

MODULE 2

Readings:

All computers share common components including RAM, ROM, hard drive, CPU, monitor, and storage devices (CD, DVD)

- An operating system software is system software that controls basic computer expression
- The CPU is the computer component that is considered the brain of the computer coordinating all the input/output and processing activities, CPU stands for central processing unit
- RAM (random access memory) is computer memory that stores all open programs. Contents are only maintained as long as there is a constant supply of electricity
- A hard drive stores programs and data files, A constant supply of electricity is not necessary to ensure maintenance of contents
- ROM (read only memory) is computer memory that cannot be changed. It stores critical programs such as those necessary to boot the computer
- A desktop computer is a modular stationary computer comprised of a system unit, keyboard, monitor and mouse
- A laptop computer is a portable computer usually smaller in physical size but more costly than a desktop

Every computer must have an operating system. It is a software that performs basic processing tasks. e.g., checks major system components each time you power on the computer making sure everything is functioning properly. Without it a computer could not function.

The processor of a computer component is housed in the mother board

- The motherboard is a circuit board housed in the system unit. It contains the CPU and RAM
- Processor speed is usually measured in billions of hertz or gigahertz (GHz)

The processor directs all computer activities, the processor is usually considered the brain of the computer

- Software that identifies and isolates computer viruses is called antivirus software
- Software that removes spyware from a computer is called anti spyware software
- Software that acts as a barrier between your computer and the internet, prohibiting unauthorized internet travel to or from the computer is called a fire wall
- A virus is a computer program that is purposely written to be destructive or annoying
- Spyware is software that has been downloaded and installed onto your computer to gather personal information, hijack your homepage or display unwanted advertising
- Cookies are text files providing information identifying you as a return visitor to a Web site
- Phishing is an attempt by another person to acquire your personal information and identity through an e-mail scam

- Network is two or more computers linked together
- Broadband communication is a high-speed Internet connection. Options include DSL cable and satellite
- Cable is a broadband internet connection option that uses television cable to provide internet access
- DSL (digital subscriber line) is high-speed internet access provided through existing telephone lines
- A USB drive uses a connection on a computer that enables peripheral devices such as printers, network adaptors, scanners and digital camera to connect
- A network interface card (NIC) is a component that is built into or connected to a computer, enabling the computer to communicate with a network.
- A router is a device that enables two networks to communicate
- A hub is a device that rebroadcasts communication to all equipment on a network
- An Ethernet network uses Ethernet protocol and wiring to connect computers
- The 802.11 standard is a method of communication used on wireless networks
- Bluetooth is a technology that facilitates low-bandwidth wireless communication over short distances
- A dial-up connection is a connection to the internet over a standard telephone line
- A satellite connection uses a satellite dish to transmit data to and from the internet
- The binary system is the native format understood by computers in which only two digits are used zero and one
- A bit is either a one or a zero. it is a binary digit that represents the on or off state of a computer circuit
- A byte is comprised of eight bits. A byte represents a character on a keyboard
- ASCII (american standard code for information interchange) is a code representing keyboard characters as numbers
- Unicode is a character-coding format that represents global characters from all languages
- A keyboard is used to enter typed data into a computer
- A mouse is an input device that enables a user to point and click
- Hard copy is printed output
- Soft copy is output displayed on computer monitor
- A CRT monitor is a large television like computer output device
- An LCD monitor is a flat panel output device
- The resolution is the sharpness of a displayed image, determined by the number of pixels
- Pixels (picture elements) are small addressable areas on a monitor
- A hard disk is a large-capacity storage device housed in the system unit (same as hard disk)
- A cd drive reads from and writes to CDs (unless it is a CD-ROM disc, in which case it cannot be written to only read from)
- A DVD drive reads from and writes to DVDs (Digital Video disc or Digital Versatile Disc) it has greater capacity than a CD
- A port is a physical interface through which external devices can be connected to a computer
- The desktop is the screen that displays when you power on a computer

- Icons are small pictures on the desktop that represent, programs, shortcuts, files or folders
- The task bar is a horizontal bar at the bottom of a window, providing information on open windows and providing access to system resources
- A CD-RW (CD-Rewritable) enables you to read from the CD and write back to it multiple times.
- Plug and play is a windows feature that facilitates the installation of new hardware so that you simply plug it in and begin to use it
- A data file is an item that you creat and to which you give a name such as a document or worksheet
- A folder is a named area of storage on a disk
- A backup is a copy of a file
- Productivity software includes programs that address general tasks such as word processing, spreadsheet preparation, the creation of presentations and database management
- An Office suit is a collection of productivity of software
- Online Software is productivity software that is accessed online
- Comercial software is a software that is sold and is protected by U.S Copyright Law
- Shareware is software that is developed and distributed to online consumers for limited time usually as a trial version
- Freeware is copyrighted software that you can use as you like
- A computer is an electronic device for storing and processing data according to instructions given to it in a variable program or a non electronic device that assists in making calculations

Study Material:

Non-electronic Computers	
Abacus	An ancient tool for counting that uses wood or stone beads in rows. Origin – Mesopotamia, Egypt, China
Slide Rule	A tool with two sliding rulers, used to calculate multiplication and division and more advanced calculations.
Punch Card	A card with holes representing data such as records for the census or for payroll.
Calculating Machine	A mechanical version of the calculator.

The three most common categories are:



Mainframes

In the 1940s, the first general-purpose computer to be developed was a **mainframe**. Mainframe computers can be used by many people at the same time and can handle very complex problems or large volume jobs. Mainframes are generally used for data processing for business and scientific applications.

For example, major banks can process bills for credit card holders all over the world with the aid of a mainframe. Large research projects also use the mainframe's vast memory, storage capacity, and super-fast processing speed to conduct tests and co-ordinate operations.



Minicomputers

The **minicomputer** was introduced in 1963. It is a scaled-down version of the mainframe computer. It is capable of performing many jobs that old mainframe computers accomplished in the past. Due to its cost-effectiveness, the minicomputer's most important contribution has been the introduction of distributed computing, where a number of small computers can be used instead of one giant computer.



Microcomputers

Two major events led to the introduction of the first **microcomputer**: the development of the first microprocessor in 1969 and the creation of the first general-purpose microprocessor chip in 1971. Microcomputers had a major economic impact due to their small size and drastically improved cost-effectiveness.

These powerful yet easy-to-operate machines have been called home computers, laptop computers, notepad computers, personal computers (PCs), palmtop computers and micros. The microcomputer can perform jobs that were previously only handled by the largest computers.

+ embedded computers

A computers purpose is for inputing, processing, storing, and outputting data

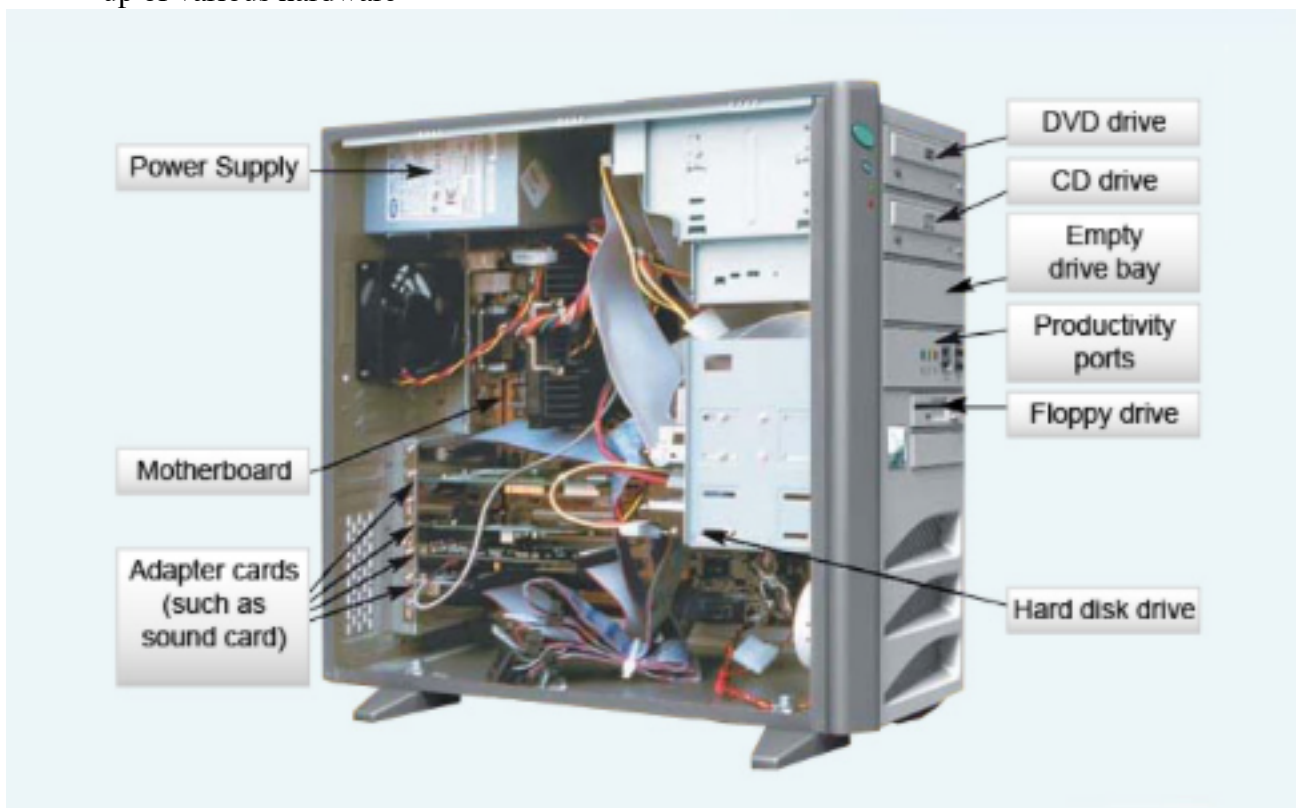
A personal computer:

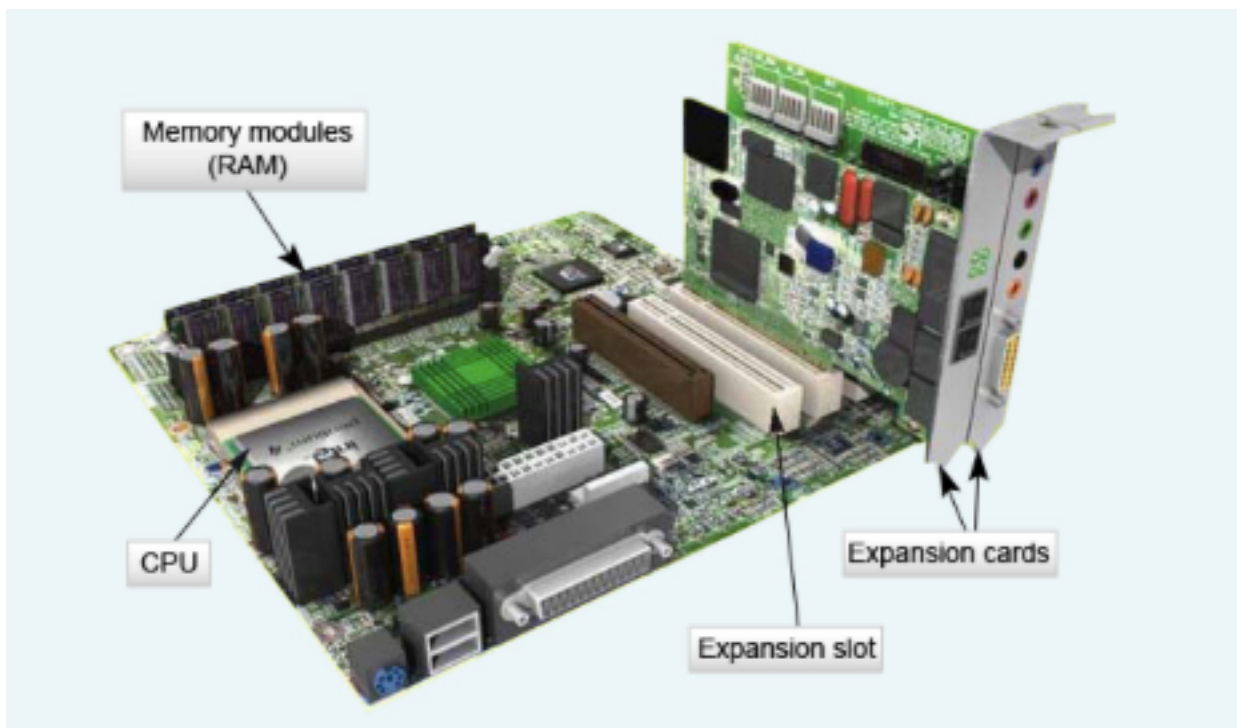
1. interactive and useful
2. dedicated and user-friendly
3. co-operative
4. accessible (small size, low price)

Personal Computers are also made up of three main subsystems:

1. input/output
2. central processing
3. storage

- A peripheral is a hardware that connects to a system unit and make up the input/output subsystem
- The system unit contains the central processor and main storage subsystems each made up of various hardware

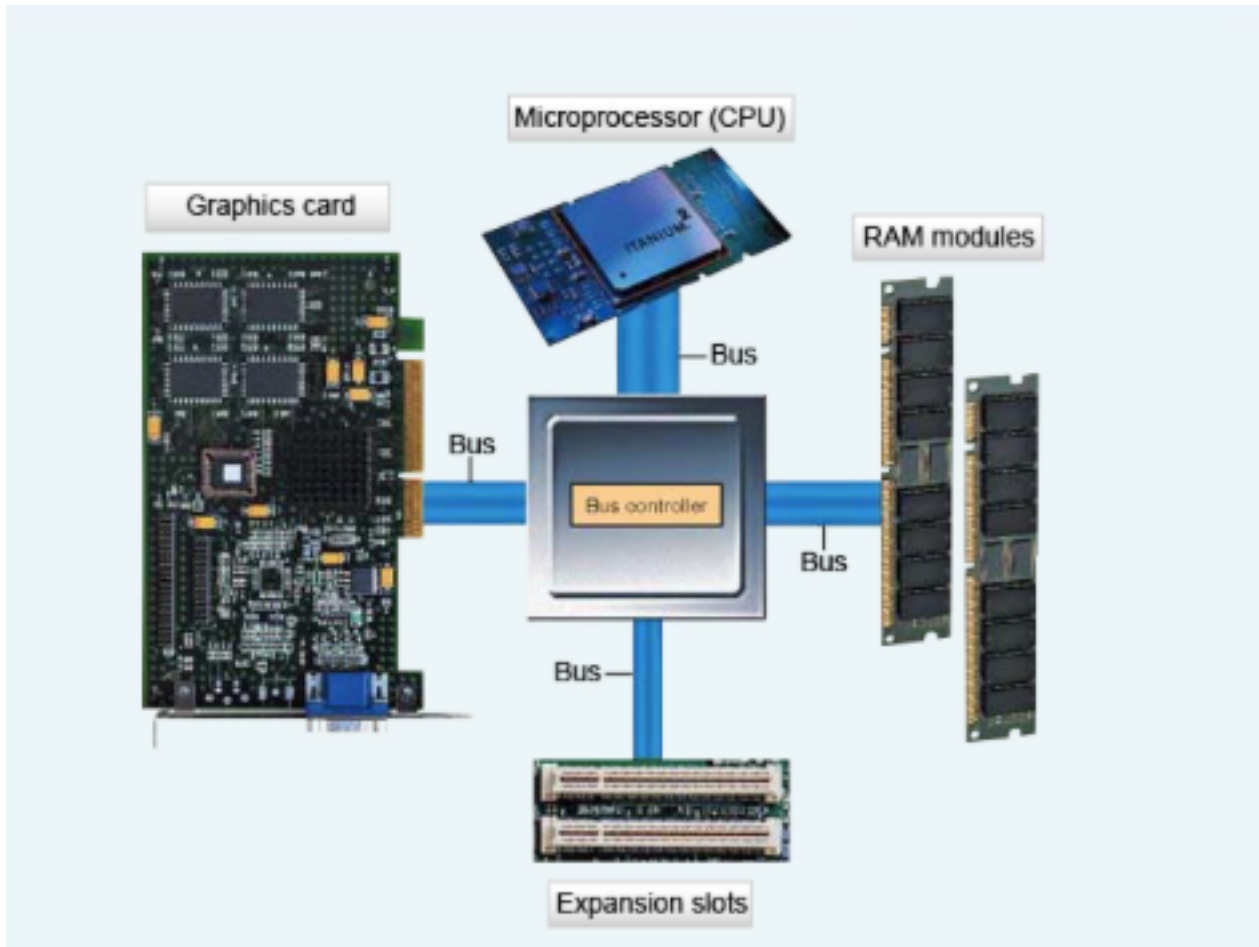




How Much is a Byte?

