Introduction to Information Technology

HUMAN DATA ENTRY DEVICES

Assignment by First & Second Bench

4   Input and Output Devices

4.1 Basic Introduction :

A computer interacts with the external environment via input-output (I/O) devices attached to it.

- Input device is used for providing data and instructions to the computer.

- After processing the input data, computer provides output to the user via output device.

4.2 Input Devices

- **I**nput devices allow users and other applications to input data into the computer, for processing.
- The data input to a computer can be in the form of text, audio, video, etc.
- Keyboard, Mouse, Digitizing Tablet, Joystick, Touchscreen, Scanner and so on are the examples of input devices.

- There are some devices that can be used both as Input and Output devices: Hard disk drive, USB drive, CD drive, DVD drive, Floppy drive etc.

- The input is provided to the computer using an input device akknd must be translated to a form that the computer can understand. The translation is done by the input interface of the input device.

Input devices can be classified as follows:

-Human Data entry devices
-Source Data entry devices

4.3 Human Data Entry Devices

Input devices that require data to be entered manually to the computer are known as human data entry devices.

- The data may be entered by typing or keying in, or by pointing a device to a particular location.

- Keyboard (Universal Input Device), Pointing devices like Mouse, Joystick, Digitizing Tablet and Pick devices like Light pen and Touch screen are HDED.

4.3.1 Keyboard

Features
- Keyboard is a common (universal) input device. It is provided along with the computer and easy to use.
- It is used for entering the text data by typing.
- When the data is being typed, the monitor (output device) displays the typed data.
- Design is similar to the standard typewriter. The modern keyboards are QWERTY keyboard.

Working of keyboard: When a key is pressed, keyboard interacts with a keyboard controller and keyboard buffer. The keyboard controller stores the code of pressed key in the keyboard buffer and informs the computer software and hence output is shown.

4.3.2 Pointing Devices - Mouse

Pointing devices are used for providing input to a computer by moving a device to point to a location on computer monitor.

Mouse is a small hand-held device having two or three buttons & a small wheel on its upper side. Mouse is also a commonly used input device.

- The data is entered by pointing the mouse to a location on the computer screen.

- Benefit of a mouse is that the curser moves with the motion of the mouse which makes us easy to select and choose commands from menus, dialog boxes, icons, etc.

- It is used extensively while working with graphics elements such as line, curve, shapes, etc.

Mouse can be classified as:

1. **Physical mouse**: Normal mouse which we use in our daily life. Contains two: left &right buttons & a wheel.
2. **Optical mouse**: Uses a Light Emitting Diode (LED) & a sensor to detect the movement of mouse.

Using a mouse:

- Pointing
- Left Click
- Right Click
- Double Click
- Drag and Drop

Track Ball: Same as physical mouse but contains a circular wheel.

4.3.3 Joystick

Joystick is a device commonly used for playing games. It is mainly used to control the speed of cursor and thus popular in games which involve in racing and flying.

4.3.4 Digitizing Tablet

Digitizing Tablet is an input device which is mainly used in Graphic Designing. It is an electronic flat tablet.

-The pen used in Digitizing Tablet seems like a simple pen but has an electronic head which corresponds to the movement of pen on the monitor.

- Different types of logos, drawings & **Digital Signature** can be made using Digitizing Tablet.

THE END

Thank You for Your Attention ☺