

Output Devices

- ❑ Output basically means getting data out of the computer.

Monitor

Printer

Speakers

Headphones

Modem

Fax



Types of Monitor

□ Cathode Ray Tube (CRT)



□ Liquid Crystal Display (LCD)



Printers

- ❑ IMPACT PRINTERS uses pressure by physically striking the paper. Ex. Daisy wheel printers, line printers, dot matrix printers & band printers.
 - ❑ NON-IMPACT PRINTER does not apply pressure on the paper but instead produces character by using lasers, ink spray, photography or heat.
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Dot matrix printer



Laser printer



Inkjet printer

Storage Devices

- Storage devices are both input and output devices in one. A storage device is a place to keep data that has been processed so that it can be retrieved at a later time to be used again.

Hard Disk

Floppy Disk

CD's, DVD's

Magnetic Tape

Flash Memory, Jump Drive

Floppy Disk

- ❑ The most common secondary storage device
- ❑ 3.5" disk – 1.44MB



High-Capacity Floppy Disks

- ❑ Floppy disk cartridges
- ❑ 3 ½ inches in diameter
- ❑ Stores more information
- ❑ Zip disks



Hard Disk Drive or Hard Disk

- ❑ Made of rigid materials unlike floppy disks
- ❑ Holds a greater amount of data



Optical Discs

- ❑ A standard part of modern desktop machines, especially used for multimedia purposes and preferred in loading applications.



Kinds

- ❑ Blue Ray Disk – 40G
 - ❑ Digital Versatile Disk
 - DVD-R – write once, 3.95G
 - DVD RW – rewritable, 3G
 - Single Layer and Double Layer
 - ❑ Compact Disk
 - CD-R – write once, 650MB
 - CD-RW – rewritable, 700MB
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Optical Drives

- ☐ CD-ROM read CDs
 - ☐ CD-Writer read/write CDs
 - ☐ DVD-Combo read/write CDs,
read DVD
 - ☐ DVD Writer read/write CDs
read/write DVDs
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Other Secondary Storage

❑ Solid-State Storage

- No moving parts
- Flash memory cards



- USB flash drive~



Parts that Build Up A System Unit

- ☐ Casing or cover
 - ☐ Power Supply
 - ☐ Motherboard
 - ☐ Microprocessor
 - ☐ Memory
 - ☐ Video Card
 - ☐ Sound card
 - ☐ Floppy disk drive
 - ☐ Hard disk drive
 - ☐ CD-ROM drive
 - ☐ MODEM
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Casing or cover

- ❑ The box or outer shell that houses most of the computer, it is usually one of the most overlooked parts of the PC.
 - ❑ Protects the computer circuits, cooling and system organization.
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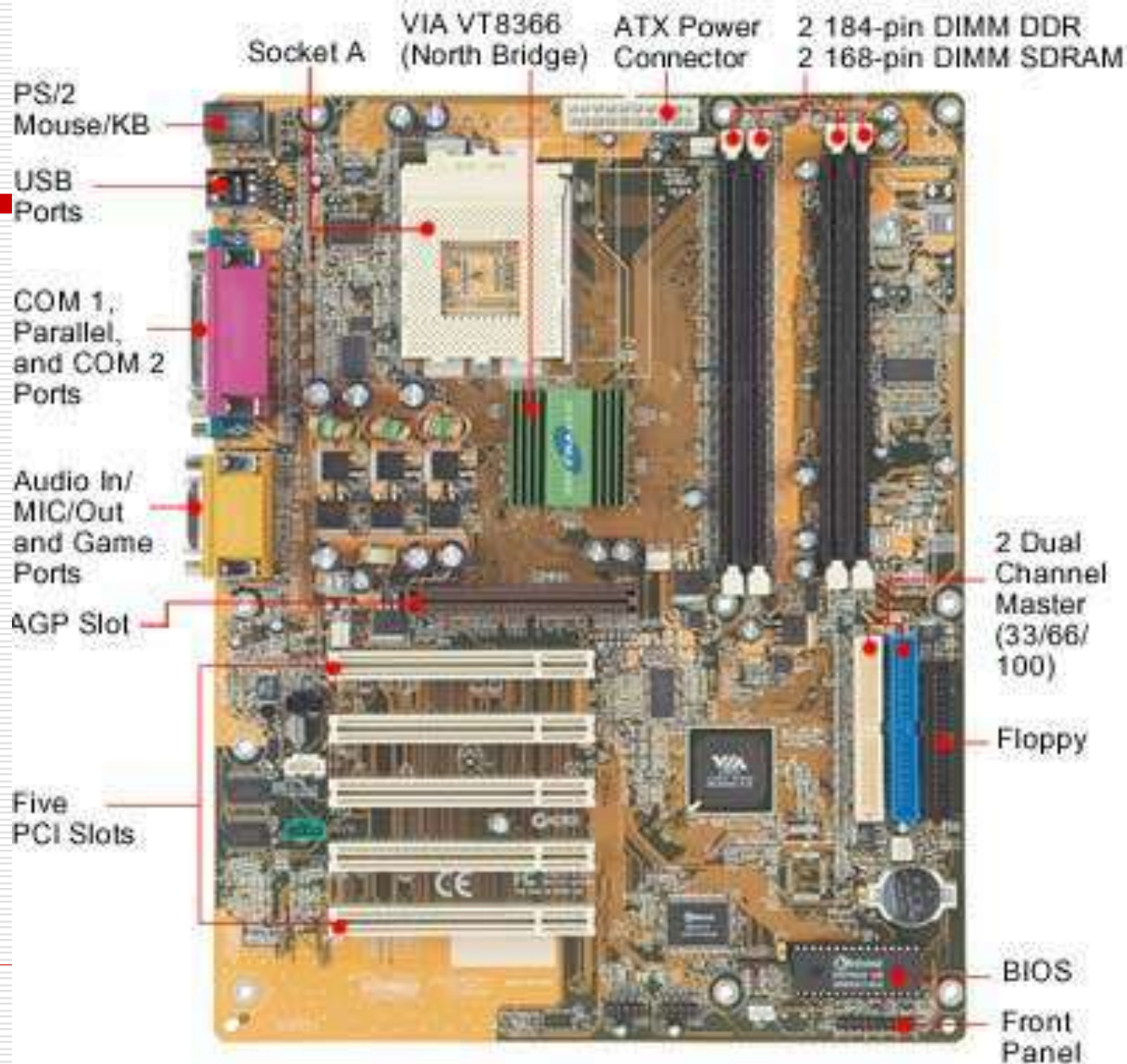
Power Supply