Name	Abbreviation	Number of Bytes	Relative Size
Byte	B	1 byte	Can hold one character of data.
Kilobyte	KB	1,024 bytes	Can hold 1,024 characters or about half of a double-spaced typewritten page.
Megabyte	MB	1,048,576 bytes	A floppy disk holds approximately 1.4 MB of data, or approximately 768 pages of typed text.
Gigabyte	GB	1,073,741,824 bytes	Approximately 786,432 pages of text. Since 500 sheets of paper is approximately 5 cm, this represents a stack of paper about 80 meters high.
Terabyte	TB	1,099,511,627,766 bytes	This represents a stack of typewritten pages almost 82 km high.
Petabyte	PB	1,125,899,906,842,624	The stack of pages is now about 84,000 km high, or about one-fourth the distance from the earth to the moon.


- Cache memory is found between the processor and the RAM it speeds up the location and retrieval of data
- Virtual memory is a file on the hard disk
- buses are paths that connect the CPU with the internal and external components.



CRT monitor is an ordinary tv screen it uses cathode ray tube

LCD monitor more compact and now come with all new computers flat screen s empty a liquid crystal display

Storage Media Capabilities

	STORAGE MEDIUM	CAPABILITIES	STORAGE CAPACITY
	Hard Drive	Read and write	External: Up to 2 TB (Terabyte) Internal: Up to 750 GB
	CD CD-RW	Read-only Read and write	700 MB
	DVD DVD+RW	Read-only Read and write	4.7 GB (for single-sided, single-layered DVDs) 9.4 GB (for single-sided, dual-layered DVDs)
	Blu-ray (BD)	Read and write	27 GB (for single-layer discs) 50 GB (for dual-layer discs)
	Flash Memory Cards	Read and write	16 MB to 8 GB
	Flash Drive	Read and write	Up to 12 GB

MODULE 3

Readings:

- The Internet is a group of interconnected networks that spans the world
- E-commerce is the avenue for conducting businesses over the internet through advertising, selling, and buying products
- The world wide web is a subset of the internet that supports graphical pointing click navigation to information and resources
- A web page is a single document formatted to be used on the Web that consists of text, graphic, animation and or sound
- A web site is a collection of web pages for an organization or entity
- A hyperlink is a text or graphical element that when clicked displays another area of the same webpage or displays another web page or resource
- A protocol is a set of rules that govern data formats and transmission
- The hyper text transfer protocol (HTTP) is a set of rules that specifies data format and transmission of web pages
- A web server is a computer that stores web pages and transmits data when requested. when a web server receives a report that someone has entered the web addresses or clicked a link it fetches the data and transmits the requested web page to the computer that initiated the request
- Hyper Text Markup Language (HTML) is an authorizing language use to create web pages
- Internet Explorer 7 is the newest version of Microsofts browser
- A browser is a software application used to locate and display web pages
- An Internet Service Provider (ISP) is a company that provides access to the internet
- A Uniform Resource Locator (URL) is the specific address of a world wide web file
- The file transfer protocol (ftp) is used for uploading storing, downloading and sharable files over the internet
- A domain is the name of a entity's website or server
- A top level domain is a suffix that identifies the type of organization sponsoring a web site
- A browser home page is the page that displays when you open internet explorer

EG: <http://www.prenhall.com/exploring>

the first part of the URL identifies the http protocol.






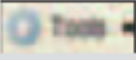
the second part of the URL is the domain. which is the name

the third part of the URL is the top-level domain which is a suffix that indicated the type of domain

After the top level domain indicates another page within a website

Top-Level Domain	Characteristics
.com	Commercial business
.edu	Educational institution
.net	Network organization
.gov	United States government agency
.mil	Military
.ca	Most two character domains are for countries. This one is Canada.
.org	Nonprofit organization

- A temporary internet file is a copy of a webpage that is saved onto your hard drive for ease of access later. when clicking back the web page loads faster than when you first accessed it that happened because the browser actually saves a snapshot of web pages that you visit
- A frame is a boxed area usually located at the side or top of a web page containing links and additional information

Command	Icon
Favorites Center	
Add to Favorites	
Home	
Print	
Page	
Tools	

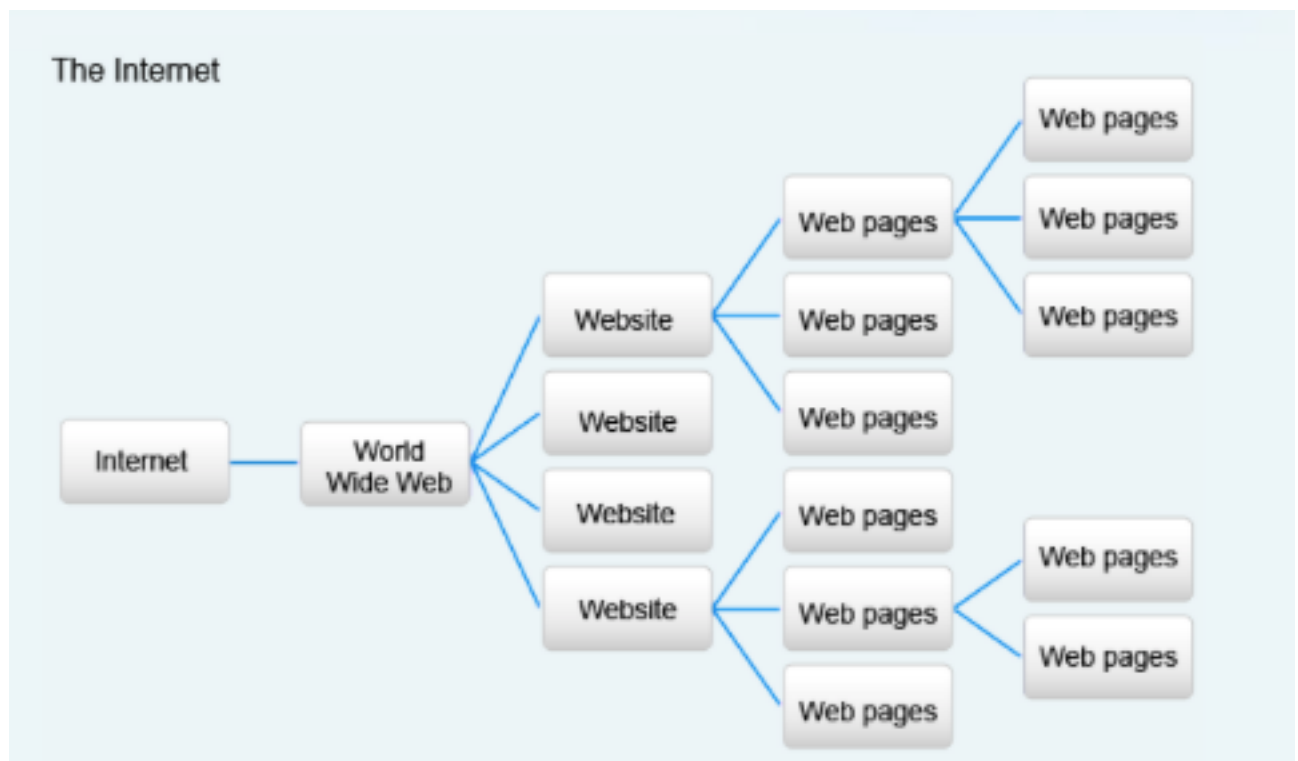
- A cookie is a text file saved on your computer by a website that you visited
- A favorite or bookmark is a marker that identifies a web page so that you can quickly display the page later
- a pop-up is an uninvited browser window that appears in front of an active browser window
- a pop-under is an uninvited browser window that appears when an active browser window is closed

- A search engine is a website that provides search tools so that you can find information on a topic
- A keyword is a word or phrase that describes information that you want to retrieve
- Email is the transmission of messages over a communication network
- Windows mail is an email program included with windows vista
- Windows contacts is a windows vista feature that stores information about people whom you communicate electronically
- An attachment is a file that is sent along with an e-mail
- An instant message is a form of online communication that enables you to type messages from others who are online at the same time
- A blog is a personal journal entry that is posted online

Study Material:

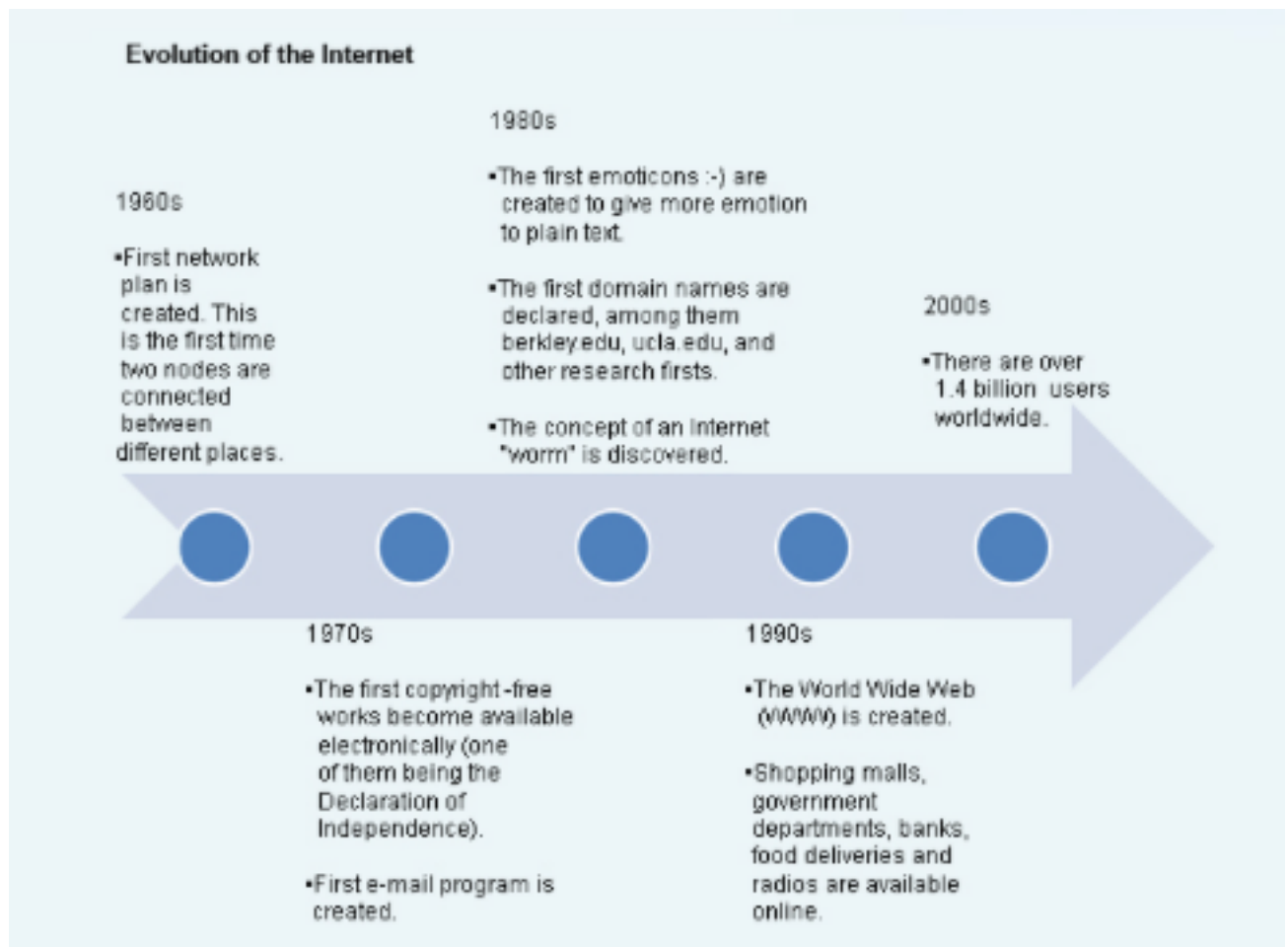
The internet is a large network of computer networks. it uses electronic communication to connect computers across the world so that they can share information

The internet was created in 1969 and based on research by the advanced research projects agency. later it was developed into broader network by a number of additional research projects



The web became part of the internet in 1989

Evolution of the Internet:



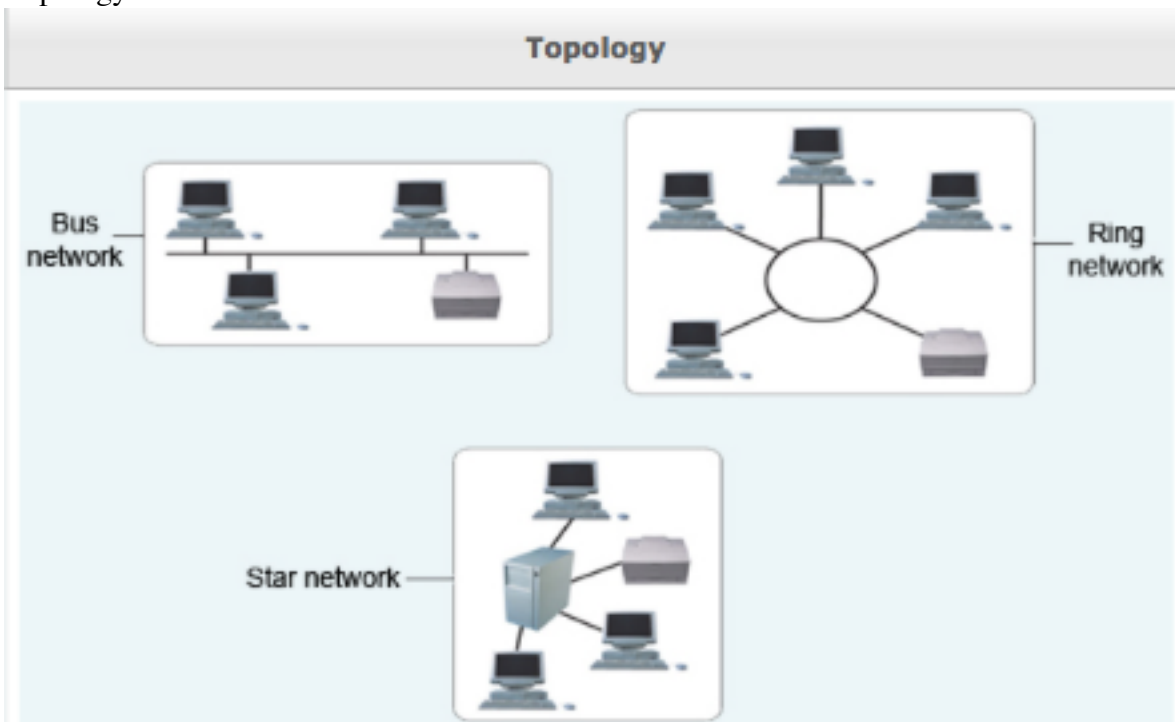
Internet Connections

5. Modems: are devices that allow your computers too understand analog signals coming through your phone line
6. Routers: Handles the transfer on data from network to network
7. Switches: work within a network. These devices make sure data is transferred to the correct network mode

Types of Internet connections:

Internet Connections	
Dial-Up Modem	Up to 56 Kbps (Kilobytes per second) transfer rate
DSL (Digital Subscriber Line) Modem	Up to 1.5 Mbps (Megabytes per second)
Cable Modem	Variable transfer rate
Fiber Optic Internet	Up to 30 Mbps

Topology:



Topology	The physical shape of a network.
Bus or Linear	All nodes are connected in sequence on a single cable. Typical P2P network.
Ring	Nodes are connected in a circle.
Star	Each node connects to a central switch which re-transmits the data in the right direction.

