

COMPUTER SCIENCE

SHORT NOTES

Personal computer (PC)

A single-user computer containing a central processing unit (CPU) and one or more memory circuits.

Petabyte

A measure of memory or storage capacity and is approximately a thousand terabytes.

Petaflop

A theoretical measure of a computer's speed and can be expressed as a thousand-trillion floating-point operations per second.

Platform

The operating system, such as UNIX, Macintosh, Windows, on which a computer is based.

Plug and play

Computer hardware or peripherals that come set up with necessary software so that when attached to a computer, they are recognized by the computer and are ready to use.

Pop-up menu

A menu window that opens vertically or horizontally on-screen to display context-related options. Also called drop-down menu or pull-down menu.

Power PC

A competitor of the Pentium chip. It is a new generation of powerful sophisticated microprocessors produced from an Apple-IBM-Motorola alliance.

Printer

A mechanical device for printing a computer's output on paper. There are three major types of printer:

- **Dot matrix** - creates individual letters, made up of a series of tiny ink dots, by punching a ribbon with the ends of tiny wires. (This type of printer is most often used in industrial settings, such as direct mail for labelling.)
- **Ink jet** - sprays tiny droplets of ink particles onto paper.
- **Laser** - uses a beam of light to reproduce the image of each page using a magnetic charge that attracts dry toner that is transferred to paper and sealed with heat.

Program

A precise series of instructions written in a computer language that tells the computer what to do and how to do it. Programs are also called software or applications.

Programming language

A series of instructions written by a programmer according to a given set of rules or conventions (syntax). High-level programming languages are independent of the device on which the application (or program) will eventually run; low-level languages are specific to each program or platform. Programming language instructions are converted into programs in language specific to a particular machine or operating system (machine language). So that the computer can interpret and carry out the instructions. Some common programming languages are BASIC, C, C++, dBASE, FORTRAN, and Perl.

Puck

An input device, like a mouse. It has a magnifying glass with crosshairs on the front of it that allows the operator to position it precisely when tracing a drawing for use with CAD-CAM software.

Pull-down menu

A menu window that opens vertically on-screen to display context-related options. Also called drop-down menu or pop-up menu.

Push technology

Internet tool that delivers specific information directly to a user's desktop, eliminating the need to surf for it. PointCast, which delivers news in user-defined categories, is a popular example of this technology.

QuickTime

Audio-visual software that allows movie-delivery via the Internet and e-mail. QuickTime images are viewed on a monitor.

RAID

Redundant Array of Inexpensive Disks, a method of spreading information across several disks set up to act as a unit, using two different techniques:

- **Disk striping** - storing a bit of information across several discs (instead of storing it all on one disc and hoping that the disc doesn't crash).
- **Disk mirroring** - simultaneously storing a copy of information on another disc so that the information can be recovered if the main disc crashes.

RAM

Random Access Memory, one of two basic types of memory. Portions of programs are stored in RAM when the program is launched so that the program will run faster. Though a PC has a fixed amount of RAM, only portions of it will be accessed by the computer at any given time. Also called memory.

Right-click

Using the right mouse button to open context-sensitive drop-down menus.

ROM

Read-Only Memory, one of two basic types of memory. ROM contains only permanent information put there by the manufacturer. Information in ROM cannot be altered, nor can the memory be dynamically allocated by the computer or its operator.

Scanner

An electronic device that uses light-sensing equipment to scan paper images such as text, photos, and illustrations and translate the images into signals that the computer can then store, modify, or distribute.

Search engine

Software that makes it possible to look for and retrieve material on the Internet, particularly the Web. Some popular search engines are Alta Vista, Google, HotBot, Yahoo!, Web Crawler, and Lycos.

Server

A computer that shares its resources and information with other computers, called clients, on a network.

Shareware

Software created by people who are willing to sell it at low cost or no cost for the gratification of sharing. It may be freestanding software, or it may add functionality to existing software.

Software

Computer programs; also called applications.

Spider

A process search engines use to investigate new pages on a web site and collect the information that needs to be put in their indices.

Spreadsheet

Software that allows one to calculate numbers in a format that is similar to pages in a conventional ledger.

Storage

Devices used to store massive amounts of information so that it can be readily retrieved. Devices include RAIDs, CD-ROMs, DVDs.

Streaming

Taking packets of information (sound or visual) from the Internet and storing it in temporary files to allow it to play in continuous flow.

Stylus and tablet

An input device similar to a mouse. The stylus is pen shaped. It is used to draw on a tablet (like drawing on paper) and the tablet transfers the information to the computer. The tablet responds to pressure. The firmer the pressure used to draw, the thicker the line appears.

Surfing

Exploring the Internet.

Surge protector

A controller to protect the computer and make up for variances in voltage.

Telnet

A way to communicate with a remote computer over a network.

Trackball

Input device that controls the position of the cursor on the screen; the unit is mounted near the keyboard, and movement is controlled by moving a ball.

Terabytes (TB)

A thousand gigabytes.

Teraflop

A measure of a computer's speed. It can be expressed as a trillion floating-point operations per second.

Trojan Horse

See virus.

UNIX

A very powerful operating system used as the basis of many high-end computer applications.