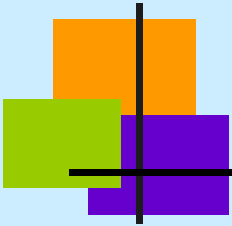




Information System Lecture Two

Hardware for Information Systems





Computer and Communications Hardware

- Computer hardware
 - Input devices
 - Output devices
 - Primary storage
 - Secondary storage
 - Central Processing Unit (CPU)
- Communications hardware
 - Network devices

Input & Output Devices

- An **input device**
 - accepts data from outside the computer and converts it into an electronic form the computer can understand.
 - **keyboard, mouse, scanner, digital pen, OMR, MICR and IVR.**
- An **output device**
 - converts data from an electronic form inside the computer to a form that can be used outside the computer.
 - **screen, monitor, printer, and fax.**





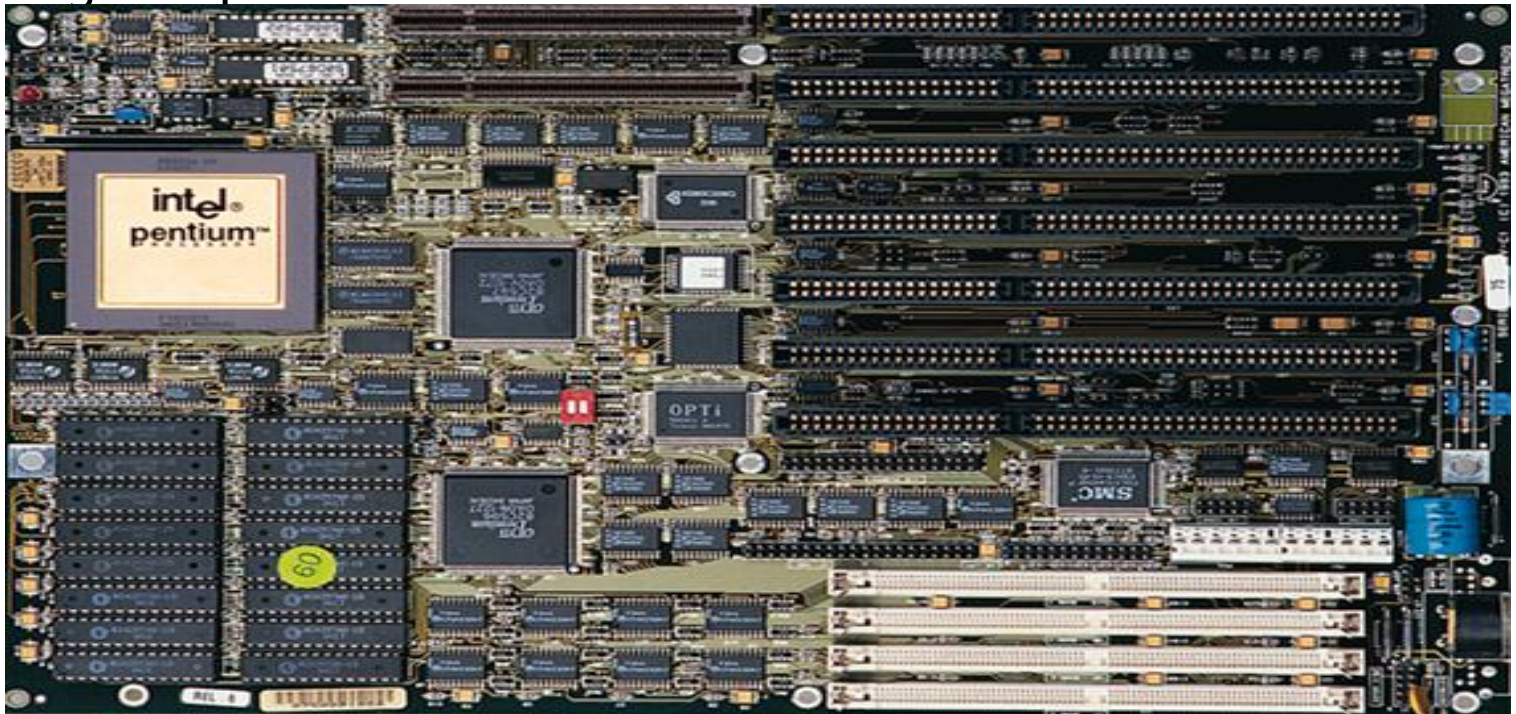
Storage

- **Primary storage**
 - also called internal storage, is the “memory”, or **RAM**, of the computer.
 - Temporary
- **Secondary storage**
 - Data is usually transferred to and from primary storage.
 - Examples include hard disks, floppy disks, ZIP disks, CDROMs, and DVDs.



Central Processing Unit (CPU)

- The CPU, or processor, carries out the instructions of the program. It contains circuits that perform arithmetic and logical operations.



Types of Computer Systems

- Personal Computers
 - Desktop, Laptop, Handheld, Workstations
- Multiple-user computer systems
 - Minicomputer
 - Typically between \$5,000 and \$200,000
 - Mainframe computer
 - Typically between \$100,000 and \$10,000,000
 - Both are multi-user environments

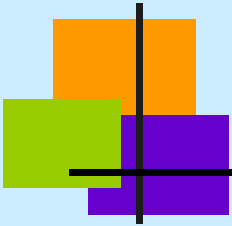




Types of Computer Systems (cont'd.)

- Networked computer systems
 - Many computers connected to a network which is used by many people at one time.
 - **Servers** – provide services to other computers on the network.
 - **Clients** – a user's workstation connected to the network.
 - **Client-server computing** – servers and clients used cooperatively.

Software for Information Systems





Types of Software

- **Application software**
 - designed for specific computer applications for a business or organization.
- **System software**
 - designed to make computers usable. Also known as an **operating system**.
- **Communications software**
 - designed to permit computers to “talk” to each other.



Personnel for Information Systems

Information System Fundamentals



Users and Operating Personnel

- Users
 - Supply data input
 - Receive output
- Operating personnel
 - Perform technical functions such as
 - Manage networks
 - Run software
 - Pass output to users



Procedures for Information Systems

Information System Fundamentals



Types of Procedures

- Two main types
 - First tells people how to use and operate the system under normal circumstances.
 - Second tells people what to do if the system does not function normally.
- **Documentation** is written instructions on the use and operation of the system.