on design tab and from there click on move up or down to change level of shapes.

**7. Modifying the smart Art Graphics appearance**

To change the appearance of smart art graphics select the graphics and then click on design tab and from there find the layout tab and expand it now you can select the required design by clicking on it or simply mouse hover to just preview it.

**8. Change the smart Art style**

To change the style of smart art graphics select the graphics and then click on design tab and from there find the smart art styles and expand it you can select the required style by clicking on it or simply mouse hover to just preview it.

**8. Change the smart Art color scheme**

Select the graphics and then click on the design tab and click on a new dropdown will be opened select the required color and it will applied to that shape. Style and colors of a
single shape inside the smart art graphics can also be modified to change it select the single shape and change the color and format of that shape.

Document Exchange

1. Save and Existing document to another file format
If we want to save an already created document to another file format we can chose save as option.
First open the presentation then click on the file tab from Ribbon Bar, after that select the Save as option a new window will be opened select the required file type from and click on Save button.

2. Hyperlinks and action buttons
Objectives
In this Lesson you will learn
- How to insert hyperlinks?
- How to insert Action Buttons?

I. Insert Hyperlinks

Inserting a hyperlink is pretty straight forward, first select the text, picture or shape you want to convert to hyperlink then right click on it and select hyperlink from the dropdown menu a new window will be opened with Text to display and Address, insert the link in the address and Text which should be displayed in the Text to display text box. The final link will look like this Virtual University.

Hyperlink can also be inserted from insert tab using button.
Using hyperlink for email is the same method just we have to select email option from the hyperlink window.

II. Insert Hyperlinks to another slide

First select the text, picture or shape you want to convert to hyperlink then right click on it and select hyperlink and in the hyperlink window select Place in this Document option and select the slide you want to link and click OK.

III. Insert Hyperlinks to another file

In the hyperlink window select the file in the files menu and click OK. Now whenever you will click on that hyperlink the new file will be opened.

IV. Remove Hyperlinks

Right click on the hyperlink and click delete hyperlink from the dropdown menu, hyperlink will be removed while the text or image will remain there.

V. Inserting Action Buttons
Action buttons are very useful in PowerPoint whenever we click on action button an action will be performed this action can be move to next slide or play a sound.

To insert action button click on the insert tab from the ribbon bar and then click on shapes a dropdown will be opened find the action buttons on the end of this dropdown and select the required action button and draw it on the slide.

After action button is inserted a window will be opened with many actions like hyperlink or play sound or open a program, chose your required action and click OK.

Action buttons can also be applied to master slide so that the buttons will show on each slide.

VI. Change the appearance of Action Buttons

To change the style or color of action button first select the action button then click on design tab, select the required color shape and appearance of the button.

Working with Tables

Objectives
In this lesson you will learn
- How to insert table?
- How to apply Table style?
- How to format the Table using different commands?

1. Insert a blank Table
To insert a table simply Go to Insert Tab from Ribbon Bar and select option and in the dropdown menu you can simply insert a quick table selecting the small boxes.

To insert a more advanced table select insert Table option, after selecting a new window will be opened you can select the number of rows and columns to insert table.

2. Move and resize Table
Moving the table is very easy and simple, move the mouse to the sides of table and when the mouse pointer changes to four headed arrow click and drag the table to another place.

To resize it move the mouse pointer to extreme edges of the table when mouse pointer changes click and drag to resize it.

3. Add Columns and rows
Rows and columns can be inserted into already built table , to insert a row or column select the place where you want to insert row or column then right click on it and from options menu select insert then select insert row or column to the left, right below or above the current row or column.

Rows and columns can also be deleted from an existing table, to delete a row or column select the row or column and right click on it then select Delete cells option to delete the rows or column and data with it as well.

4. Change Table Styles
Select the Table and then click on design tab then find the table styles with different table style , hover the mouse on the style to preview a style and click the mouse button to select that style.
Table styles option can also be changed from right side of design tab also we can add or remove borders from table as per requirement from borders and shading section.

**Advanced Options In PowerPoint**

**Objectives**
In this lesson you will learn
- Rehearsal and Practice of Presentation
- Record the slide shows in advance
- Other Options in PowerPoint

Open slide show tab and click on Rephrase option to start slide show and record it. Slideshow can also be recorded by using record slide show option from slide show tab.

1. **Present slideshow as video**
   Click on file menu and find create video option to create video. Chose the required resolution and quality of video and save presentation as video.