Network Size:

LANs (Local Area Network): connects computers reasonable close together

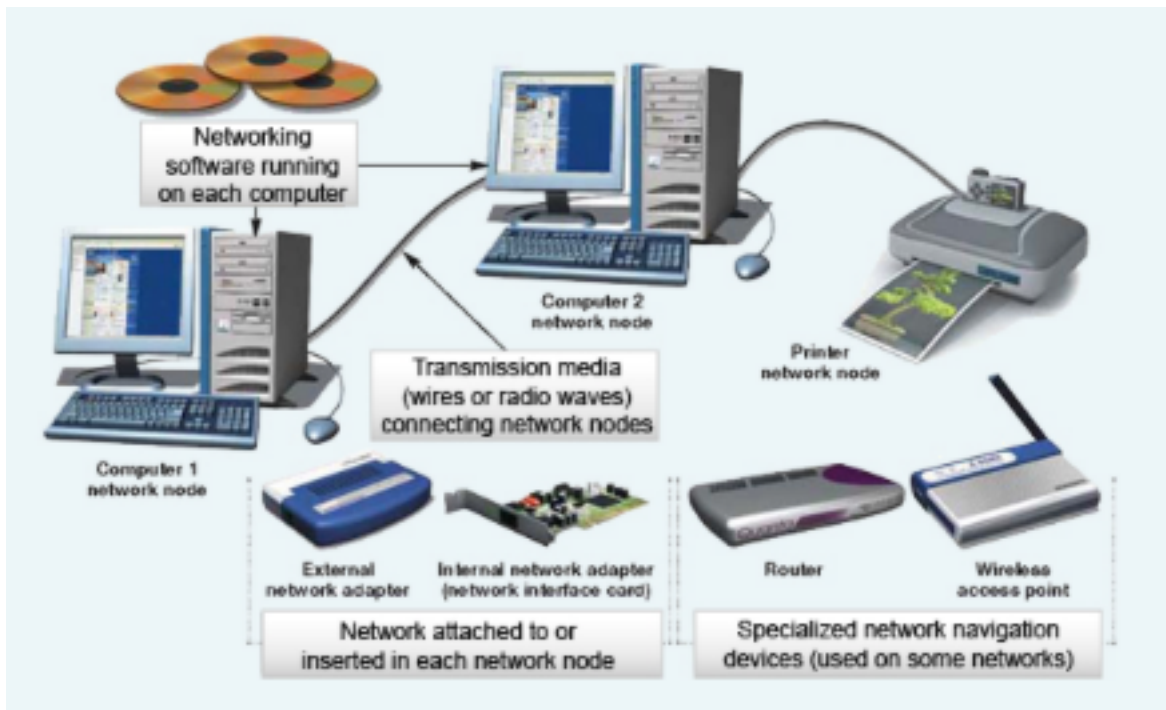
WANs (Wide Area Networks): Multiple LANs connected. Connects computers over a larger geographic area

MANs (Metropolitan Area Networks) : Connects specific area networks such as cities

Network Hierarchy:

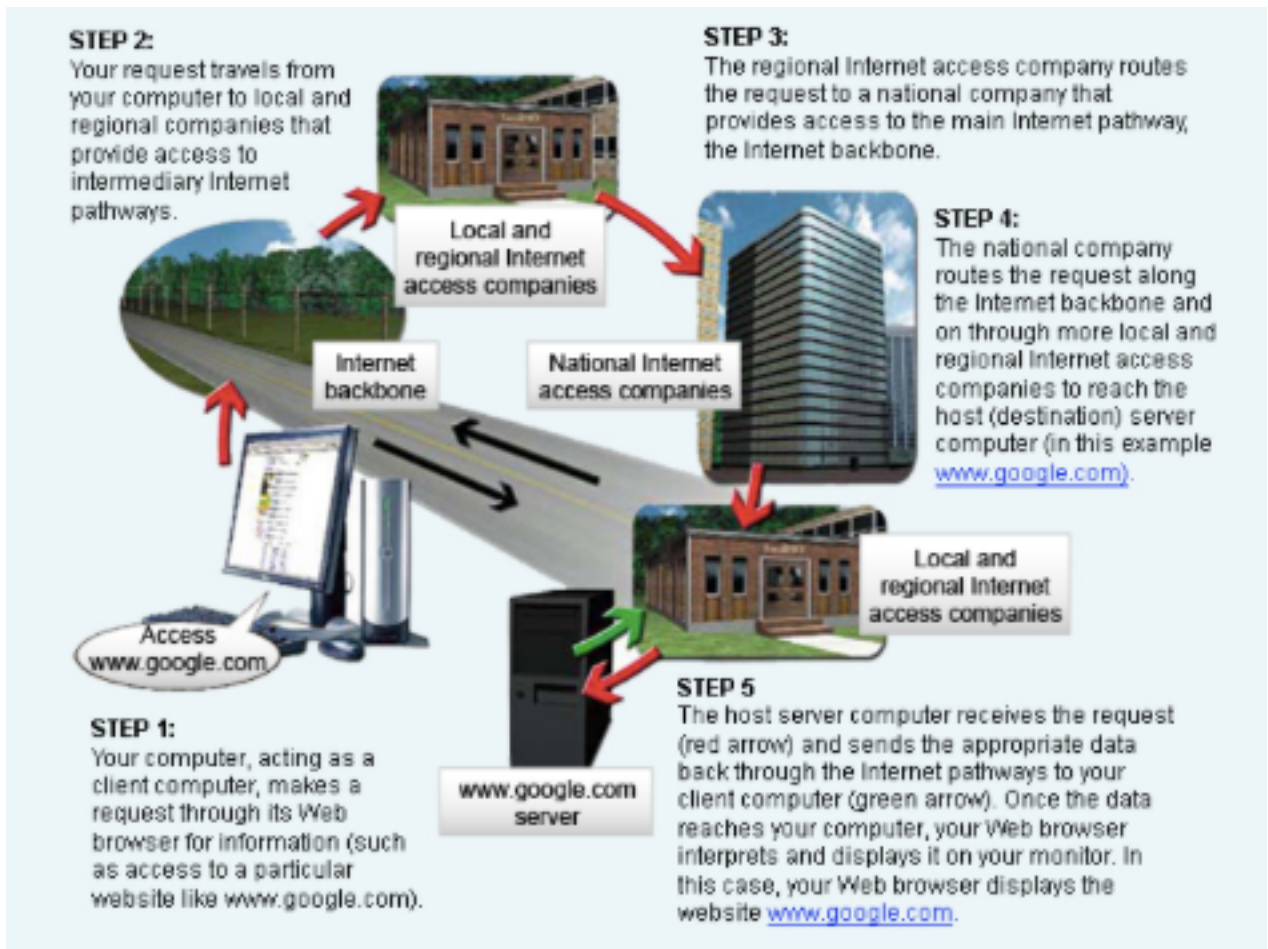
Peer-to-Peer (or P2P) : every node in the network can communicate directly with every other node. Most home networks are this type

Client Server Network: The 'Server' computer acts like the central administrator for functions available to the 'Client' computers (such as printing). The internet is a Client Server Network



A hotspot is a place that has wireless access to the internet. Many are not secure

How to connect to the internet



Evolution of browsers;

Evolution of Browsers

1994: The first browser, Netscape, hits the market.

1997: Opera is released for Windows.

2002: Mozilla releases the first version of its browser. It later becomes Mozilla Firefox.

1995: Internet Explorer (IE) is released. IE 3.0 is released in 1996 and becomes the most popular version of IE. It also includes e-mail features as well as the ability to style Web pages (color, format, font, etc.).

Tab feature appears (Opera in 2000, Firefox in 2001 and IE in 2007). This allows users to view several different websites all in one window.

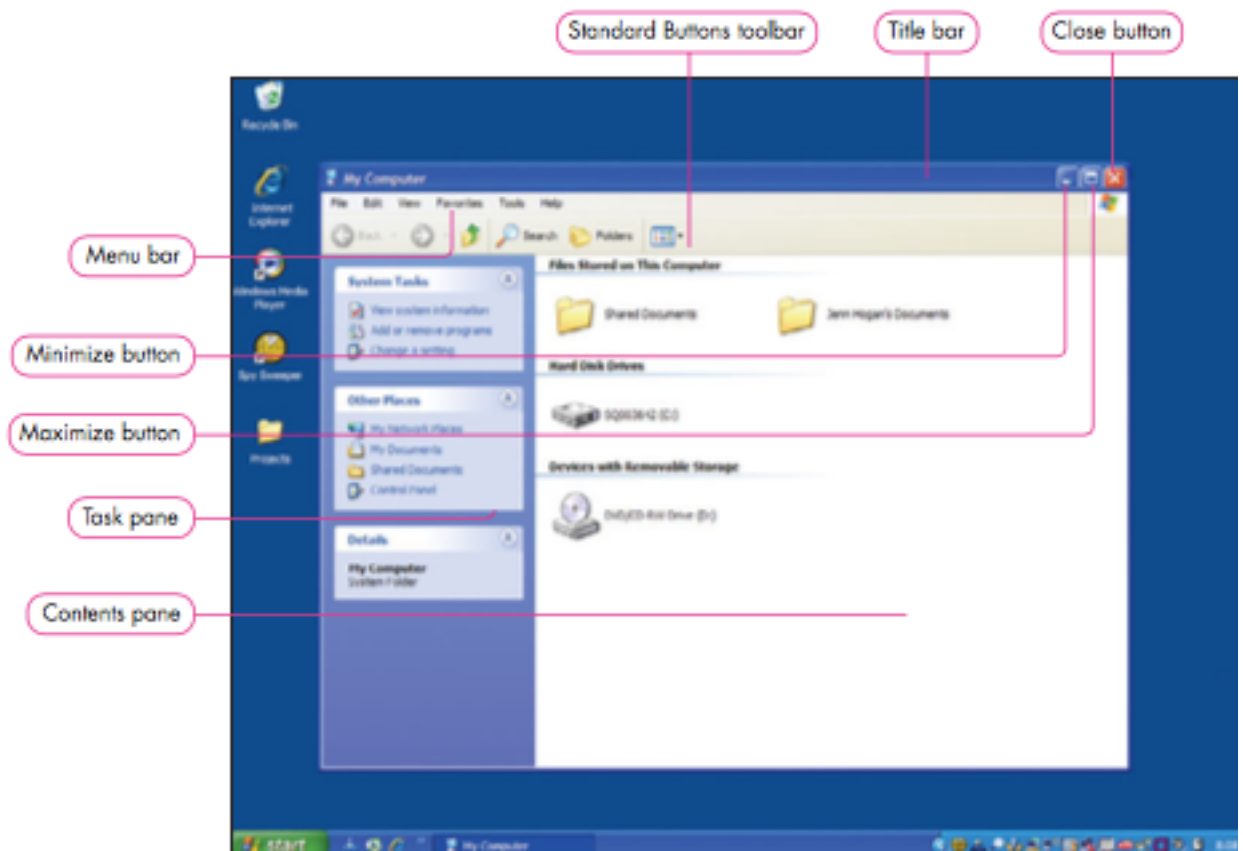
Safari, a browser made especially for Mac computers, is released in 2003.

	Internet Explorer	Mozilla Firefox	Opera	Safari
Features	<p>Optimized for Windows Operating System (since it's owned by Microsoft).</p> <p>IE's latest version uses tabs to differentiate between different websites all in one window.</p> <p>IE has small issues with security.</p> <p>IE has features for bookmarking favorite websites. It also gives you options to change privacy settings and trusted vs. non-trusted websites.</p>	<p>Firefox is open source and works on all platforms. It is owned by the public GNU license and components can be added to it, unlike IE.</p> <p>Firefox has better security features and is widely considered to have more protection.</p> <p>The 2001 version of Firefox has tabs and allows user to bookmark favorite sites and to set up options for privacy.</p> <p>Open source allows for add-ons (features).</p>	<p>Opera was an early player in the Web browser game. It has returned to the market and is growing fast.</p> <p>It was the first browser to have tabbed windows (2000).</p> <p>It works on all platforms.</p> <p>Opera is very popular on cell phones because it uses shortcuts and has all of the same features as IE and Firefox.</p> <p>It is considered highly secure, like Firefox.</p>	<p>Safari was the first Web browser made specifically for the Mac computer.</p> <p>It is the default browser that comes with a Mac as well as with iPods and iPhones (and most other i-devices).</p> <p>Safari can also be used on the Windows platform.</p>
Website	Internet Explorer	Firefox	Opera	Safari

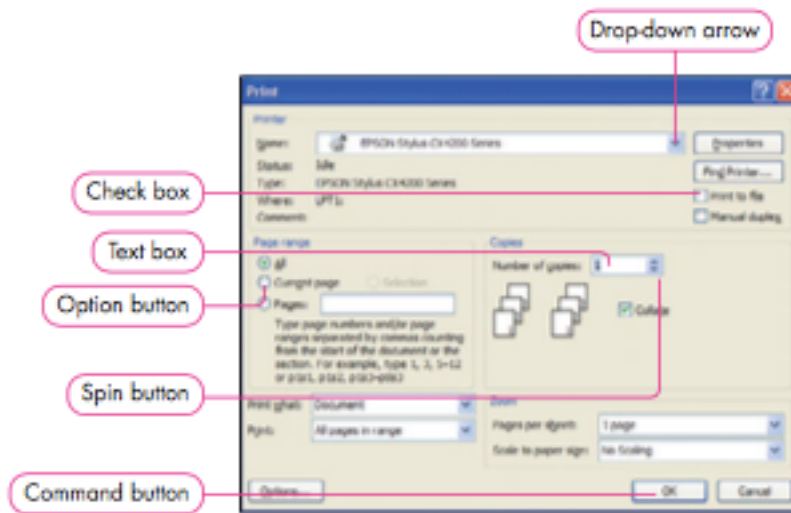
MODULE 4

Readings:

