Chapter two

COMPUTER COMPONENTS

Isn't here any single part called the "Computer" .A computer is really a system of many parts working together. The physical parts, which you can see and touch, are collectively called *Hardware*. And *Software* refers to the instructions, or programs, that tell the hardware what to do. The illustration below shows the most common hardware in a desktop computer system. A laptop computer has similar parts but combines them into a single notebook- sized package.



Monitor 2- modem 3- system unit 4- mouse 5-speaker 6- Printer 7- keyboard



INPUT DEVICES

- 1-KEYBOARD
- 2- MOUSE
- 3- TRACKBALL
- 4- TOUCHPAD
- **5- TOUCH SCREEN**
- 6- OPTICAL SCANNER
- 7- DIGITAL CAMERA
- 8- LIGHT PEN
- 9- JOYSTICK
- 10-MICROPHONE

11-OPTICAL MARK RENDER (OMR) AND BAR RENDER CODE

١

lecture (1)

Chapter two

1- <u>KEYBOARD</u>

Keyboard is a set of keys that enables you to enter data into computer. It is the main input device of the computer. ... Keyboards are basically of two **types**: 1. QWERTY: QWERTY refers to the **type of keyboard** on a Standard English

- QWERTY Keyboards. Designed in the likeness of old typewriters with most common letters spaced apart, QWERTY is the most common keyboard layout. ...
- USB / Wired Keyboards. ...
- Numeric Keypads. ...
- Wireless Keyboards. ...
- Bluetooth Keyboards. ...
- Magic Keyboards. ...
- Backlit Keyboards.







2- <u>MOUSE</u>

One of pointing devices, these moves the cursor (Mouse, Trackball, touchpad) these may have buttons as well. The mouse is used to move the pointer around the screen.

There are many types of mouse, the most important of them:-

- 1- Mechanical mouse: Houses a hard rubber ball that rolls as the mouse is moved. Sensors inside the mouse body detect the movement and translate it into information that the computer interprets
- **2-** . **Optical mouse:** Uses an LED sensor to detect tabletop movement and then sends off that information to the computer for merry munching
- **3-** . **Infrared (IR) or radio frequency cordless mouse:** With both these types, the mouse relays a signal to a base station wired to the computer's mouse port. The cordless mouse requires power, which comes in the form of batteries.
- **4- A mouse with many buttons:** The extra buttons can be programmed to do specific things, such as navigate the Web or turn pages when you're reading a document. The typical button-infield mouse has about five buttons.
- **5- Stylus mouse:** Another mouse mutation enjoyed by the artistic type is the stylus mouse, which looks like a pen and draws on a special pad.
- 6- Cordless 3-D mouse: This kind of mouse can be pointed at the computer screen like a TV remote.



lecture (1)

3- <u>TRACKBALL</u>:

Like an upside-down mouse. Rather than roll the mouse around, you use your thumb or index finger to roll a ball on top of the mouse. The whole contraption stays stationary, so it doesn't need a lot of room, and its cord never gets tangled.



4- <u>TOUCHPAD</u>:

It is a touch sensitive surface with an area of several square centimeters that can be used in place of the mouse by moving a finger on this surface and it is a tool spread in laptops and comes as a fixed part in laptops and can come as a part can be linked and separated from the computer by an outlet USB.



5- TOUCH SCREEN :

This screen gives the user the ability to control the computer by touching the finger directly or through a pen-like tool.



lecture (1)



6- OPTICAL SCANNER COMPUTER

Input device that uses a light beam to scan codes, text, or graphic images directly into a computer or computer system. Bar-code scanners are used widely at point-of-sale terminals in retail stores.





7- DIGITAL CAMERA :

Digital cameras are used to enter visual data, whether (image) or moving (video). There is what is known as a web cam and used to communicate on the Internet by transferring instant pictures between two or more callers





WEB CAMS

Ever since it was invented, the Web has become increasingly interactive. You can now use a small digital movie camera (a Web cam) mounted on the PC monitor to allow two-way communication involving not just text Communication but sound and video communication as well.

8- LIGHT PEN:



It allows the user to point to displayed objects, or draw on the screen, in a similar way to a touch screen but with greater positional accuracy.



9- JOYSTICKS:

Is used primarily at workstations that can display dynamic graphics, they can also used to play video games.

Many games require a joystick for the proper playing of the game. There are many different types, the more sophisticated respond to movement in 3 axis directions, as well as having a number of configurable buttons. Like most things in life you get what you pay for with joysticks and it is worth investing in a good, strongly constructed model, especially bearing in mind that children will hammer these devices whilst playing games



10- <u>MICROPHONE</u>:

Used to hear the sounds generated by multimedia programs. Some speakers have. The amplifier is maximize the audio signal coming from the computer and increases the clarity of sound.



11-OPTICAL MARK READER (OMR) AND BAR READER CODE

The first is used for the rapid entry of specific data such as identity cards for persons and fingerprints, and the second is used for entering and reading information about products in the markets and stores