2. **Broadcast slideshow**
   We can also broadcast the slideshow to do this from slide show tab click on Broadcast slide show option to start broadcast chose the right settings and start broadcast.

**Summary**

In this lesson you have learnt
- Create a slide show
- Use on-screen navigation tools
- Hide slides
- Insert smart Art Graphics in a presentation
- Modify colors and effects
- Insert hyperlinks
- Insert table
- Apply Table style
- Format the Table using different commands
- Rehearsal and Practice of Presentation
- Record the slide shows in advance
- Other Options in PowerPoint
Module 06
Module 06 Introduction

Objectives

The objective of this topic is to provide information about:

✓ ISP
✓ Web Browser
✓ Feature of Internet Explorer
✓ Opening of Multiple Web Pages
✓ Browser’s Settings and Use of Help file

WWW: stands for World Wide Web, It was introduced in 1991 and is the application of internet. World Wide Web means collection of online documents, which are stored in computers as services connected to internet and is the way to collect information from internet.
All of the websites in the world, taken together, make up the World Wide Web. We can get information from the World Wide Web through browsers.

Internet: The Internet is the worldwide network of interconnected computers, including both web servers and computers like the one on your desk that run web browser software and share information, Instant messaging, email etc.

Web page, web site and web server

Website: website is the way to get information on internet and it provide lot of information related to any topic. A website is a collection of web pages maintained by a single person or organization. A website has a distinct domain name, such as www.vu.edu.pk.

Web Page: every website is made up of one or more web pages. Web page contains text, sound, images and videos etc.

Web Server: web servers are the computers that actually run websites and are connected to internet. Each website has its own web server and it stores all web pages on server. web server control web site and it has special software to store collection of websites. The most common web server software is Apache, followed by Microsoft Internet Information Server.

Web Browser: Browse means to see through some object or thing. When we visit some website it means we are browsing that site. To see some website on internet we need some browser. Browsers are those programs that let you explore information on www or programs to view a website is called web browser. Many of web browser are available in the market like internet explorer, Google Chrome, Mozilla Firefox, Opera and Safari etc. purpose of all these browsers are only to browse Web pages but all the web browser provides different
features along it like bookmark, history etc. we will only discuss feature of Internet Explorer 11.

**ISP, How to connect internet**

ISP stands for internet service provider. ISP are always connected to internet, is basically a company or organization which facilitate user by taking some fee. User can connect to internet through ISP’s. Most of ISP’s let you connect to internet through by dialing a local phone number.

To connect through internet we need computer, modem and telephone line.

There are different ways to connect your computer or mobile with internet. For example

**ISDN**: stands for integrated service digital network. It is a digital phone line. Data transfer speed is faster than modem.

Now a day we can connect to internet by

- TV Cable
- DSL
- 3G
- 4G
- Wifi

**First step with the web browser**

To open internet explorer:

Click on Start < All Programs < Internet Explorer or Click from desktop
Or click Internet Explorer in Taskbar

**Basic layout and closing a web browser**

All browser contain menu bar, title bar, address bar, tool bar, New tab button, status bar, scroll bar etc. Basic component of Internet Explorer are title bar, menu bar, status bar, tool bar, scroll bar etc

**Title Bar**: The most upper bar of window is called title bar. On the right side of title bar there are three buttons to minimize, restore and close internet explorer.
Minimize button is used to minimize the window. Restore is use to restore down and close button is use to close the internet explorer.

**New Tab:** New tab makes easier to manage having multiple pages open within browser simultaneously.

![New Tab Image](image)/

**Menu bar:** There is another bar after the address bar is called menu bar. Menu bar contains different options to use features like file, edit, view etc.

![Menu Bar Image](image)

For using any main menu we just move the mouse cursor over it and it will show submenu.

**Toolbar:** The strip next to menu bar is toolbar. Toolbar is shortcut of menu bar sub options. We also called it standard toolbar because it has buttons to perform important tasks.

We can use these options by clicking icons. For knowing the purpose of these icons just take the mouse pointer over there and wait for a while you will see name of icon in form of label. This label is called tool tip text.

**Address bar:** displays URL of open web page.

![Address Bar Image](image)

**Progress Bar:** A standard Windows control that displays the percentage of completion of a particular process as a graphical bar.

![Progress Bar Image](image)

**Browser pan:** The area in middle of screen shows some text, hyperlinks and graphics are called content area or browser pan.

