

The logo consists of a light blue square with a darker blue cross-like shape in the center, positioned in the top right corner of the slide.

GLS UNIVERSITY

COMPUTER FUNDAMENTALS &  
INFORMATION TECHNOLOGY.  
UNIT– I

# Classification of Computers

- ✓ Micro
- ✓ Mini
- ✓ Mainframe
- ✓ Super Computers
- ✓ Mobile Computers

# Micro Computer

- ♦ A microcomputer is a complete computer on a smaller scale and is generally a synonym for the more common term, personal computer or PC.
- ♦ A computer designed for an individual.
- ♦ A microcomputer contains
  - ♦ a microprocessor (a central processing unit on a microchip )
  - ♦ memory in the form of read-only memory and random access memory
  - ♦ I/O ports
  - ♦ a bus or system of interconnecting wires.

# Micro Computer

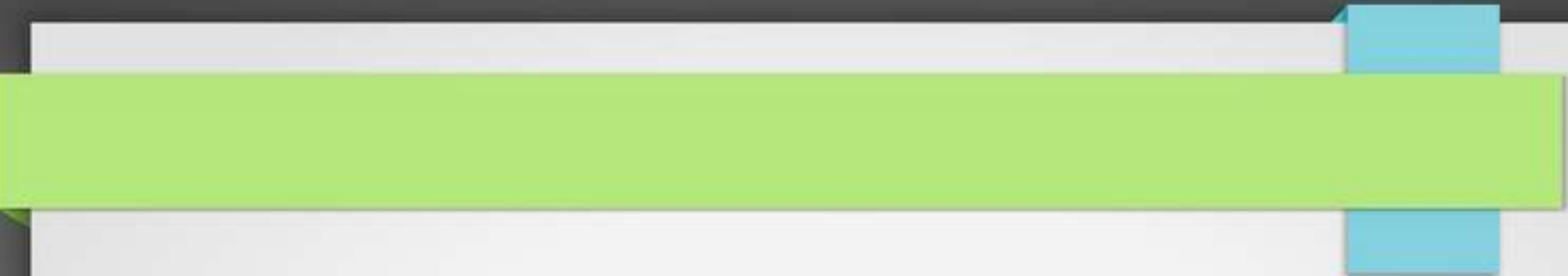
- They are cheap, compact and can be easily accommodated on a study table.
- It is smaller than Mini Computer, Mainframe Computer and Super computer.
- It has storage capacity up to Terabytes(TB)
- It is used in general purpose.
- It supports many higher level languages, multimedia, graphics, 3D graphics and games.
- IBM, Hewlett Packard, Apple, Compaq are some well known companies which manufacture microcomputers.

# Micro Computer



# Mini Computer

- These are also small general purpose system. They are generally more powerful and more useful as compared to micro computer. Mini computer are also known as mid range computer or Child computer.
- Application :- Departmental systems, Network Servers, work group system.
- Minicomputers fall in the range between Mainframes and Microcomputers.
- Minicomputers are used for scientific and engineering computations, business-transaction processing, file handling, and database management, and are often now referred to as small or midsize servers.

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- They have less memory & storage capacity than mainframe computers but they grew to have relatively high processing power and capacity than microcomputer.
  - They offer limited range of peripherals.
  - Limited range of software can be used by them.
  - The end users can directly operate it.
  - They are not very sensitive to the external environment and hence are more generalized.
  - They are used for data processing.

# Mini Computer





# Mainframe Computer

- ♦ Mainframe is a large, expensive, powerful computer that can handle hundreds or thousands of connected users simultaneously.
- ♦ Mainframe store tremendous amount of data, instructions, and information.
- ♦ A data processing system employed mainly in large organizations for various applications, including bulk data processing, process control, industry and consumer statistics, enterprise resource planning, and financial transaction processing.

# Mainframe Computer

- ♦ Mainframes process more than 83 % of transactions around the world.
- ♦ Mainframe also can act as **servers** in a network environment.
- ♦ Mainframes use operating systems, most of which are based on Unix, and a growing number on Linux.
- ♦ They are used where large amount of data are to be processed.
- ♦ Examples are: IBM 4300 series, IBM Enterprise, System/9000 series
- ♦ Over the years they have evolved from being room-sized to networked configurations of workstations and servers that are an extremely competitive and cost effective platforms for e-commerce development and hosting.

# Mainframe Computer



# Super Computer

- A Super computer is the **fastest, most powerful** computer and the **most expensive**. It has high storage capacity in Petabyte (PB).
- It has number of CPUs to make more speed.
- The fastest supercomputers are capable of processing more than 135 trillion instructions in a single second.
- These computers can store more than 20,000 times the data and information of an average desktop computer.
- Application requiring complex, sophisticated mathematical calculations use supercomputers.
- **Large scale applications** in medicine, aerospace, automotive design, online banking, weather forecasting, nuclear energy research, and petroleum exploration.

# Super Computer

- The world's most powerful supercomputer, Summit, at Oak Ridge National Lab is shown below.
- The machine captured that crown in June last year, reclaiming the title for the US after five years of China topping the list.







# PRATYUSH

India's Fastest & First Multi-Petaflops  
Supercomputer to Improve Weather & Climate Forecasts

# Super Computers



# Mobile Computers

- A mobile computer is effectively any computing device not constrained in its location to a desktop or data center.
- In recent years the variety of mobile computing devices available has rapidly increased.
- ♦ A Mobile computer is a personal computer you can carry from place to place.
- ♦ A Mobile device is a computing device small enough to hold in your hand.



# Mobile Computers

- Mobile Computers includes pocket-sized to full-alpha-keyboard hand-held devices, industrial PDAs, pistol-grip terminals, Vehicle Mounted computers
- The most popular type of mobile computer is the notebook computer.
- Mobile computing involves mobile communication, mobile hardware, and mobile software.

# Mobile Computers



# Mobile Computers

