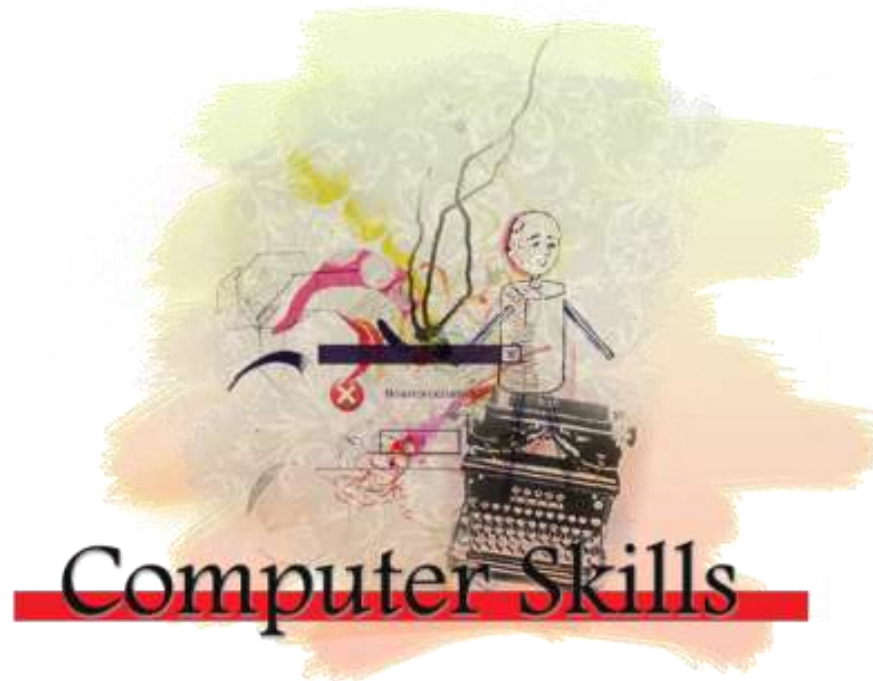# Computer component and their functions

Identifying specialized input/output devices

Identifying specialized input devices

- Game Controllers
- Digital Cameras: Still and Video
- Scanners
- Graphics Tablets
- Bar Code Reader
- Radio Frequency ID(RFID)
- Touch Screen
- Sensors and Probes
- Remote Controls
- Security Devices
- Specialized Input Devices

Computer Skills

Identifying specialized output devices

- Projectors

- Plotters

- Voice synthesizers

- Control devices/Robots

Computer Skills

Lesson Four

Connecting Devices to A Computer

- Peripheral connected to the back of system unit through a port

- Port is a general term for the connectors into which wires are plugged

- Most peripheral devices now use USB connections

Computer Skills

Connection Devices

- Universal Serial Bus
  - Designed to accept a variety of devices (keyboard, mouse, printer,…..)
  - Provide some amount of electrical power
  - Facilitates assembling and moving a computer
  - Versions of USB
    - USB 1.1
    - USB 2.0(newer computers, 40 times faster)

Connection Devices

- Universal Serial Bus
  - Types of USB
    - Type A USB (mouse: key for one orientation)
    - Type B USB (digital camera: no connecting wire)

B

Computer Skills

Connection Devices

- USB Hub

  – Used to provide multiple USB ports(up to 127)

  – Hot-swappable : safely plug/remove without shutting down the host computer

  – Some of them Provide

    additional power

Computer Skills

Connection Devices

- Wireless Devices
  - Not directly wired to system unit (keyboard, mouse)
  - Use radio waves or infrared light (receiver plugged with USB)
  - Required batteries replaced periodically
  - Others use infrared light instead of radio waves
  - Standards:
    - *Wireless fidelity(WiFi)*
      enables computers and printers to be networked together
    - *Bluetooth* (very short distances), used to connect:
      - cell/smartphones to hands free headsets
      - MP3 players and headphones
      - Some Wireless keyboard and mice
      - If no built in Bluetooth a dongle is required

Computer Skills

Connection Devices

- FireWire
  - Apple computer version of IEEE for high performance serial bus
  - Similar to USB
  - Advantage: use with device require very high rates of data transfer(digital video camera)
  - Transfer rate: 400 megabits per second(USB 2.0), now 800 megabits per second

Computer Skills

Connection Devices

- Small Computer System Interface (SCSI)
  - Older connection method (1986)
  - Recent speeds 1.280 megabit per seconds
  - Need device called a terminator at the end of the bus
- Device manager
  - Provide list of internal and external devices
  - Tells if any of them having problem
  - Open from control panel

Computer Skills