To close Browser there are several methods like
1- Click File < Close
2- Press Cross button (X) on title bar

**Protocol**
Data is transferred from one computer to other through some rules, these rules are called protocol. Different protocols are used on internet like HTTP, HTTPS, FTP and TCP/IP etc.

**HTTP:** stands for hypertext transfer protocol. It is protocol to transfer WebPages from web server to web browser. Basic purpose of http is to transfer those pages which contain hyper text links. All web pages URL start with http. For example: [http:// vu.edu.pk](http://vu.edu.pk)

**HTTPS:** stands for hypertext transfer protocol secure. It provides safe communication between two computers.

**FTP:** stands for file transfer protocol. Using this protocol we can access files from the ftp server. Ftp server are those computers on internet which store different type of files. These servers are maintained by universities, college or agencies etc. Some files on the ftp can only be accessed by some specific users, to copy these types of files we have to enter their password. For anonymous ftp sites, files are accesses without any password.

**Understand makeup & structure of URL**

**IP Address:** 203.215.176.42 which is hard to remember. Using host masking this IP address converts into character base URL which is easy to memorize.

For example, we can store mobile number using person name. Like 0123124567 store using Ali name.

User do not need to remember IP addresses of different websites. But it is easy to remember their URLs addresses.

![www.vu.edu.pk](www.vu.edu.pk)

URL stands for Uniform Resource Locator. A URL can be thought of as the "unique address" of a web page and is sometimes referred to informally as a "web address." URLs are used to write links linking one page to another; for an example, [http:// vu.edu.pk](http://vu.edu.pk).

**Structure of URL:**

A URL is made up of several parts.

For example [http:// vu.edu.pk/cgi-bin/neomail.pl](http://vu.edu.pk/cgi-bin/neomail.pl)

The first part is the protocol, which tells the web browser what sort of server it will be talking to in order to fetch the URL. In this example, the protocol is [http](http).
The Second part is its name, which tells about the organization, it is associated like 
vu.edu.pk.

The third part of the example URL is the path at which this particular web page is located 
on the web server. http://vu.edu.pk/cgi-bin/neomail.pl

8. Search Engines

Search means to find some thing. Search engines are program that searches documents for 
specified keywords and returns a list of the documents where the keywords were found. Like 
Google, AltaVista etc

Search engines used software called spider to search documents on internet. Documents are 
sent to search indexing software. Indexing software extract information from documents 
storing in database, then database is search fro that documents that match to our word search. 
Search engines assembles web page that shows the result as hyper text link.

How to change home page in web browser

When we start internet explorer, the first page we see on the screen is called home page or 
start page.
To change home page:
Click Tools < Internet Options < General < Address

Display web page in new window

We want to open web page without closing other or copy a web page 
then: Click File < New < Window

Stop a web page from downloading

In many situations, we stop web page from opening for example when a web page take a 
lot of time to open, click on wrong link , some portion of web page open and we just stop 
for further processing.

We can stop a web page either of two ways:
   1- Click View < Stop
   2- Click on Stop button

Refresh a web page

Refresh means to view web page with latest changes. Using this option we do not have to 
enter URL in address bar again.

We can refresh a page by three ways:
16. Display previously visited sites

When we visit some sites in browser, the browser keep its address of sites which we opened before. Browser saves these sites in history.

To view history:
Press Ctrl+H or Click available at right side of browser toolbar.

Changing number of days in history list

We can set number of days that our history should be kept. To change history days:
Click Tools < Internet Options

This dialogue box will open.
Select history section to change days.

Deleting single entry, clear list of history

It is possible to delete history item or history list.

To delete single item:
1- Right Click on Item
2- Select delete

To delete list:
1- Click Tools < Internet Options
2- Select History section to delete history

Help
Click Help in menu bar and choose Internet Explorer Help
Or Press F1

Modify Toolbar: Right click on toolbar, choose desire option from the open list.
**Change webpage view settings:** Click view, choose Zoom, Choose desired zoom view value. Or Press Ctrl + for Zoom in and Press Ctrl – for Zoom out.

**Change webpage text size:** Click view, Choose Text size , Choose desired text view option
Objectives

The objective of this topic is to provide information about:

- How to go to any URL?
- How to activate a hyperlink/image link?
- How to move backward and forward in visited websites?
- How to place a bookmark on web page and how to view it?
- How to create a book mark folder and add web page in it?
- How to delete a bookmark?