- ❑ Responsible for powering every device in your computer.
- ❑ Parts of a Power supply
 - Disk drive connectors
 - Motherboard connector
 - Power supply fan
 - Power switch
 - Input voltage selector
 - Cover
 - Power plugs receptacle



Motherboard

- ❑ The physical arrangement in a computer that contains the computer's basic circuitry and components.
 - ❑ Components are:
 - Microprocessor
 - (Optional) Coprocessors
 - Memory
 - Basic Input/Output System (BIOS)
 - Expansion Slot
 - Interconnecting circuitry
-



Expansion Slots

- ☐ Graphic cards
 - ☐ Sound cards
 - ☐ Modem cards
 - ☐ Network interface cards/network adapter
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Software

- ❑ Instructions that tell the computer how to process data into the form you want.
 - ❑ Software and programs are interchangeable.
 - ❑ Two major types:
 - System and Applications
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2 Kinds of Software

1. ~~System Software~~ enables the application software to interact with the computer hardware.
 - Operating Systems are programs that coordinate computer resources, provide an interface between users and the computer; and run applications.
 - Utilities perform specific tasks related to managing computer resources.
 - Device drivers are specialized programs designed to allow particular input or output devices to communicate with the rest of the

Functions of a System Software

- ❑ Managing resources (memory, processing, storage, and devices like printer).
- ❑ Providing user interface
- ❑ Running applications



Operating System Software

- ❑ Directs all the activities and sets all the rules for how the hardware and software will work together.

Examples would be:

DOS, Windows 95, 98, ME, NT, XP,
Vista, Windows 7

Unix, Linux,

MAC system OS 6,7,8,9,10

Command Line Operating Systems

DOS is an example of a command line operating system.

On the next slide, Notice that there are no:

- ☐ Icons (pictures)
 - ☐ Colors
 - ☐ Mouse Pointer
 - ☐ Buttons
 - ☐ You have to memorize commands in order to use this text based operating system.
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```
C:\WINDOWS>dir h:
```

```
Volume in drive H is USERS  
Directory of H:\TLC FILES
```

```
      <DIR>  
      <DIR>  
.  
..  
HUMANRES SHW      317,952  09-14-01  8:12a Human resources Activity 2.shw  
HUMANRE0 SHW      196,608  09-17-01  2:08p Human Resources Activity 5.shw  
HUMANRE1 SHW      135,680  09-18-01  1:46p Human Resources Job Application.shw  
CASHIER1 SHW      126,976  09-20-01  9:00a Cashiering Lesson 1.shw  
THELORAX WPD         3,862  08-29-01  2:56p The Lorax.wpd  
TLCDISCL SHW      167,424  09-19-01 10:57a TLC Disclosure.shw  
KASH      SHW      105,472  09-19-01  1:32p KASH.shw  
ETHICS    SHW       94,208  09-19-01  1:44p Ethics.shw  
CASHIER0 SHW      200,192  09-20-01  3:26p Cashiering Lesson 2.shw  
COMPUTER SHW      140,800  09-21-01 11:05a computer basics.shw  
      10 file(s)      1,489,174 bytes  
      2 dir(s)       12,395.44 MB free
```