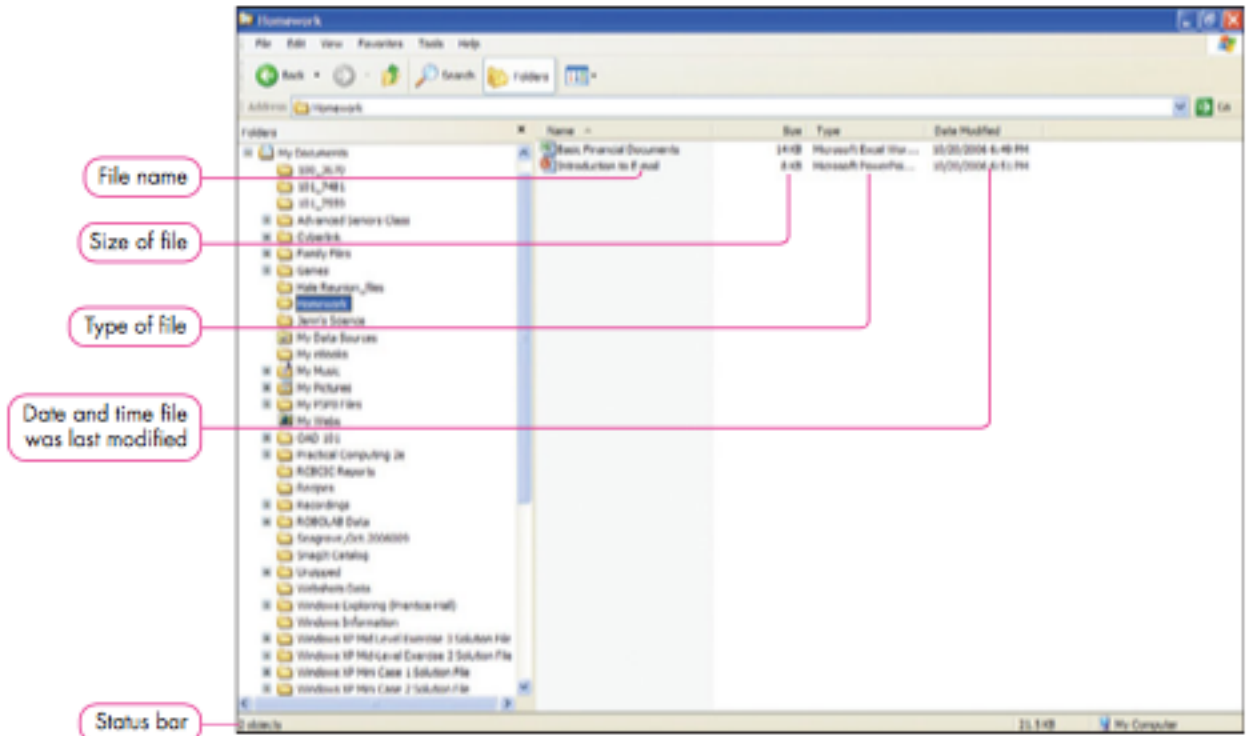
- Windows XP is the primary operating system for personal computers
- Windows Vista is the newest version of the windows operating system
- Windows XP Home edition focuses on entertainment and home use
- Windows XP Professional Edition is designed to support business systems
- Windows XP Media Center Edition coordinated multimedia elements
- Fast user Switching is a windows feature that allows you to quickly move from one use account to another
- The desktop contains icons and a task bar it is displayed wen a computer first boots up
- An icon is a pictorial element representing a program file website or shortcut
- The task bar is the horizontal bar that allows you to move among open windows and proves access to system resources
- The Start Button provides access to programs and other system resources
- The start menu is displayed when you click the Start Button
- The Quick Launch toolbar contains program icons, making it possible to open programs with a single click. located to the right of the Start Button
- The Notification area found at the right side of the task bar, displays icons for background programs and system processes
- Windows Desktop Search helps you find anything on your computer
- A window is an enclosed rectangular area representing a program or data
- Multitasking is the ability to run more than one program at a time
- The task pane is a bar that provides support for a currently selected item or window



- The title bar is the shaded bar at the top of every window
- The minimize button removes a window from the view but not from the memory
- The maximize button causes a window to fill the screen
- The restore down button returns a window to the size it was before it was maximized
- The close button removes a window from the memory
- A drop-down menu displays more selections pertaining to the menu item
- A menu bar is a horizontal bar at the top of a window containing options to enable you to work with an application
- A toolbar usually found at the top or side of a window contains buttons that are accessed more quickly than menu selections
- A status bar displays summary information about the selected window or object
- A scroll bar enables you to control which part of a window is in view at any time
- A thumbnail is a miniature display of a folder or page
- A dialog box is a special window that requests input or presents information



- An option button, or radio button is mutually exclusive selection in a dialog box
- A text box enables you to give an instruction by typing in a box
- A spin button is a dialog box feature with an up or down arrow to increase or decrease a value
- A check box enables you to select one or more items that are not mutually exclusive
- A list box presents several items any of which can be selected
- A command button is a dialog box item that you click to accept or cancel selections
- The help and support centre provides assistance on window topics
- To get quick assistance with a windows topic you can use the index feature to type in a key word to find what you're looking for
- A file is a collection of data or information that has a name
- A program file is part of a software program such as Microsoft word
- A data file is an item that you create and to which you give a name such as a document
- A filename is an identifier that you give a file when you save it
- A folder is an object or container that can hold multiple files and subfolders



8. Windows Explorer displays a tree structure of the devices and folders on your computer
9. A shortcut menu displays a list of commands when you right-click an item or screen element
10. A backup is a copy of a file
11. The recycle bin holds files and folders deleted from the hard drive
12. The background is the area of a display screen behind the desktop icons
13. A screen saver is a moving graphic or image that takes over the display screen when the user is idle
14. The control panel enables you to change settings
15. A wizard is a set of guided instructions
16. To uninstall software click start and control panel then click add or remove programs. Find the program you want to uninstall then click it
17. To adjust the mouse click start then control panel then click printer and other hardware. click mouse, click buttons if necessary.
18. A user account specifies a users settings permissions and customizations
19. A shortcut is a special type of file or device
20. to create a short cut first locate the objects then elect the object , right click and drag it to the desktop and click create shortcuts
21. Search companion is a search tool option in windows XP (similar to the index mentioned above)

Study Material:

A software is “a set of instructions that tell a computer what to do”

4. System Software (Operating System)
5. Programming Software (Computer Science and Engineering)
6. Application Software (User)

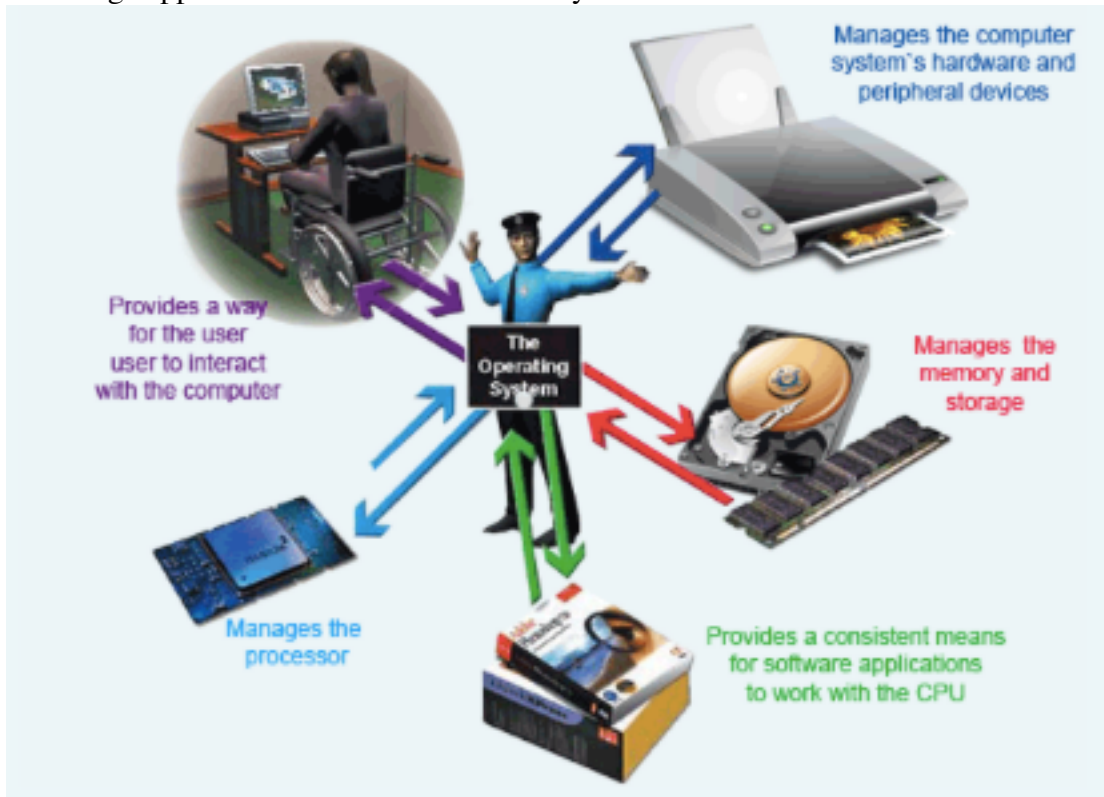
Type	Description	Example
System Software	<p>System software actually interfaces with the hardware. It allows the computer's hardware to work with application software and in turn work for you.</p> <p>This category is mostly made up of Operating System software. Operating systems make working with a computer much easier. They help you use the computer and avoid typing computer code and they have user-friendly interfaces (mouse, keyboard, icons, etc.). Without these systems we would be stuck typing programming or machine language in order to get anything done. Operating system software does most of this work for you. Not only does it make the computer's inner workings easier to handle, it also gives you faster performance by categorizing everything in human terms. It also manages all your files for you.</p> <p>Other software, such as drivers (software you need to download so that your hardware works correctly) and utility programs (disk defragmenter, disk clean-up, etc.) are also in this category.</p>	<p>Windows Vista Windows XP Mac OS X Linux</p>
Programming Software	<p>Programming software is used mainly by programmers and computer scientists. This type of software allows programmers to create other software. This software includes compilers, editors, interpreters, debuggers, and more. We won't focus on these, but you should know that they exist. Programmers use different languages such as Java, C++, or PHP to use these tools.</p>	<p>Visual Studio Eclipse MySQL</p>
Application Software	<p>This is the software you will use the most. This includes utility programs, word-processing programs, spreadsheet software, digital image-editing, games, workplace-specific software, databases, medical software, business software, and more.</p>	<p>Microsoft Word, Excel, PowerPoint, Access Solitaire, Frogger, Call of Duty, Adobe PhotoShop, FrameMaker, InDesign Windows Media Player, RealPlayer, iTunes</p>

What is an Operating System:

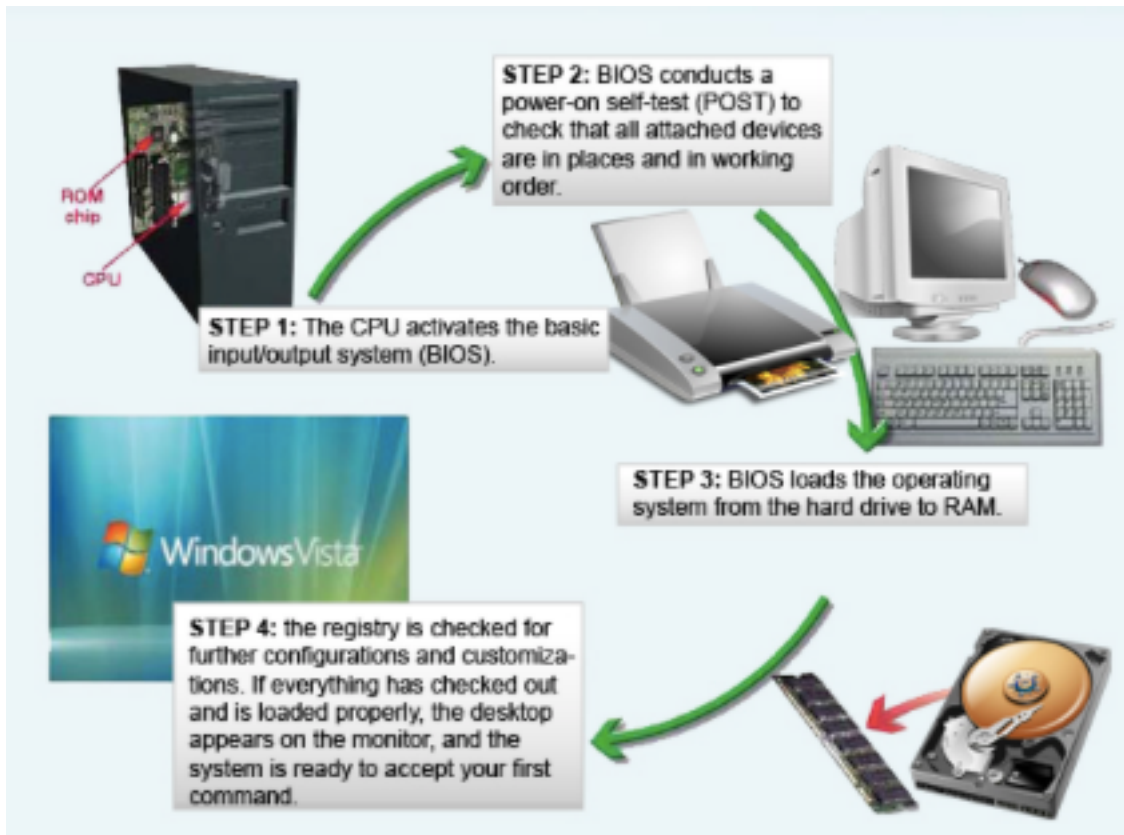
Operating System (OS) is a complex program that manages all of the system files used by your computer. It manages the flow of data in your computer

Functions:

- Allow the user to interact with the computer
- Manage the CPU
- Manage memory and storage
- Manage system hardware and peripherals
- Manage applications software and memory allocation



What happens when you turn on a computer:



When you turn on your computer a process called bootstrapping starts up and loads the operating system into memory

When you reboot your computer you are restarting this bootstrapping process. if this is done correctly then the computer will save all of your data at that time

What does the OS do?:

The OS helps you communicate with the computer. It displays all the software and hardware that you have access to in terms that you can understand. It translates the computers languages into a language you can understand

Evolution of OS interfaces:

- **Command Line Interface**
 - Type commands to communicate
 - Very complicated for most users
- **Menu-driven Interface**
 - Select tasks from a list displayed on the screen
 - Still not easy enough for most people
- **Graphical User Interface**
 - Graphics and point-and-click technology

It also allows you to manage your files by creating a hierarchy of folders and files within drives. It also multi-tasks different programs so that it seems like the computer is doing more than one or two things at a time

Types of OS:

Name	Description
Windows XP Windows Vista [by Microsoft]	<p>Microsoft Windows dominates the operating system world market share.</p> <p>It is based on MS-DOS which was a Command Line OS created in the 1980s.</p> <p>Later versions of Windows used...windows. It is simple enough so that any user is able to use a computer without having to know commands.</p> <p>Windows XP and Windows Vista are the most common operating systems for PCs today, in homes almost all libraries, schools and businesses.</p>
Mac OS X [by Apple]	<p>Mac OS X runs on Mac computers. Because the Mac market share has increased in recent years, so has the popularity of Mac OS X. Mac OS was the first OS to have a GUI (1984).</p> <p>In general, Macs are used less in schools and businesses, but are popular with artists and students in non-science programs.</p> <p>Mac OS X has a completely different navigation system than the Windows systems, and Leopard (the latest version) is based on the Unix operating system.</p>
Ubuntu [by Linux]	<p>Ubuntu is currently the most popular of all Linux-based operating systems.</p> <p>Linux is mostly used by computer science professionals and companies specializing in computers.</p> <p>It is a stable and more efficient OS, but it is more difficult to use than Windows.</p> <p>Linux is an open source OS, which means that it is freely available and can be modified by users as they wish.</p>

Application Software:

Application Software is a software that you use on a daily basis to do most tasks on your computer. You have control over these programs.