Opening a website

To visit any website, we should know its URL. URL is typed in address bar of browser.

Navigating backward and forward in a web page

- To move backward: Click Backward button
- To move forward: Click forward button
- To move home page: Click Home button
- Click view Choose Go to and select any visited website
- We can move backward and forward using keyboard e.g. ALT+LEFT and ALT+RIGHT

Hypertext Links

Hypertext is text that links to other information. When we click with mouse on hypertext link it is activated means it moves you to next page you click. Some links bring to download a file, broadcast TV or radio.

Hypermedia Links

- Picture
- Graphics
- Audio
- Video

Hyperlink Shape: Click on any hyperlink will change mouse pointer into hand shape.

Methods to open link

Some links are opened in same window or some are in other window.
To open link in new tab:
Right click on link
Select open in new tab

To open link in other window:
Right click on link
Select open in new window

**Book mark a web page**

When we visit some site and we like it, we can save it. For saving any site it mean we are making bookmark means we are putting mark on this site that we can open it again. We can make list of those sites which we like, some browser say it Book mark and some browser say it favorite.

To put site in favorite, we can have several methods:
1- Click Favorite button from toolbar
2- Click on Favorite < Add to favorites

**Creating a book mark folder and add page in it**

When list of favorites grow long, we can make it short by making folder and also we can organize them.
To organize:
1- Click on Favorite < Organize Favorite

A dialogue box will open, Click on New Folder. This will create a folder.

To add page in this folder:
1- Click Favorite < Add to Favorite A dialogue box will open.
2- Select Folder from Create in option.
3- Add page in it.

**Delete a book mark**

We can delete web pages or folders from favorites list.

To delete folder:
Click on favorite < organize favorites
Select Folder / page
Select delete button to delete folder.

**Display book marked page on toolbar**
To display favorites in tool bar as shortcut:
Click View < Toolbar < Favorites Bar

**Viewing favorite list on screen**

We can also see favorites item on the left side of screen. To view on left side of screen:
Click on Favorites Star Button from right side of toolbar.
Click button from the explorer bar.

**Copy a text from a web page to a document**

Duplicate means to copy same data on different location. We can copy or duplicate any text or image data.

To copy Data:
1- Select data
2- Click Edit < Copy or press Ctrl+C

To paste Data:
1- Select target location
2- Click Edit < Paste or press Ctrl+V

**Copy image from web page to a document**

To copy image:
3- Select image
4- Click Edit < Copy or press Ctrl+C

To paste image:
3- Select target location
4- Click Edit < Paste or press Ctrl+V

**Copy URL from web page to a document**

We can also copy URL from browser to a document.

To copy URL:
5- Select URL from browser
6- Click Edit < Copy or press Ctrl+C

To paste URL:
5- Select target location
6- Click Edit < Paste or press Ctrl+V

**Save a web page on hard disk**
We can save a web page on hard disk. We can open web page data without connecting internet. To save a web page on hard disk:
1- Click File < Save As
2- Select target location on disk to

**Save a graphic**

We can save a graphic as file.

To save graphic:
1- Right Click on graphic
2- Select Save Picture As option
3- Select target location and Enter Name of graphic

**Download text file, image**

Downloading is process of transferring file from remote computer to user computer.

To download a file:
1- Select File
2- Right Click on file
3- Select Save Target As
You can also save an image in the same way as file.

**Printing web page**

To print a web page: Click File < Print

**Summary:**

In this lesson we have learnt:
- Web navigation
- Process of navigation
- Organizing bookmarks and favorites
- Saving of web contents
Objectives

The objective of this lecture is to provide information about:

✓ How search engine work?
✓ How to refine narrow searching?
✓ Use of Boolean operators

Search Engines

World wide web contain millions of web pages that it’s difficult to tell their exact figure, so to find out required information is possible through search engines. Search engines help us to find information on the web and store the information about web pages. It usually search web pages according to any phrase or keyword.

Search engine visit websites using different software, for example

- Spider
- Web crawler

Spider: it is called spider because spider visits many websites in parallel at the same time and also visit different web servers. When the Spider search Web server it make central repository to save related websites URLS’s. This repository of web server is called database or index. After specific intervals, spider store new and updated websites URLS’s in database.

How to use any search engine

There are many search engines on net like Google, Yahoo and Bing etc

To search any website:

Write keyword in entry box

Search Specific site:
Write keyword in double quotations.

When we search any web site, relevant websites are on front page.

