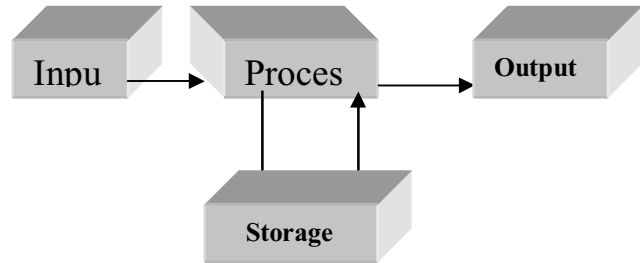


Hardware (22/11/02)

What is a computer system?

A computer system is made up of 4 things :

A computer system makes up a computer and makes it run these input devices are things like a mouse and a keyboard a output devices are things like speakers a monitor and a printer. The processor is a 2-way system it can output Information and you can input information.



Graphics tablet

The graphics tablet is a flat pad, which the user can write or draw on with a device similar pen called a stylus. The surface of the pad is sensitive to the position of the stylus and the stylus itself is sensitive to the pressure applied by the users the stylus is moved across the pad the movement is translated to a drawing on the computer monitor.

Sound sampler

Sound sampler is when you can record a piece of music or voice and edit it or you can mix other pieces of music with others.

Monitors

The computer monitor or VDU (visual display unit) works by cathode ray tubes (CRTs) contain an electron gun at the back of the tube which fires electrons at phosphor dots coating the inside of the screen. When struck by electrons the phosphor dots glow to give colours.

Computer input device advantages and disadvantage

device	Advantage	Disadvantage
Keyboards	Easy to use	As fast as you can
Scanner	Graphics can be easily put in	may need to size/takes 7 seconds
Digital camera	Easily captures pictures	May require processing

<u>Data storage device</u>	<u>Advantage</u>	<u>Disadvantage</u>
Floppy disk	Useful for transferring data	They only hold 1.4 megabits
Hard disk	Holds loads of information	The heads crash even if a smoke particle got on the disk
Magnetic tape	They can be used for permanent storage	You can not go directly to an item of data on tape not like a disk
Zip disk	They hold up to 250 Mb	The cost
CD - ROM	Hold loads of data	User cannot write to the disk
CD-R	They hold up to 650 Mb	Can be used to write but only used once
CD-RW	They can be write and be deleted	Cost

The mouse

The pointer on the monitor screen mirrors the movement of a mouse by the users hand. Under the mouse there is a ball which rolls as the mouse is moved. This movement of the ball causes to shafts to rotate inside the mouse one-shaft records the movement in the north-south direction and the other shaft records the east-west movement. When the screen pointer is over on icon or on a menu the mouse button can be clicked double clicked or dragged to create a process.

Touch pad

You find these on laptops they are a small ball in the centre of the keyboard they are very similar to a mouse.

Tracker ball

Tracker ball is similar to a mouse it works in the same way. But it's way larger than a mouse suitable for a laptop or for people who haven't got a good grip. It has got a big ball on the top so you can slide your hand across it the left and right buttons there bigger as well but the buttons are usually on the right hand side.

Video digitiser

Digital camcorders can plug straight into computers via live wire interface. This lets the computer to download, store and manipulate the digital video image. Conventional camcorders can also transfer video into computer but because the image is held in analogue form, a video digitiser or via capture card is required to convert the signal into a digital for storage and/or display on the computer for information on analogue and digital formats. Video capture and editing requires computers with large hard disk drives since files containing video data tend to be quite large. Captured files can be edited in many ways you can compress mix it together to take up less memory with relatively low loss in image quality.

Scanner

Scanners enable both pictures and text to be input to a computer. Scanning text in order to recognise the words and letters requires special software. The most common scanners are flat beds.

A scanner works by placing a picture to be scanned face down on a glass plate. A bright light slowly moved across the picture and the reflected light is focused onto a light and black sensors using the mirrors and lenses.

Digital camera

The picture taken with a digital camera is stored in the computer memory rather than a film.

The different colours that make up the pictures are converted to digital signals by sensors placed behind the lens. These pictures can then be displayed directly onto the computer monitor or imported into a graphics package.

Laser printers

Laser printers work by the laser drawing the image onto a negatively charged photosensitive drum. Where the laser hits the drum, the charge is removed. The drum passes the toner reservoir where negatively charged toner is attracted to these areas. This toner is then transferred to the paper where it is heated and made to stick by the fuse assembly.

For my big m cinema project I am going to use a graphics tablet which the user can write or draw on with a device similar pen called a stylus. Where I can important my designs for the big m cinema using this. I am going to use a Sound sampler because u can record a piece of music or voice and edit it or you can mix other pieces of music with others this is useful for inputting music on your webpage to make it more interesting and not boring just to look at so background music will be used to make the website more interesting. I will be using The computer monitor or VDU (visual display unit) to see what I am doing on the computer I will also need a keyboard and mouse to input characters, pictures and other commands. I will use cds and floppy disks, hardisks and zip drives to transfer data between workstations so I can do work elsewhere and also I can use the internet. I am also going to use a Digital camcorder because they can plug straight into computers via live wire interface. This lets the computer to download, store and manipulate the digital video image.

Video capture and editing requires computers with large hard disk drives since files containing video data tend to be quite large. Captured files can be edited in many ways you can compress mix it together to take up less memory with relatively low loss in image quality. This is useful to record a virtual tour inside the big m cinema

Scanners enable both pictures and text to be input to a computer. Scanning text in order to recognise the words and letters requires special software this is useful for scanning in pictures and all sorts quickly. I am going to use a digital camera because The picture taken with a digital camera is stored in the computer memory rather than a film u can store more pictures and it don't cost to get the pictures developed. And finally I am going to use a printer to print articles out and to show people my website more quicker and easier also I can save the work and not let the big m cinema project be copy writted.

This is the PC specs and operating systems I have used during school hours

Windows 2000 Server PDC - Primary Domain Controller

Pentium III

1 Gb RAM

5 x 18 Gb HD's with Raid Controller

HP DLT Backup Drive

Workstations

Windows 2000 Professional

Intel Celeron 1.2 Ghz

128 Mb RAM

20 Gb HD

17" Monitor

Network Protocols

TCP/IP

10/100 Network Cards