Application software is usually organized into different categories:	Some popular application software:
<ul style="list-style-type: none"> ▪ Utility Programs ▪ Productivity Software ▪ Multimedia Software ▪ Entertainment Software or Learning and Leisure 	<ul style="list-style-type: none"> ▪ Microsoft Office (Word, Excel, PowerPoint, Access, FrontPage, Outlook, Visio, etc.) ▪ Windows Media Player, Real Player, VLC Player, iTunes, etc. ▪ Internet Explorer, Mozilla Firefox, Safari, Opera, etc. ▪ Calculator, Notepad, Paint, Solitaire, etc. ▪ Adobe Photoshop, InDesign, FrameMaker, Reader, Illustrator, etc. ▪ Many more

Utility Programs:

Utility programs are application software that help you maintain and manage your computers software and hardware.

Functions:

- lets you alter how your computers desktop looks
- help you manage other application software
- compress files for easier storage or transfer
- Help you carry out regular system maintenance
- let you schedule maintenance tasks so that they are done automatically
- and much more

Examples

Disk Cleanup: cleans unnecessary files from your hard drive

Disk Defragmenters: it tires to regroup related data so that your operating system works more efficiently

Productivity Software:

It helps you complete tasks or create documents for school or work such as Word, Excel etc..

Multimedia Software:

Enables you to create, organize and edit music movies and pictures

Photo-editing Software	Video-editing Software	Audio-editing Software
<ul style="list-style-type: none"> ▪ Microsoft Photo Story ▪ Picasa ▪ Adobe Photoshop (any version) ▪ Corel Paint Shop Pro 	<ul style="list-style-type: none"> ▪ Adobe Premiere ▪ Microsoft Movie Maker ▪ Blender 	<ul style="list-style-type: none"> ▪ Audacity ▪ Sony Sound Forge ▪ Adobe Soundbooth

Learning and leisure:

Learning software is usually subject-based, but general reference software is also available

Leisure software is everywhere it includes games and applications to let you listen to music ad movies or even programs to let you draw

Acquiring software:

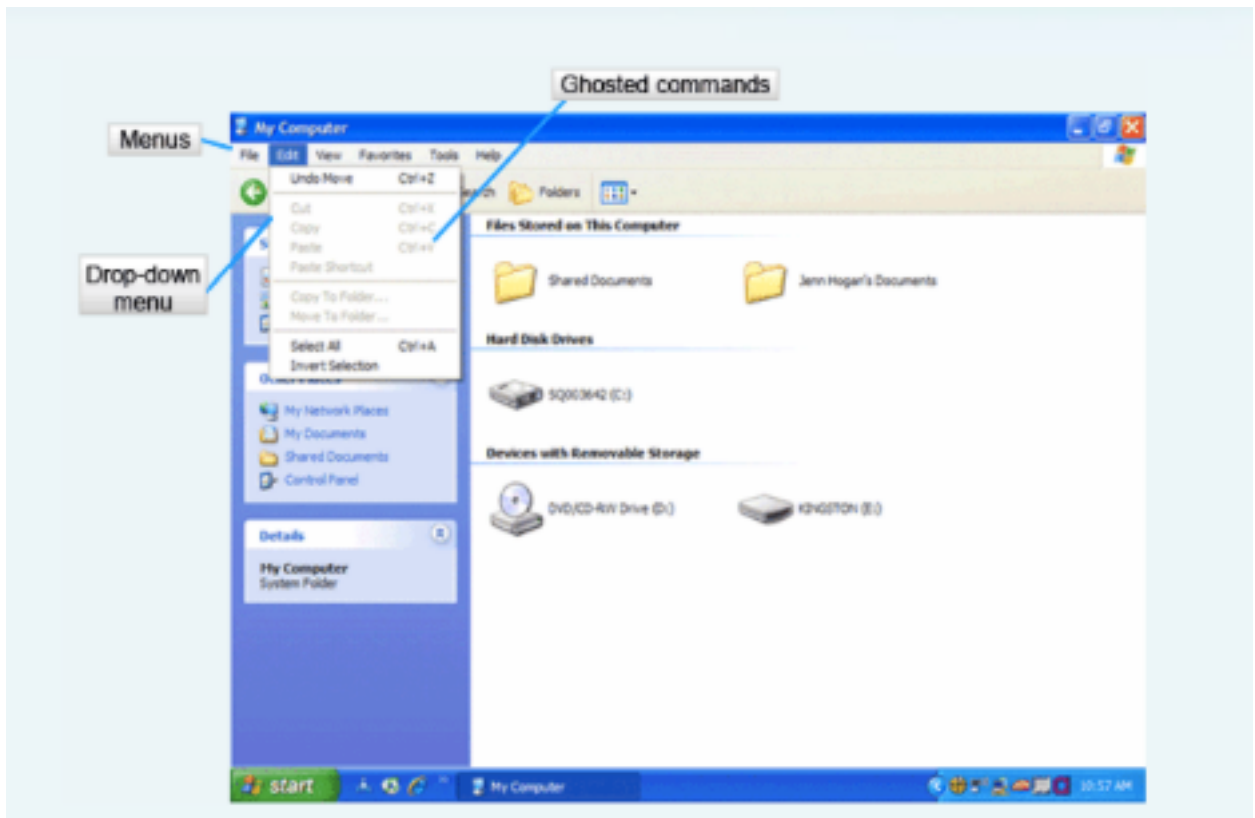
1. Web-Based Applications are programs that are run directly from your web browser. they include things like map quest or google docs
2. Freeware is a software that is available at no cost although it is copyrighted.
3. Shareware is software that is available from free but with certain conditions. the application can only be used for short amount of time before it has to be bought or there may be no support offered for users unless the software is registered

Windows:

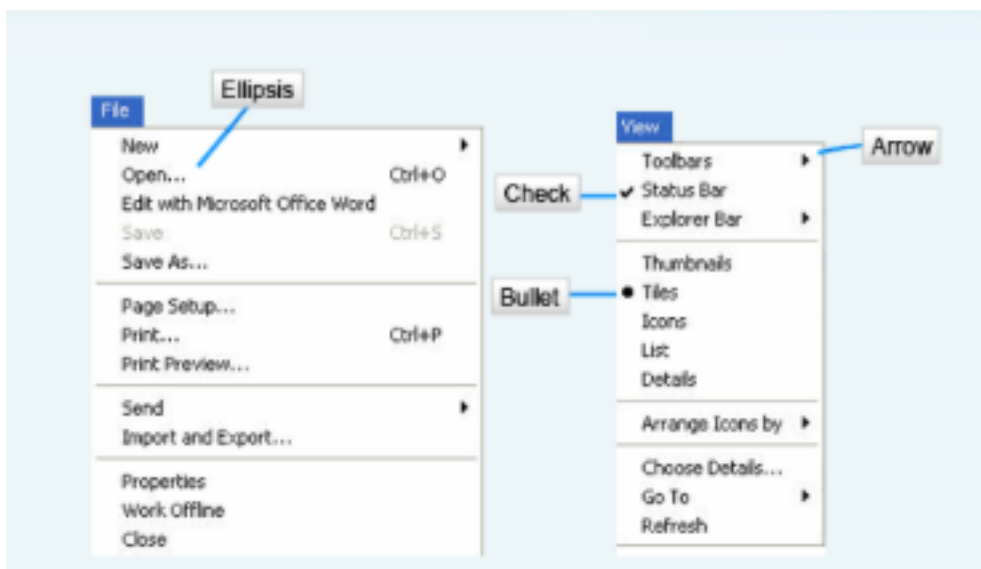
Windows Vista/Windows XP

Versions	Description	Windows XP Comparable Version
Windows Vista Home Basic	This version is for low-level, budget home users who do not require advanced media support.	Windows XP Home Edition
Windows Vista Home Premium	This version combines the media features of Window XP Media Center Edition with the Windows XP Home Edition to support advanced home media uses such as HDTV and DVD authoring.	Windows XP Home Edition with features from Window XP Media Center Edition
Windows Vista Business	As its name implies, this version is aimed at the business market. Similar to Windows XP Professional, this version has added support for networking capabilities. This product comes bundled with a new version of Internet Information Services (IIS), one of the most widely used web servers for corporate websites.	Windows XP Professional
Windows Vista Enterprise	This edition is aimed at the enterprise segment of the business market and is not available through retail stores or OEMs (Original Equipment Manufacturers). It comes with Microsoft Virtual PC, which enables it to run on any platform, and has a multilingual user interface.	
Windows Vista Ultimate	This is the "ultimate" operating system for high-end PC users, gamers, multimedia professionals, and PC enthusiasts. Vista Ultimate comes with RSS (Really Simple Syndication) support for easy access to podcasts and weblogs, a game performance tweaker, DVD ripping capabilities, and other online capabilities for downloading media.	

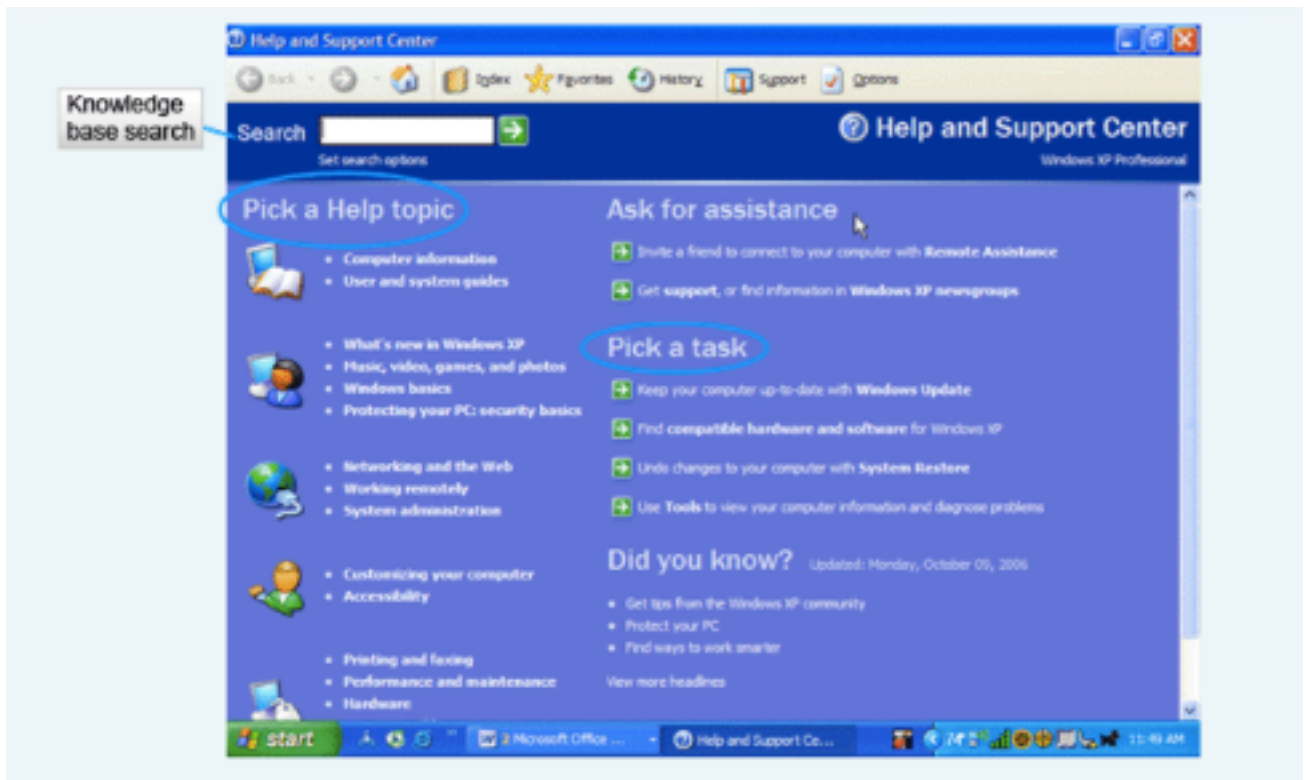
Using Display Menu:



Menu Components:



Help and Support Center:

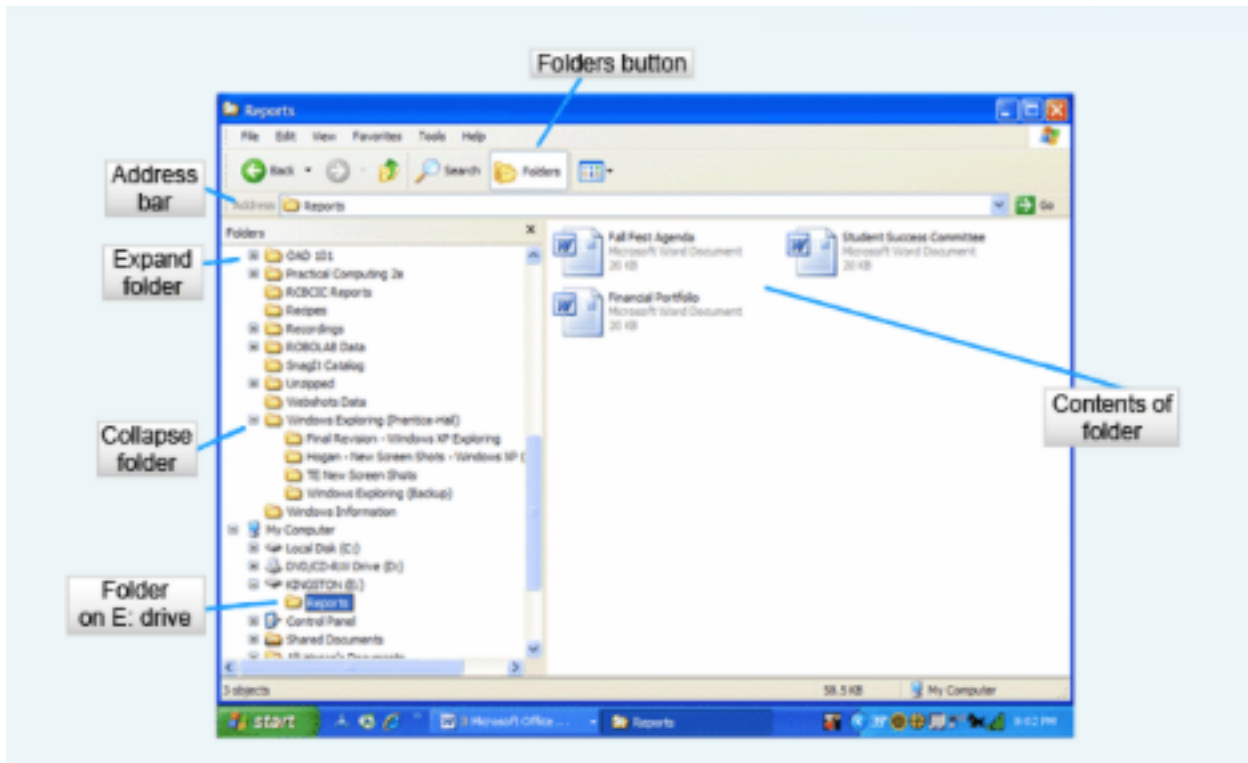


Filename extensions:

Filename Extensions		
Extension	Type of Document	Application that Uses the Extension
.doc	Word-processing document	Microsoft Word 2003
.docx	Word-processing document	Microsoft Word 2007
.wks	Word-processing document	Microsoft Works word processing
.wpd	Word-processing document	Corel WordPerfect
.xls	Spreadsheet	Microsoft Excel
.slr	Spreadsheet	Microsoft Works spreadsheet
.mdb	Database	Microsoft Access
.ppt	PowerPoint presentation	Microsoft PowerPoint
.pdf	Portable Document Format	Adobe Acrobat or Adobe Reader
.rtf	Text	Any program that can read text documents
.txt	Text	Any program that can read text documents
.htm or .html	Web page	Any program that can read HyperText Markup Language
.bmp	Bitmap image	Microsoft Paint
.zip	Compressed file	Winzip

Windows Explorer:

A program that displays your folders and files in a hierarchal structure



Back up strategies:

- Flash drive
- hard drive

Recycle Bin:

The recycle bin enables you to restore a file that was deleted from Drive C

If you click the folders button twice in a row the left pane displays either a task pane or the hierarchical view depending on what was displayed prior to clicking the button initially

MODULE 5

Readings:

- Word processing software is used primarily with text to create, edit, and format documents
- Spreadsheet software is used primarily with numbers to create worksheets
- Presentation graphics software is used primarily to create electronic slide shows
- Relational database software is used to store data and convert it into information

Office 2007 Product	Application Characteristics
Word 2007	Word processing software is used with text to create, edit, and format documents such as letters, memos, reports, brochures, resumes, and flyers.
Excel 2007	Spreadsheet software is used to store quantitative data and to perform accurate and rapid calculations with results ranging from simple budgets to financial analyses and statistical analyses.
PowerPoint 2007	Presentation graphics software is used to create slide shows for presentation by a speaker, to be published as part of a Web site, or to run as a stand-alone application on a computer kiosk.
Access 2007	Relational database software is used to store data and convert it into information. Database software is used primarily for decision-making by businesses that compile data from multiple records stored in tables to produce informative reports.