Combine selection criteria in search

With simple search, we can get variety of results. We can refine and narrow these results.
To use selection criteria: Use Boolean operator like AND, OR and NOT

**Use AND operator:**
Open Yahoo search engine
Write **Hardware AND Software** in search text area
Its mean show webpages which contain both hardware and software words

**Use OR operator:**
Write Hardware OR Software in search text area
Its mean show webpages which contain hardware or software word

**Use NOT operator:**
Write Hardware NOT Software in search text area
Its mean show webpages which contain only hardware word

**Note: write Boolean operators in capital**

**Advance Search**
Click on Advanced Search options in search engine
Or
Click settings, choose Advance search

Search results can be found in the form of images, videos and Books etc.

**Summary:**

In this lesson we have learnt:
- What are search engines and how to select a search engine?
- How to use Boolean operators?
- How to use advance search?
Objectives

The objective of this lesson is to provide information about:

- Email application
- Email account configuration
- Receiving and reading email

Application use to send or receive email is called email application for example, Microsoft outlook, incrediMail and Windows Live

Using Microsoft Outlook

Click Start button
Click All Programs
Click Microsoft Office
Click Microsoft Outlook

Click Next button

Select No
Microsoft Outlook Layout

Click Next
Check Continue with no email support
Click Finish

Email Account Setting
Click File
Click Account Setting

Click New
Click manually configure server settings or additional server types

Choose Internet Email
Click Next
Fill form with your email server information
Click Existing Outlook Data File
Click More Settings

Fill form as shown in figure
Press Ok
Click Test Account settings
Click Next
Click Finish

**Email Application Inbox:**
Click Inbox in Navigation Page
Click Send and Receive button in Home ribbon

**Reading a message:**
Click on Inbox
Click on email message in Content area

**Mark message as read/unread**
Messages which we have read called read messages and messages which we have not read are called unread. It is possible to make read messages as unread and unread messages as read.

To make a message as read: 1-
   Select message
   2- Right click on message
   3- Select Mark as read
If we marked a folder then all its messages are marked as read/unread

**Writing Email:**
Click New button in Home tab

Write email address in To
Write Subject
Write message in text area
Responding an email message:
Click email message
Click Reply or Reply All in Home tab
Write your reply in next window
Click Send
Click sent Items in navigation pane to check sent emails

Copy and Paste Email Text
Select text from reading pane
Right click and click copy
Click New email
Right click in message area and click paste

Cut and Paste Email Text
Select text from reading pane
Right click and click cut
Click New email
Right click in message area and click paste

Email Signature setting
Click New Email
Click Signature button in Message tab
Click New and write CPL
Write details in Edit Signature
Click OK

Insert signature in email message
Click New Email
Click email message area
Click Signature
Click CPL

Proof reading means to remove spell mistake from your email messages.
Click Review tab
Click Spell & Grammar

Download File attached in email:
A file can be send and receive through email.
Click received email
Right Click attached file
Click Save as
Attach File with email:
A text, image, audio or video file can be send through email attachment feature.
Click New Email
Click Attach File in Message tab
Locate your file and Click Insert

Search Email Message:
Write relevant keywords in search box available in content area to find any relevant email.

Close Email Application
Click cross button

Summary

We have learnt in this lesson:
- What is email?
- Using email application
- Configuring email account
- Send and Receiving email
Objectives

The objective of this lesson is to provide information about:

✓ What is an email?
✓ How to create email account?
✓ Using email account

Concepts

In ancient times, people use letter as way of communication and they send it through post offices but it took long time to reach destination. In modern days way of communication have been changed because of internet and new ways were adopted to send information quickly e.g. telegram, fax, telephone and email etc.

Email is abbreviation of electronic mail. With the help of email we can exchange information around the world. Only difference between email and other letter is that email is written through keyboard and sends through internet while letter is written by hand and send through postoffice. It is the fastest way of communication than letters and it can be sending at any time when it is convenient.

Famous Email Client

Gmail
Hotmail
Yahoo email
Communicator

SMTP: is simple mail transfer protocol and used to send and receive email messages.
POP3: is post office protocol and used to receive email messages. Email client interacts with POP3 server to discover and download new email messages.

