DHRM

GOLDEN HUMANS

1006 - DMIS

MANAGEMENT INFORMATION SYSTEM

TRENDS IN COMPUTER HARDWARE

The system unit

A. Digital data representation
B. The System Unit
C. Motherboard
D. The CPU
E. Buses
F. Memory
G. Ports and Connecters
H. Improving Performance

Digital Data Representation

- **Bit** – The smallest unit of data that a binary computer can recognize (a single 1 or 0)
- **Byte** = 8 bits
- Byte terminology used to express the size of documents and other files, programs, etc.
- Prefixes are often used to express larger quantities of **bytes: kilobyte (KB), megabyte (MB), gigabyte (GB), etc.**

• 1 Bit = Binary Digit	• 1024 Terabytes = 1 Petabyte
• 8 Bits = 1Byte	• 1024 Petabytes = 1 Exabyte
• 1024 Bytes = 1 Kilobyte	• 1024 Exabytes = 1 Zettabyte
• 1024 Kilobytes = 1 Megabyte	• 1024 Zettabytes = 1 Yottabyte
• 1024 Megabytes = 1 Gigabyte	• 1024 Yottabytes = 1 Brontobyte
• 1024 Gigabytes = 1 Terabyte	• 1024 Brontobytes = 1 Geopbyte

The System Unit

The main case of the computer

- Houses the processing hardware for a computer
- Also contains memory, the power supply, cooling fans, and interfaces a connect peripheral devices
- Houses the drive boys in which storage devices (hard drives, DVD drives, etc.) are located

MOTHERBOARD OR SYSTEM BOARD

The main circuit board inside the system unit

- All computer components must connect to the motherboard
- External devices (monitors, keyboards, mice, printers) typically connect by plugging into a port exposed through the exterior of the system unit

.

The CPU

Circuitry and components package together and attached to the mother board

- Does the vast majority of processing for a computer?
- Different CPUs typically designed for desktop PCs, portable PCs, or servers
- Personal computers CPUs often made by Intel or AMD

- CPU clock speed: One measurement of processing speed
    - Measured in megahertz (MHz) or gigahertz (GHz)
- Number of Cores
- Processor Architecture
- Cache Memory
- Manufacturer

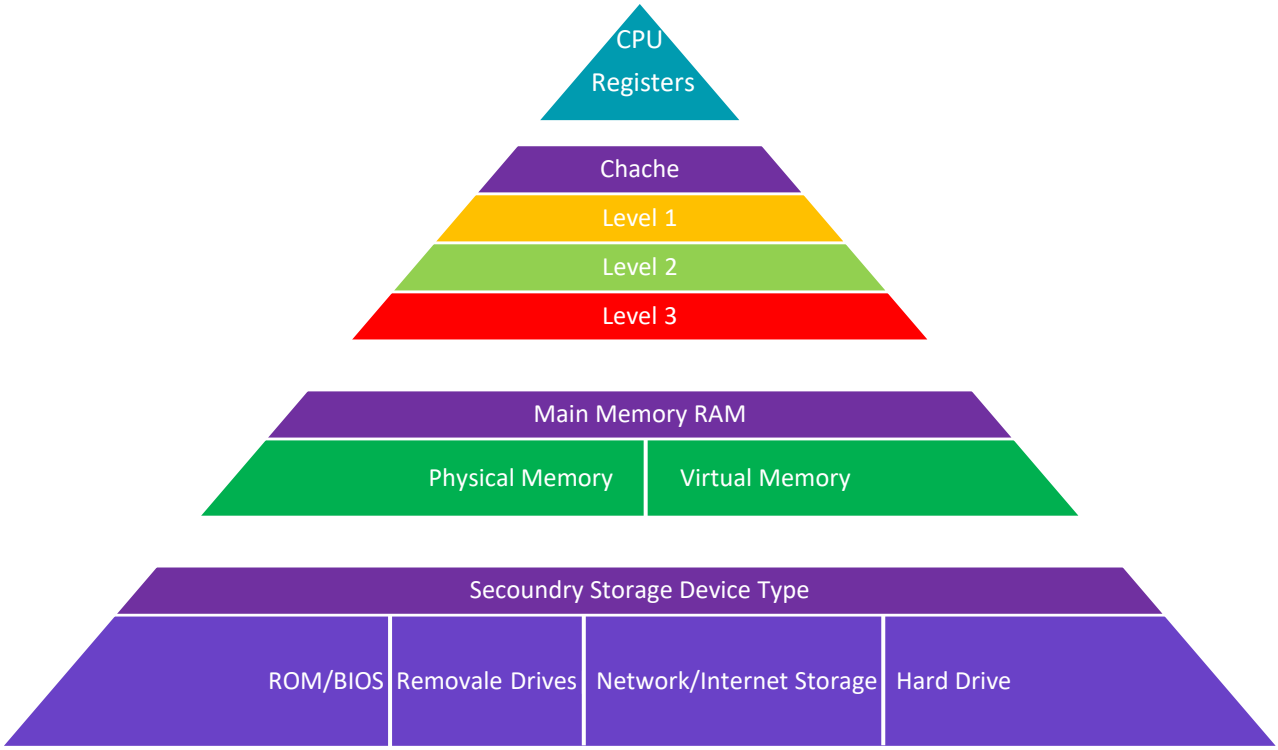
BUSES

- Connecter and plugs, and tera with any devices

COMPUTER MEMORY

- Computer memory is the storage space in computer where data is to be processed and instructions required for processing are stored.