- A user interface is the meeting point between computer software and the person using it .it provides the means for the person using it and provides the means for a person to communicate with a software program
- Click the Office button to display the office menu

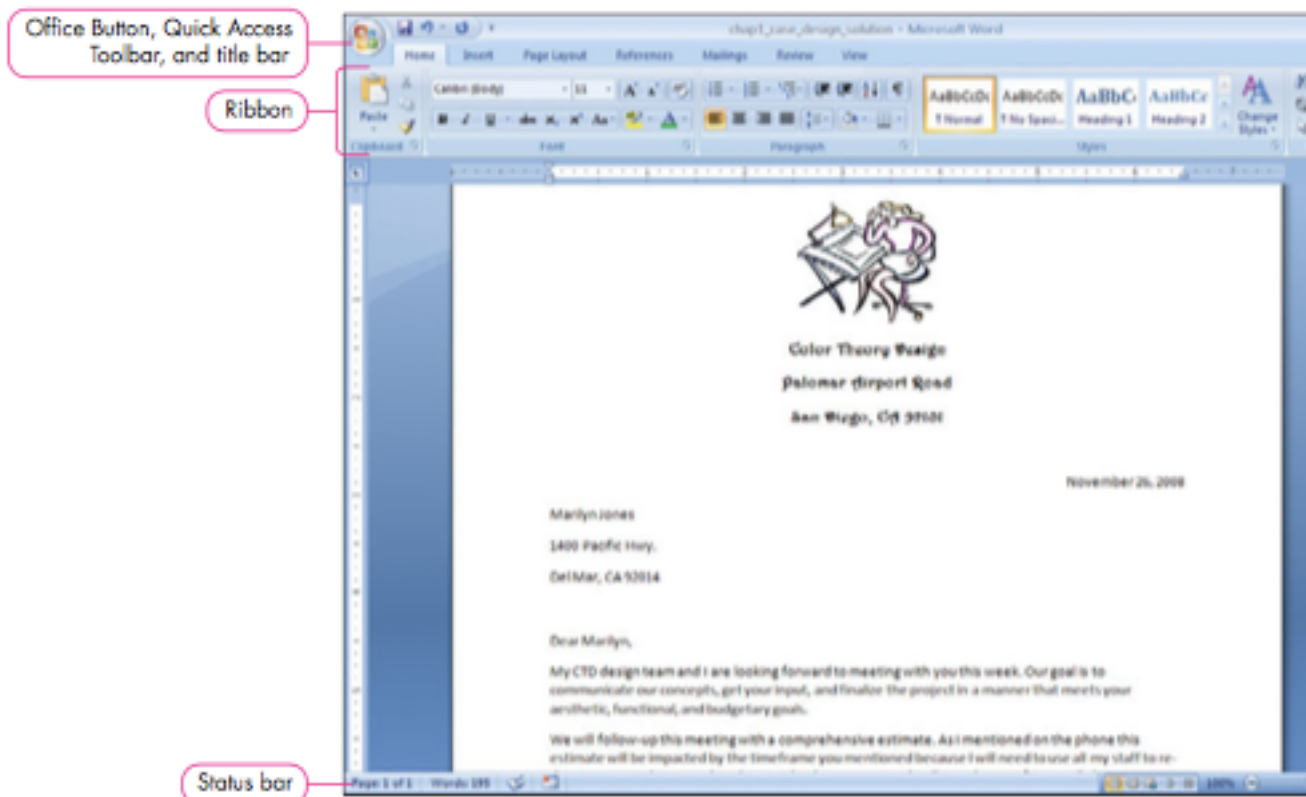
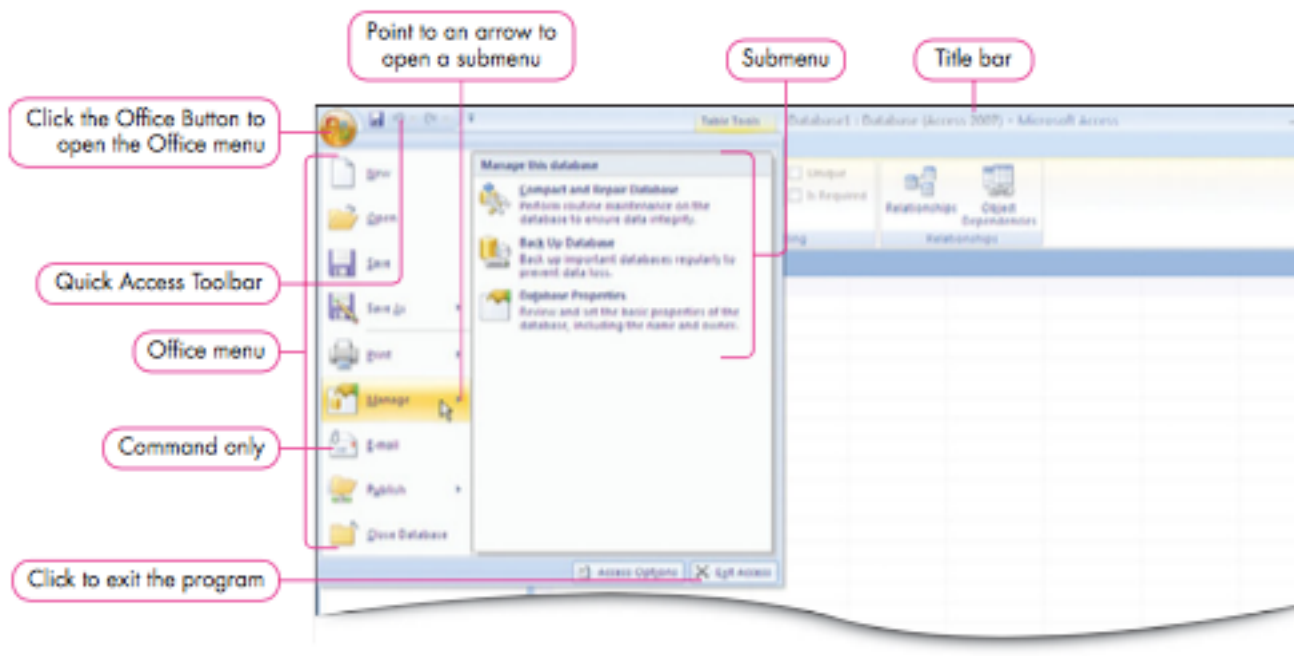
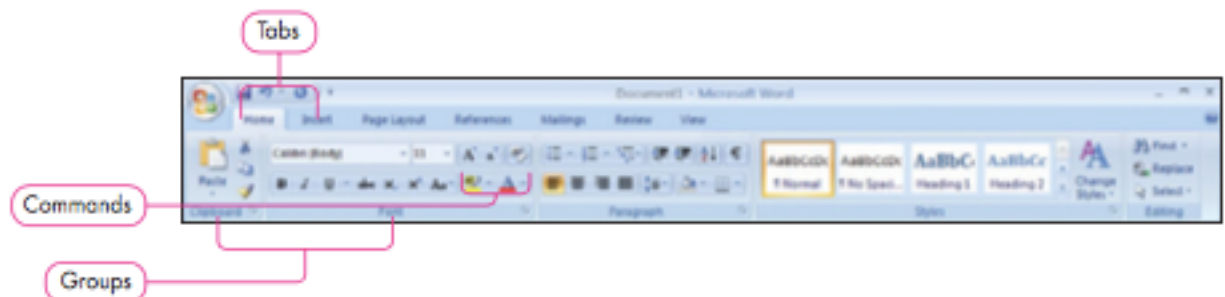


Figure 1.1 Office 2007 Interface

- The office menu contains commands that work with an entire file or with the program. e.g.: when you want to perform a task that involves the entire document such as saving, printing or sharing file with others, you use the commands on the office menu



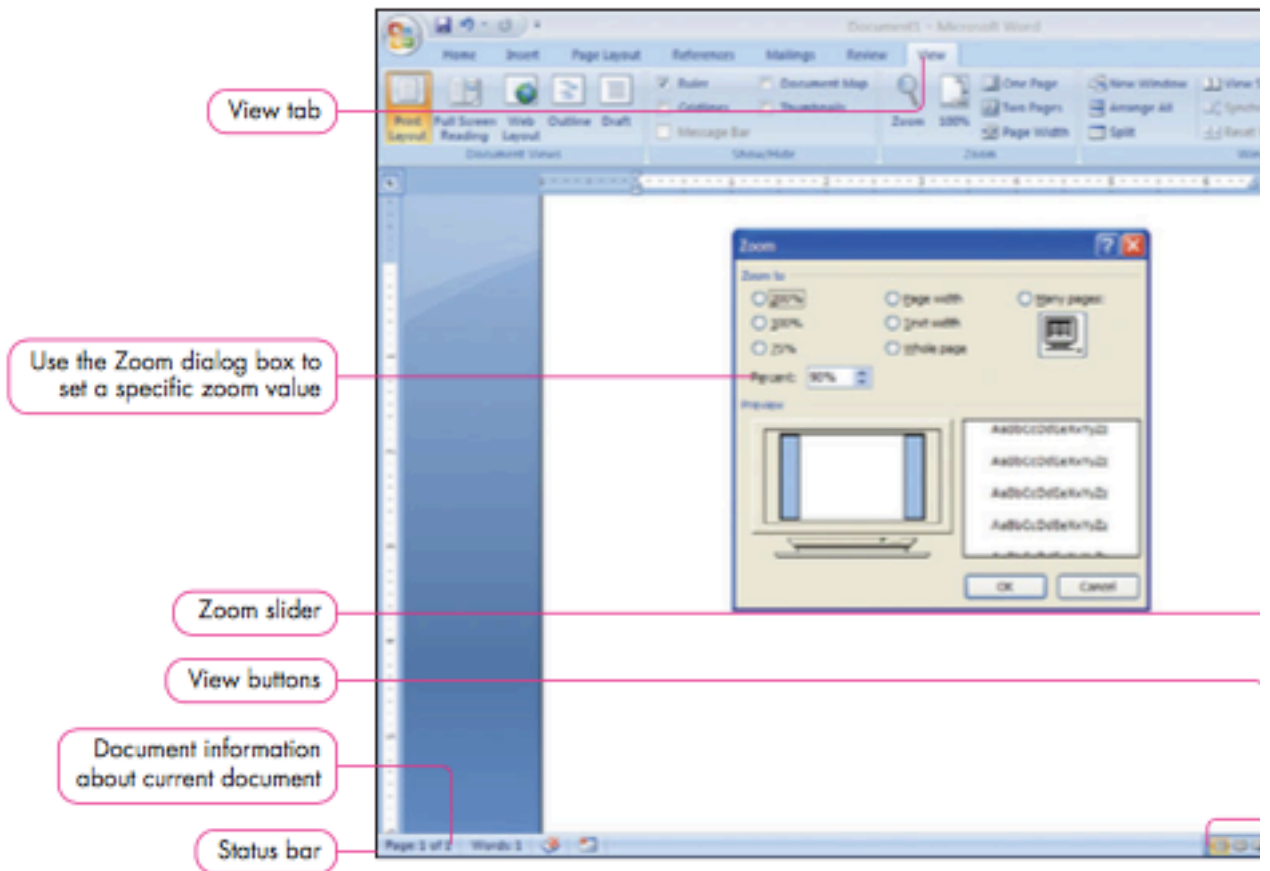
- 22. The Quick Access toolbar contains buttons for frequently used commands
- 23. A title bar displays the program name and filename at the top of the window
- 24. The ribbon is a large strip of visual commands that enables you to perform tasks



- 7. tabs which look like folder tabs, divide the ribbon into task-oriented categories
- 8. Groups organize similar commands together within each tab
- 9. A command is a visual icon in each group that you click to perform a task
- 10. A dialog box is a window that provides options related to a group of commands
- 11. A dialog box launcher is a small icon that when clicked opens a related dialog box
- 12. A gallery is a set of options that appears as thumbnail graphic
- 13. Live Preview provides a preview of results for gallery options
- 14. A contextual tab is a tab that provides specialized commands that display only when the object they affect is selected
- 15. A key tip is the letter or number that displays over each feature on the ribbon and quick access tool bar and is they keyboard equivalent that you press
- 16. The status bar displays below the document and provides information about the open file and button for quick access

View Option	Characteristics
Print Layout	Displays the document as it will appear when printed.
Full Screen Reading	Displays the document on the entire screen to make reading long documents easier. To remove Full Screen Reading, press the Esc key on the keyboard.
Web Page	Displays the document as it would look as a Web page.
Outline	Displays the document as an outline.
Draft	Displays the document for quick editing without additional elements such as headers or footers.