3. How email works

First you compose a mail and send it. Message is sent to your internet service provider’s email server. Message is then sorted in recipient’s electronic mail box. To read message, log on to email server and retrieve message. To read message, first you have to enter password.
4. Email system using email client SMTP and POP3

Steps to send email messages:
1. Message is prepared using email client.
2. Email client sent it to SMTP server (if receiver is local then mail goes to POP3)
3. Receiver computer picks it at his/her computer
4. If mail is sent to SMTP than SMTP server send it to local computers POP3 and receive it

Understanding the structure of email address

Whenever we send any mail we should know the address of recipient.

Structure of Email address: Email address consists of two parts separated by “@” symbol. First part identifies the name of user account and second part contains URL of persons account on internet like awais@yahoo.com

Layout of email application

Any email program contains components to write, send and receive email messages.

Create an email account

To use an email program its important to have email account.

To create an account on yahoo:
1. Type www.mail.yahoo.com in browser
2. Click on Create account
3. Fill the Form by entering user name and password and more

Open a mail box for specific user

You can open email account which you have created before by user name and password. Enter User name and password and Click Sign In.

Open one and several messages

When ever we got any email, it goes to our inbox. we can read and write mail here.

To read mail:
Æ Click on Inbox
Æ Click on ay message to read

To compose a mail:
Click on Compose
Write and send mail
Close a mail message

To close a mail message:
Click on Close (X) button of window

Summary:

In this lesson we have learnt:
- Type of email server (SMTP and POP)
- What is email and what is structure of email address
- How to create email address?
- Read messages in mailbox.
Objectives

The objective of this lecture is to provide information about:

- How to create a new address list and add or delete mail address in it?
- How to create a new folder and how to move messages to a new folder?
- How to sort and delete the messages?
- How to undelete the deleted messages and how to empty delete item folder?

Managing email

When we receive many mail messages, it results into over abundance of email messages in inbox or sent email folder. As a good practice, these should be managed. To manage your email you can follow options.

1. Create new folders for messages
2. Save your messages in hard disk
3. Delete unwanted or read messages

Create an address book

In real life, you can use diary to record the name and address of your friend. It is good to use diary to remember the details of your friends. It is difficult to remember to remember many email addresses. Email program makes life easy by providing a facility to record email ids of all contacts in address book. You can save name, phone number, email ids and some related information in an address book. Address book works like a diary.

Add a mail address to address list

1. Click on the New Item in home tab
2. Click Contact
3. A new window will open. Enter name and email id of the contact and click on Save and Close button below the menu bar.

Contact Group: is like a sub address book which contain email addresses of specific group people. For example Friend Group, Sales Group and Purchase Group etc.
Creating Contact Group
Click contact from Navigation pane
Click New contact group
Write Group name
Click Add Members
Choose required option

Delete a mail address to address list
The way we have added the contact in address book, we can delete the contact with few clicks.

1. Select the email contact (s) from address book by single click.
2. Click on the Remove member button or right click on the contact name and select delete from the drop down menu.
3. Contact(s) will be deleted.
4. To delete complete address book, Click delete group button

Create a folder
It is good to organize messages in different folders. Email program usually save messages in separate folders. You can create as many folders you want.

To create a new folder
Go to Folder Tab
Click New Folder Enter the name of new folder
Write name of folder and specify location.

Move messages to folder
To save a message in a new folder
Select the message in the inbox
Right click on message
Choose Move
Click other folder where you want to move the message and click on the Ok button.

Sort messages
We can sort email messages by date, subject and sender name. Let us sort these messages by date wise.
Steps:
Open inbox  
Click Arrange by in content area  
Choose any option to sort by your choice  

**Message Tagging**  
Step:  
Click New Message  
Click High / Low Importance in Message tab  

**Flag mail message**  
After reading the mail you have two options. Some mails are replied urgently and some are replied late. It is possible we forgot to reply some urgent messages, so for this reason flag feature is introduced.  

To apply flag on the message of inbox folder:  
1. select a message  
2. Click On Follow Up in Home tab  
Flag To remove flag:  
1. Right click on message  
2. Select Clear Flag Option  

**Delete a message**  
You can easily remove any message. Right click on the message you want to delete from inbox and select Delete from the menu. Email message will be deleted from inbox right away and sent to folder “Deleted items”.  

**Undelete a message from Deleted Items**  
You may delete important message. When you delete a message, it is moved from inbox to deleted items folder. Open “Deleted items” folder and right click on the message you want to undelete. Select “Move to folder” option and select Inbox.  

**Summary**  
In this lesson we have learnt:  
- Creation of a new address book  
- Addition and deletion of addresses in address book  
- Message sorting  
- Set Message Priority