COMPUTER MEMORY HIERARCHY



Ports and Connectors

Port: A connector on the exterior of a PC's system unit to which a device may be attached

- Serial
- Parallel
- **RJ45 (Network)**
- PS / 2 (Keyboard / Mouse)
- **Video Out (DP, HDMI, DVI, VGA)**
- RJ11 Modem / Phone
- **USB (2.0, 3.x, Type C**
- Fire Wire
- MIDI
- Game
- eSATA
- **Audio (Mic in, Speaker out etc. and Audio Combo)**

IMPROVING THE PERFOMENCE OF YOUR DEVICES

Perform system maintenance

- Scan for viruses and spyware
- Uninstall unnecessary programs properly
- Removing unnecessary from the startup list
- Delete temporary files
- Empty the recycle Bin
- Arrange files efficiently
- Consider placing large files on external storage devices or Cloud
- Remove duplicate files

STORAGE

- Storage System
- Secondary Storage Devices
- Remote Storage Systems
- Other Types of Storage Systems

STORAGE SYSTEM CHARACTERISTICS

- Can be internal, external, or remove
- Are nonvolatile
- Usually use random access; can be sequential

SECOUNDRY STORAGE DEVICES

- **HDD**
- **SSD**
- **Optical Disk**
- **Flash Memory Systems**

REMOTE STORAGE SYSTMS

- Remote storage refers to using a storage device that is not connected directly to the user's computer; instead, the device is accessed through a local network or through the Internet
- Network Storage: Using a remote storage device via a local network.
- Remote storage device accessed via the internet are often referred to as online storage or cloud storage (E.g., OneDrive, Google Drive, Drop Box etc.…)
    - Growing in importance because more and more applications are web-based
    - Increasingly being used for backup purposes

OTHER TYPES OF STORAGE SYSTEMS

- Smart card; Credit card-sized piece of plastic that contains some computer circuitry (processor, memory, and storage)
    - Store small amount of data (about 64KB or less)

- Magnetic tape consists of plastic tape coated with a magnetizable substance that represents the bits and bytes of digital data, similar to magnetic hard disks.
    - Although magnetic tape is no longer used for everyday storage applications because of its sequential-access property, it is still used today for business data archiving and backup.
    - One advantage of magnetic tape is its law cost per terabyte.

INPUT AND OUTPUT

- Input
    - Mouse
    - Keyboard
    - Scanner
    - Cameras
- Output
    - Monitor
    - Speaker

SOURCE DATA AUTOMATION

Capturing data electronically from a source document or entering data directly into a computer at the time and place the data is generate

HOLOGRAPHIC PROJECTION

WHAT IS HTML

- Standard for **H**ypertext **M**arkup **L**anguage
- Based on tags.
    - *So, it is called as a Markup Language*
- HTML document can be named as a Web page.
- It contains HTML Tags (HTML Elements) & Plain Text.
- The file extension is .html
- The latest version is HTML 5

```
<html>
    <head>
    [contains the information which are needed to run the html file properly.]
    </head>
    <body>
    [contains the content of the html files]
    </body>
</html>
```

<title></title>

Used to add the title of the html page

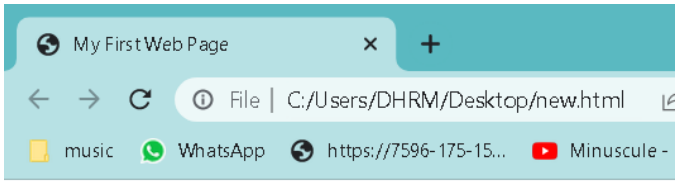
<style></style>

Used to add style settings for html elements.

<script></script>

Used to add client-side scripts to the html file.

Common tags in HTML header




```
<html>
<head>
    <title>My First Web Page </title>
</head>
<body>
</body>
```

<img> , <table>, <hr>, <tr>, <input>, <from>, <b>, <i>, <front>

TAGS AND ATTRIBUTES

```
<html>
    <head>
        <title>My First Page</title>
    </head>
    <body>
    <h1 align=”center”> ITRC </h1>
    </body>
</html>
```