- The zoom slider enables you to increase or decrease the magnification of the file onscreen. located on the right edge



- To access help press f1 on the keyboard or click the help-button on the right edge of the ribbon
- An enhanced screen tip displays the name and brief description of a command when you rest the pointer on a command

3 fundamental tasks important for productivity considered universal to every computer program:

4. opening files that have been saved
5. saving files you create
6. printing files

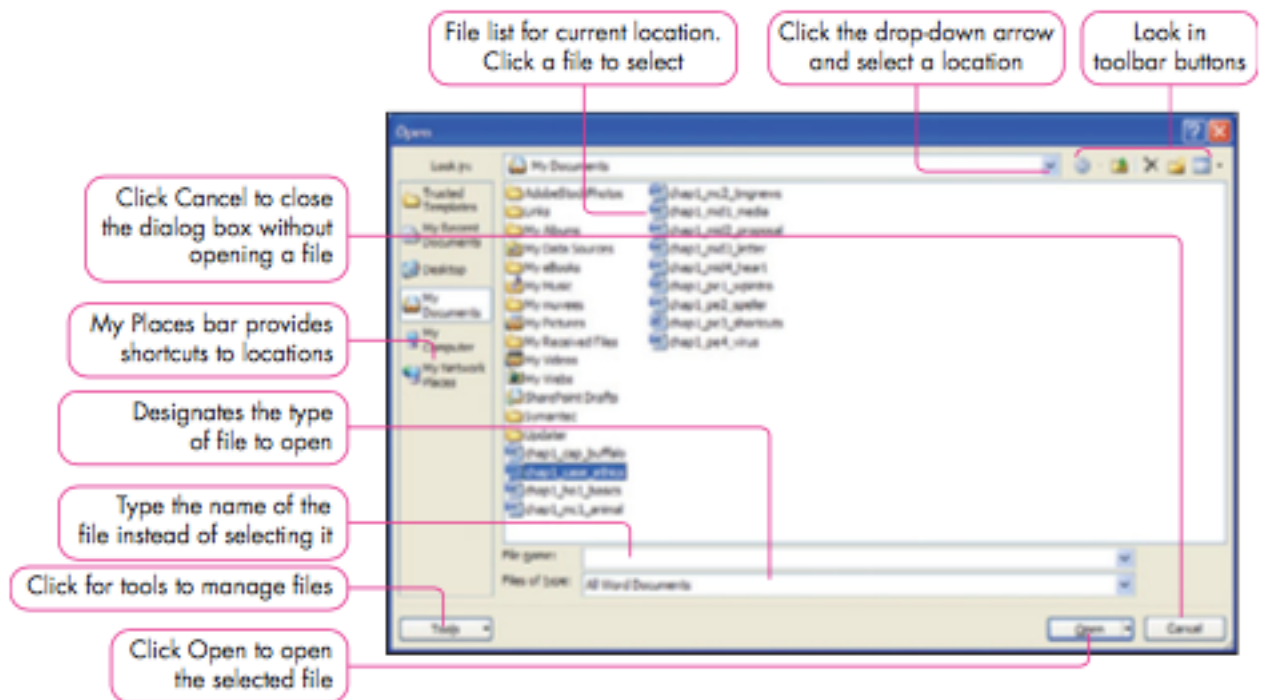
The insertion point is the blinking vertical line in the document, cell, slideshow or database table designating the current location where text you type displays

Open a file using the open dialog box

look in: provides a hierarchical view of structure of folders and subfolders on your computer or on any computer network you are attached to, move up or down in the structure to find a specific location or folder then click the desired location to get it

My places bar: provides a list of shortcut links to specific folders on your computer and locations on a computer network that you are attached to. click a link to select it and the file list changes to display subfolders and files in that location

Buttons	Characteristics
Previous Folder	Returns to the previous folder you viewed.
Up One Level	Moves up one level in the folder structure from the current folder.
Delete	Deletes the selected file or selected folder.
Create New Folder	Creates a new folder within the current folder.
Views	Changes the way the list of folders and files displays in the File list.



Open options:

Open Options	Characteristics
Open	Opens the selected file with the ability to read and write (edit).
Open Read-Only	Opens the selected file with the ability to read the contents but prevents you from changing or editing it.
Open as Copy	Opens the selected file as a copy of the original so that if you edit the file, the original remains unchanged.
Open in Browser	Opens the selected file in a Web browser.
Open with Transform	Opens a file and provides the ability to transform it into another type of document, such as an HTML document.
Open and Repair	Opens the selected file and attempts to repair any damage. If you have difficulty opening a file, try to open it by selecting Open and Repair.

- The recent documents lists displays when the office menu opens and provides a list of links to the last few files you used . it changes to provide only the most recent files

Save options:

Command	Characteristics
Save	Saves the open document: <ul style="list-style-type: none"> • If this is the first time the document is being saved, Office 2007 opens the Save As dialog box so that you can name the file. • If this document was saved previously, the document is automatically saved using the original filename.
Save As	Opens the Save As dialog box: <ul style="list-style-type: none"> • If this is the first time the document is being saved, use the Save As dialog box to name the file. • If this document was saved previously, use this option to save the file with a new name, in a new location, or as a new file type preserving the original file with its original name.

- A macro is a small program that automates tasks in a file
- A virus checker is software that scans files for hidden programs that can damage your computer
- A template is a file that contains formatting and design elements

File Format	Characteristics
Word	.docx—default document format .docm—a document that contains macros .dotx—a template without macros (a template is a file that contains formatting and design elements) .dotm—a template with macros
PowerPoint	.pptx—default presentation format .pptm—a presentation that contains macros .potx—a template .potm—a template with macros .ppam—an add-in that contains macros .ppsx—a slide show .ppsm—a slide show with macros .sldx—a slide saved independently of a presentation .sldm—a slide saved independently of a presentation that contains a macro .thmx—a theme used to format a slide
Excel	.xlsx—default workbook .xism—a workbook with macros .xltx—a template .xltn—a template with a macro .xlsb—non-XML binary workbook—for previous versions of the software .xlam—an add-in that contains macros
Access	.accdb—default database

- Portrait orientation is longer than it is wide like the portrait of a person
- Landscape orientation is wider than it is long, resembling a landscape scene

Print Options:

Print Option	Characteristics
All	Select to print all the pages in the file.
Current page/slide	Select to print only the page or slide with the insertion point. This is a handy feature when you notice an error in a file, and you only want to reprint the corrected page.
Pages	Select to print only specific pages in a document. You must specify page numbers in the text box.
Number of Copies	Change the number of copies printed from the default 1 to the number desired.
Collate	Click if you are printing multiple copies of a multi-page file, and you want to print an entire first copy before printing an entire second copy, and so forth.
Print what	Select from options on what to print, varying with each application.
Selection	Select to print only selected text or objects in an Excel worksheet.
Active sheet(s)	Select to print only the active worksheet(s) in Excel.
Entire workbook	Select to print all worksheets in the Excel workbook.

- A duplex printer prints on both sides of the pages
- A manual duplex operation allows you to print on both sides of the paper by printing first on one side and then on the other

2 ways to quick print

1. select quick print from the office menu
2. customize the quick access toolbar to add the print icon. click the icon to print the current file without opening the print dialog box

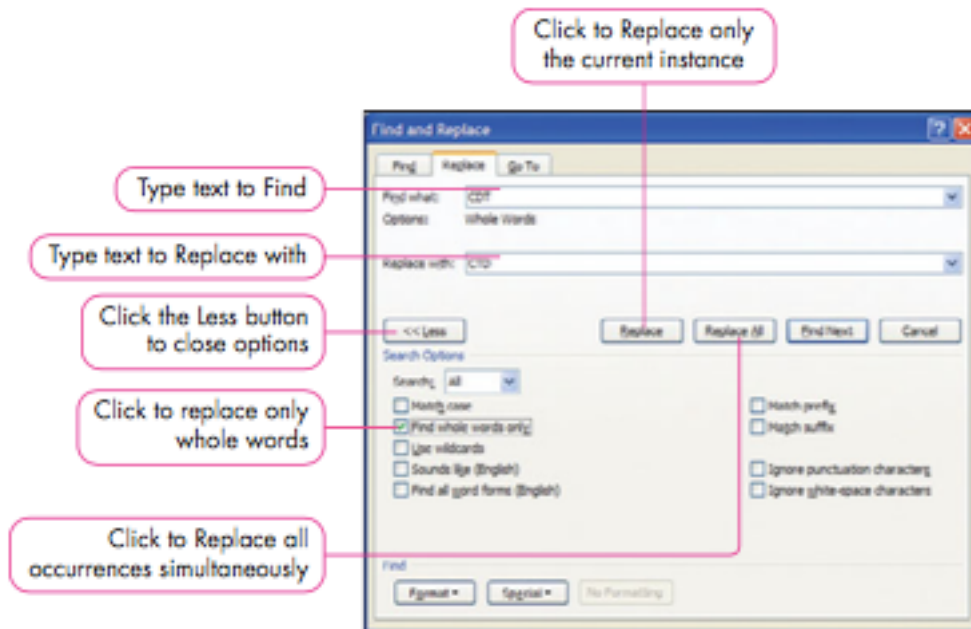
Most basic tasks in word fall into two categories:

- editing a document
- formatting a document
- The mini toolbar displays above the selected text as semi-transparent and repeats often used commands

Text selection:

Outcome Desired	Method
Select a word	Double-click the word.
One line of text	Point the mouse to the left of the line, and when the mouse pointer changes to a right-pointing arrow, click the mouse.
A sentence	Hold down Ctrl and click in the sentence to select.
A paragraph	Triple-click the mouse in the paragraph.
One character to the left of the insertion point	Hold down Shift and press the left arrow key.
One character to the right of the insertion point	Hold down Shift and press the right arrow key.

- Insert is adding text in a document
- Overtyping mode replaces the existing text with text you type character by character
- Select the text to replace and start typing the new text replaces the selected text
- Cut removes the original text or object from its current location
- Copy makes a duplicate copy of the text leaving the original intact
- Paste places the cut or copied text or object in the new location
- The clipboard is a memory location that holds up to 24 items for you to paste into the current document, another file, or another application.
- Find locates a word or group of words in a document
- Replace not only finds text, it replaces a word or group of words with other text
- Go To moves the insertion point to a specific location in the document



- The Undo command cancels your last one or more operations
- The redo command reinstates or reverses an action performed by the undo command

- The repeat command repeats only the last action you performed
- Formatting text changed an individual letter, word, or a body of selected text format by changing:
 - font face or size
 - font attributes such as bold, underline, or italic
 - Font color
- A font is a names set of characters with the same design

Command	Description	Example
Font	Enables you to designate the font.	Arial Comic Sans MS
Font Size	Enables you to designate an exact font size.	Size 8 Size 18
Grow Font	Each time you click the command, the selected text increases one size.	A A
Shrink Font	Each time you click the command, the selected text decreases one size.	B B
Clear Formatting	Removes all formatting from the selected text.	<i>Formatted</i> Cleared
Bold	Makes the text darker than the surrounding text.	Bold
Italic	Places the selected text in italic, that is, slants the letters to the right.	<i>Italic</i>
Underline	Places a line under the text. Click the drop-down arrow to change the underline style.	<u>Underline</u>
Strikethrough	Draws a line through the middle of the text.	Strikethrough
Subscript	Places selected text below the baseline.	Sub _{script}
Superscript	Places selected text above the line of letters.	Super ^{script}
Change Case	Changes the case of the selected text. Click the drop-down arrow to select the desired case.	lowercase UPPERCASE
Text Highlight Color	Makes selected text look like it was highlighted with a marker pen. Click the drop-down arrow to change color and other options.	Highlighted
Font Color	Changes the color of selected text. Click the drop-down arrow to change colors.	Font Color

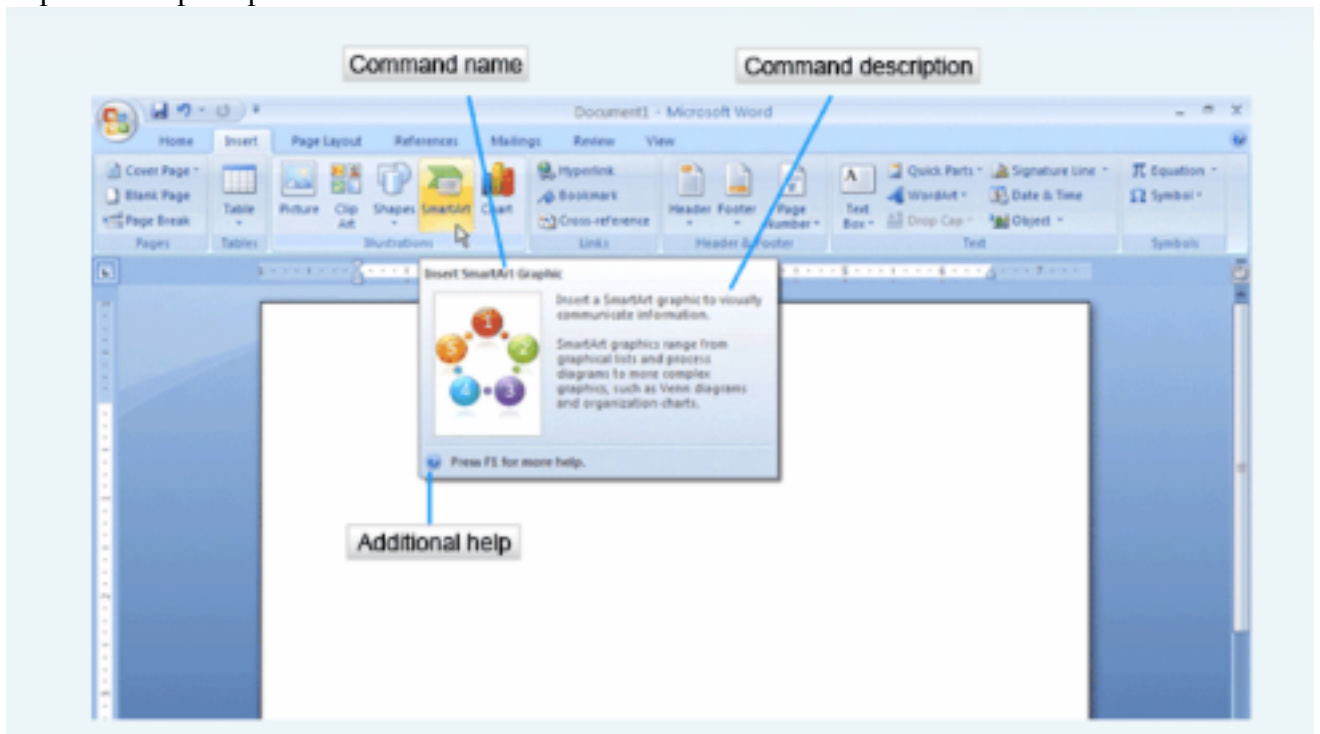
Copying formats with the format printer:

- The format printer copies the formatting of text from one location to another
- Elect the formatted text then click format printer in the clipboard group on the home tab to copy the format

Study Material:

Word	Document processing
Excel	Spreadsheet
PowerPoint	Presentation
Access	Database

Super ToolTip Help



Super ToolTips are displayed when the mouse lingers over a command on the ribbon. it provides the commanded name ,a brief description of the command and a link for additional help. for more help hold mouse on the command and press f1

Universal tasks:

