



SNS COLLEGE OF ENGINEERING

Kurumbapalayam(Po), Coimbatore - 641 107

Accredited by NAAC-UGC with 'A' Grade

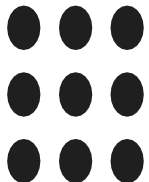
Approved by AICTE, Recognized by UGC & Affiliated to Anna University,
Chennai

Department of Information Technology

Computer Graphics

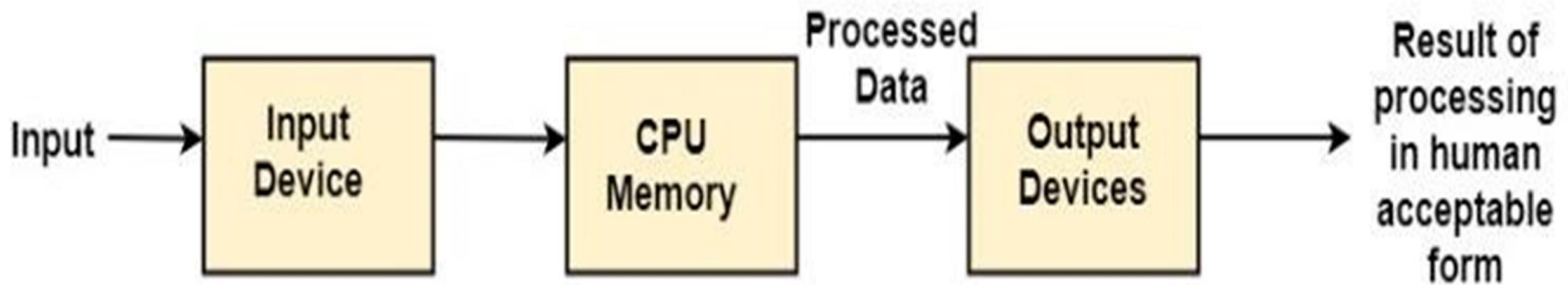
Unit 1 : INTRODUCTION TO COMPUTER GRAPHICS

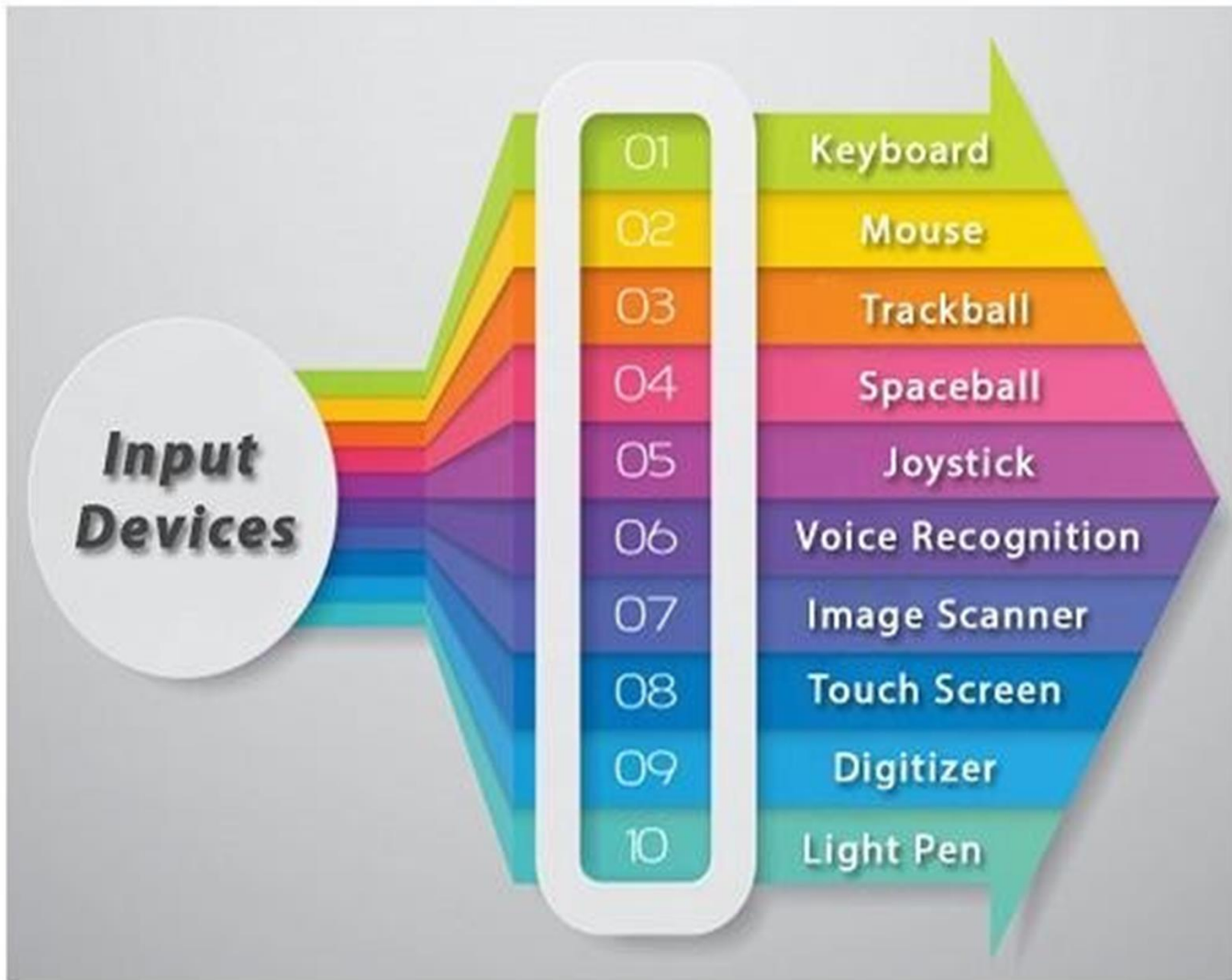
Topic : Graphics Input Primitives and Devices