```
C:\WINDOWS>_
```



Operating Systems: GUI

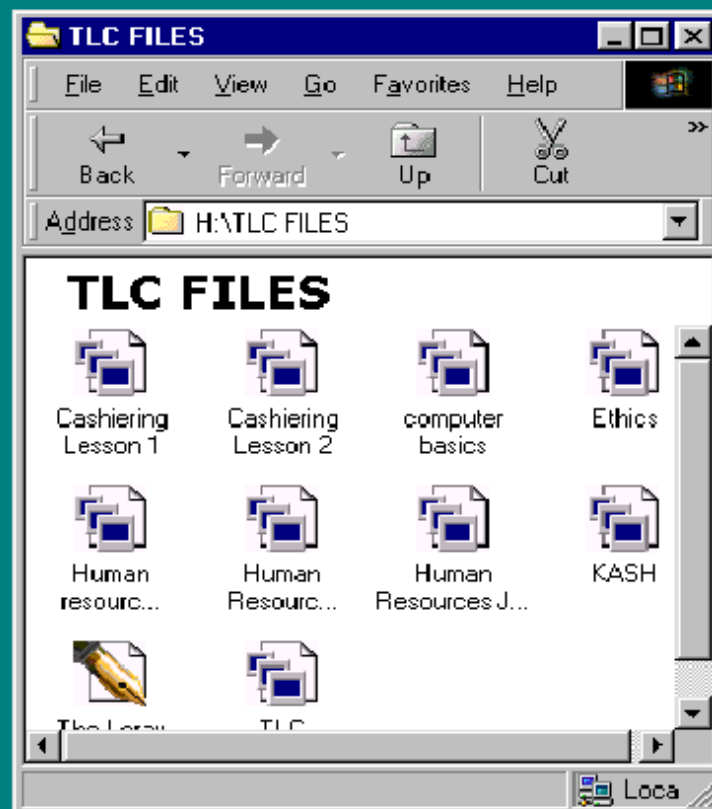
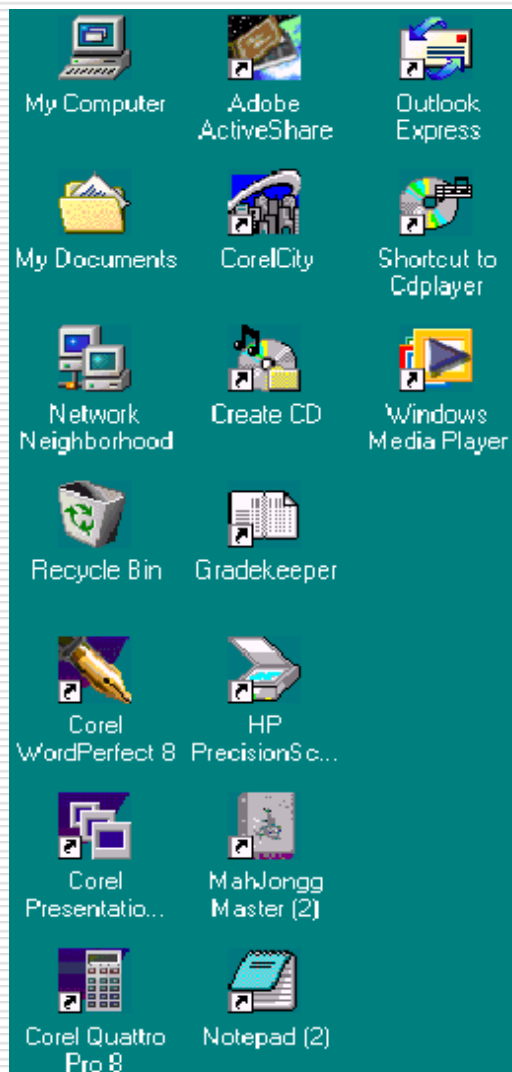
□ GUI stands for Graphical User Interface

Uses pictures (icons) to represent files, folders, disk drives, modems, printers, etc.

GUI's were created to make using a computer easier, more interesting, non-threatening to inexperienced users.

A mouse allows users to point at something and click to make it work. With command line you have to have all of the commands to make your programs work.

Here is an example of a GUI



Application Software

- Programs that work with operating system software to help the computer to do specific types of work.
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Application Software

- There are six basic types of application software...

Application Software

1. Business software: word processors, spreadsheets, and database programs.
 2. Communication software: allows computers to communicate with other computers: fax software, Novell NetWare, AOL, Modem Software.
 3. Graphics software: software that allows users to create and manipulate graphics...Photoshop, Print Shop, etc.
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Application Software

4. Education and Reference software: Programs that help teach new material and ideas, and programs that can be used to find information...Encarta, Worldbook Encyclopedia, Jumpstart Kindergarten, MicroType.
 5. Entertainment and Leisure software...Warcraft, Age of Empires, Barbie Design Center, Mrs. Pacman, Solitaire
 6. Integrated software: Combines several types of software into one program or package...Quicken (Spreadsheet/data base/communications/reference) or Print Shop (Graphics/Word processor).
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