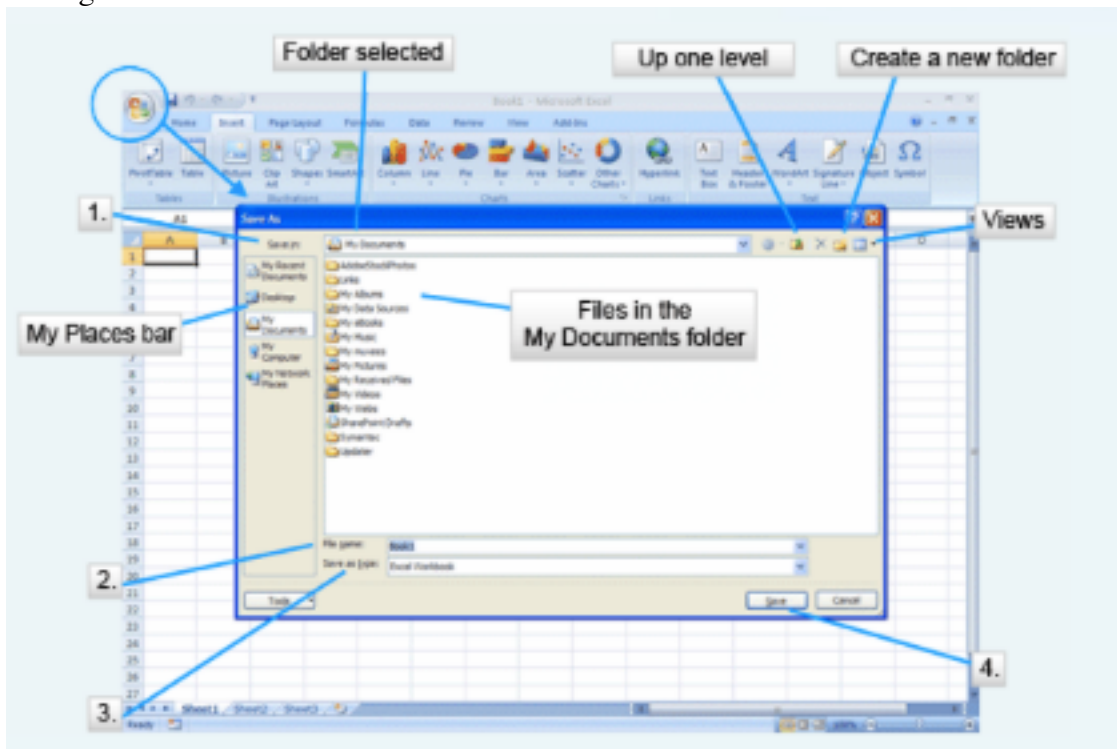
Manipulating files

- Creating new files
- Opening files
- Saving files
- Printing files

Manipulating documents

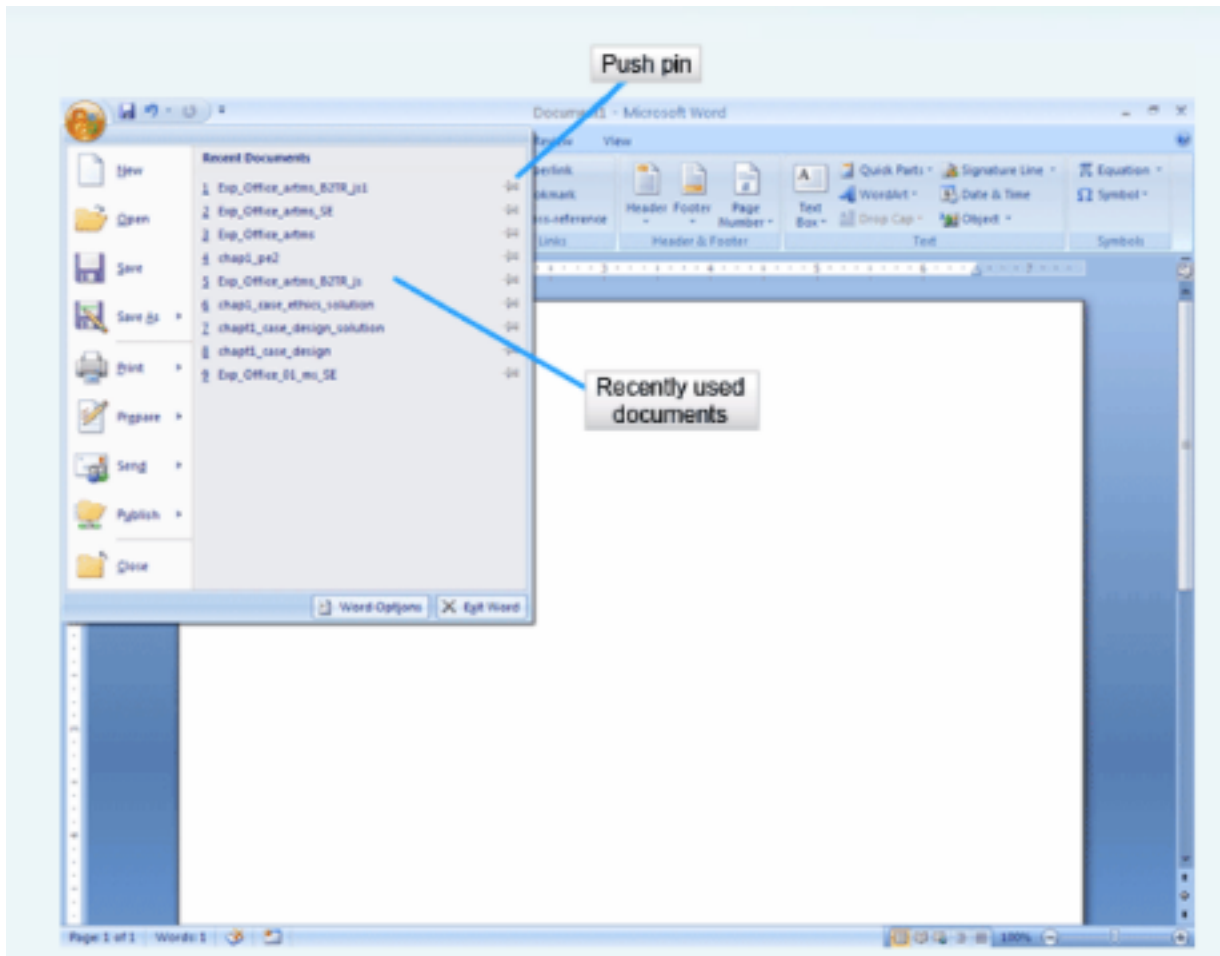
- Editing documents
- Formatting documents

Saving a file:



My Places Bar:

while in the save as menu you can change the My Places Bar to reflect the folders you use most often in Word etc.. select the folder you wish to put on the bar in the save inbox

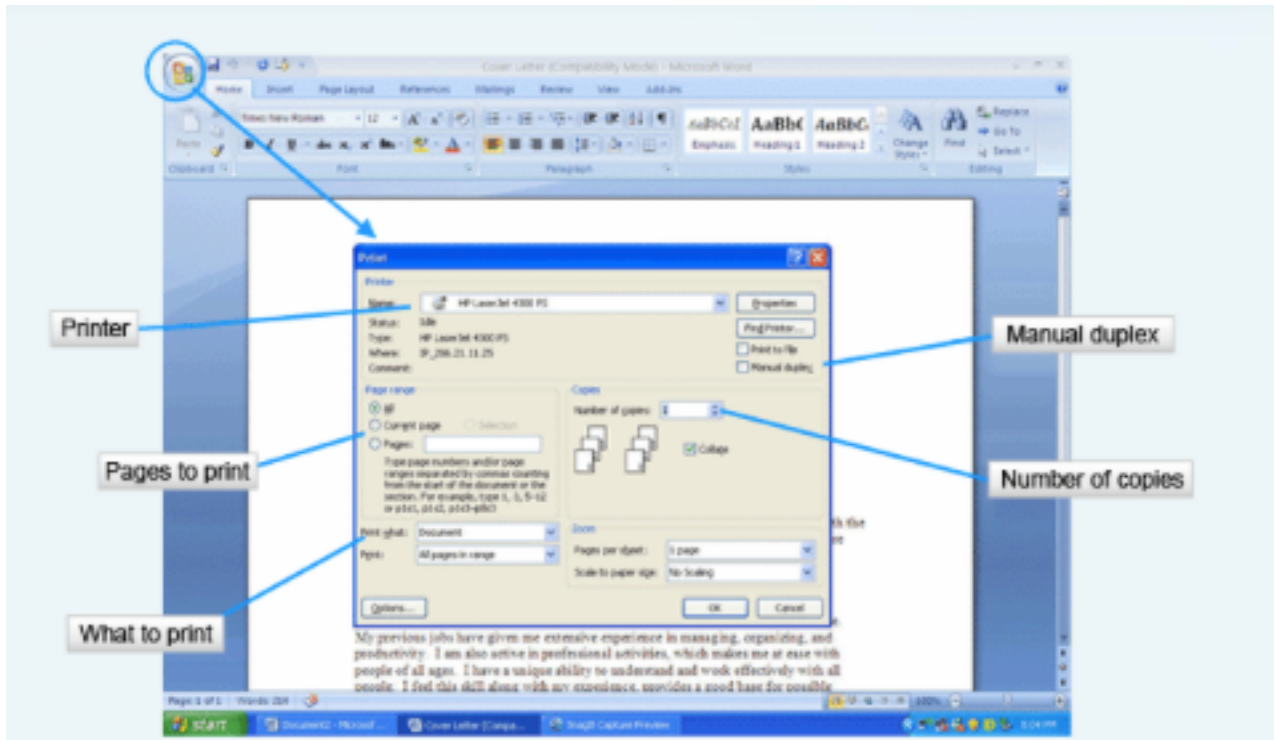


Preview a document:

Go to print preview and press preview

Print Dialog Box:

Access the print dialog box from the print preview view or you can select it directly from office menu

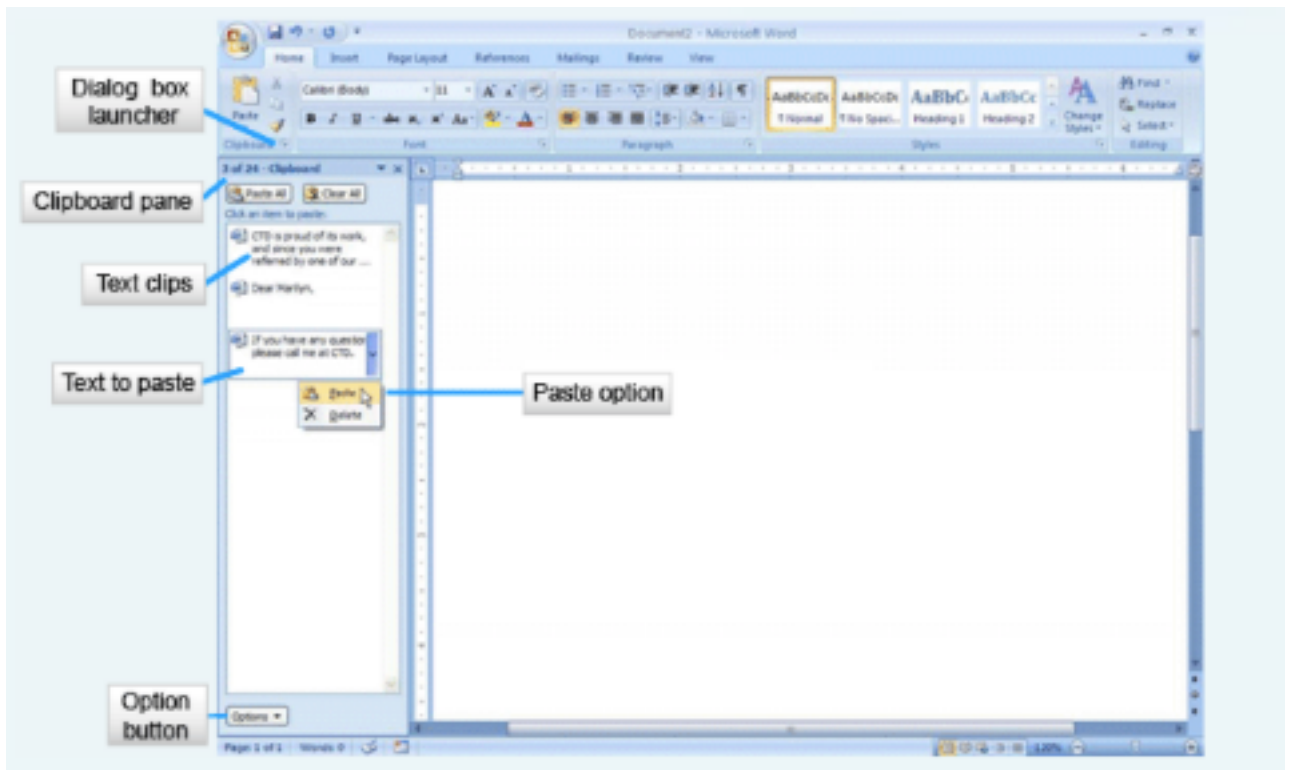


Basic Tasks:

Editing Documents		Formatting Documents
<ul style="list-style-type: none"> ▪ Selecting ▪ Inserting ▪ Overtyping ▪ Moving ▪ Copying ▪ Clipboard ▪ Finding ▪ Replacing 	<ul style="list-style-type: none"> ▪ Go to ▪ Undo ▪ Repeat ▪ Spelling ▪ Grammar ▪ Thesaurus ▪ Research 	<ul style="list-style-type: none"> ▪ Font ▪ Format Painter

The ClipBoard:

Memory location stores up to 24 items to paste in the current file

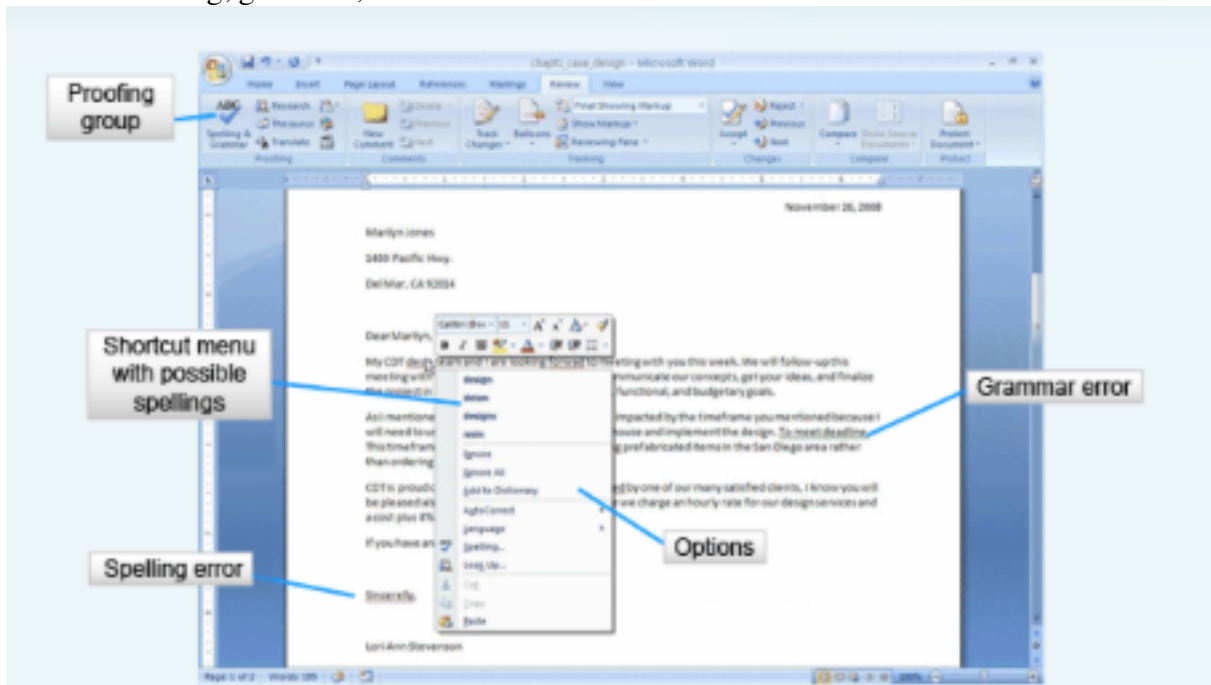


Find Command:

The editing group on the home tab contains the find and replace commands

Language tools:

Assists in spelling, grammar, research



Research:

Located in the review tab under the research option. the research pane allows you to

specify where to search and includes tools such as dictionary , encyclopedia, or internet sited for business and financial information

The office button provides commands that work with an entire document or file and displays by default in the title bar