INPUT DEVICES

- The Input Devices are the hardware that is used to transfer input to the computer.
- The data can be in the form of text, graphics, sound, and text.





Keyboard

- The most commonly used input device is a keyboard. A keyboard with
- 101 keys is called a QWERTY keyboard.

The keyboard has

- **Numeric Keys:** 0, 1, 2, 3, 4, 5, 6, 7, 8, 9
- **Alphabetic keys:** a to z (lower case), A to Z (upper case)
- **Special Control keys:** Ctrl, Shift, Alt
- **Special Symbol Keys:** ; , " ? @ ~ ? :
- **Cursor Control Keys:** ↑ → ← ↓
- **Function Keys:** F1 F2 F3....F9.
- **Numeric Keyboard:** It is on the right-hand side of the keyboard and used for fast entry of numeric data.





MOUSE

- Mouse is the most popular pointing device.
- A mouse can be used to control the position of the cursor on the screen, but it cannot be used to enter text into the computer.

Functions of the mouse:

- Clicking
- Double Clicking
- Right Clicking
- Dragging
- Scrolling



TRACKBALL

- Track ball is an input device that is mostly used in notebook or laptop computer, instead of a mouse.
- It can move two directions.



SPACEBALL

- A graphical input device that is based on a fixed spherical ball.
- It is similar to trackball, but it can move in six directions.
- It is used for three-dimensional positioning of the object.
- It is applicable in CAD applications .Animation is also done using space ball.





JOYSTICK

- Joystick is also a pointing device, which is used to move the cursor position on a monitor screen.
- The joystick can be changed in all four directions. The function of a joystick is similar to that of the mouse.
- It is mainly used in Computer Aided Designing (CAD) and playing computer games.



DIGITIZERS

- A digitizer is a machine that converts an analog object, image or signal into a digital (i.e. computer-readable) format.
- Suitable only for applications which required high-resolution graphics.
- Digitizer is also known as Tablet or Graphics Tablet as it converts graphics and pictorial data into binary inputs.



IMAGE SCANNERS

- An image scanner is a device that optically scans images, printed text, handwriting or an object and converts it to a digital image.
- There are three types of scanners available: drum scanner, flatbed, and handheld scanners.



LIGHT PENS

- Light pen is a pointing device similar to a pen. It is used to select a displayed menu item or draw pictures on the monitor screen.



TOUCH SCREEN

- It is a computer display screen that is sensitive to human touch.
- A touch panel is a piece of equipment that lets users interact with a computer by touching the screen directly.



VOICE SYSTEM

- Voice recognition(or voice system) is the ability of a machine or program to receive and interpret dictation or to understand and perform spoken commands.
- There are two variants of voice recognition – speaker dependent and speaker independent.

