

COMPUTER SCIENCE

SHORT NOTES

Applet

A small Java application that is downloaded by an ActiveX or Java-enabled web browser. Once it has been downloaded, the applet will run on the user's computer. Common applets include financial calculators and web drawing programs.

Application

Computer software that performs a task or set of tasks, such as word processing or drawing. Applications are also referred to as programs.

ASCII

American Standard Code for Information Interchange, an encoding system for converting keyboard characters and instructions into the binary number code that the computer understands.

Bandwidth

The capacity of a networked connection. Bandwidth determines how much data can be sent along the networked wires. Bandwidth is particularly important for Internet connections, since greater bandwidth also means faster downloads.

Binary code

The most basic language a computer understands, it is composed of a series of 0s and 1s. The computer interprets the code to form numbers, letters, punctuation marks, and symbols.

Bit

The smallest piece of computer information, either the number 0 or 1. In short they are called binary digits.

Boot

To start up a computer. Cold boot means restarting computer after the power is turned off. Warm boot means restarting computer without turning off the power.

Browser

Software used to navigate the Internet. Google Chrome, Firefox, Netscape Navigator and Microsoft Internet Explorer are today's most popular browsers for accessing the World Wide Web.

Bug

A malfunction due to an error in the program or a defect in the equipment.

Byte

Most computers use combinations of eight bits, called bytes, to represent one character of data or instructions. For example, the word **cat** has three characters, and it would be represented by three bytes.

Cache

A small data-memory storage area that a computer can use to instantly re-access data instead of re-reading the data from the original source, such as a hard drive. Browsers use a cache to store web pages so that the user may view them again without reconnecting to the Web.

CAD-CAM

Computer Aided Drawing - Computer Aided Manufacturing. The instructions stored in a computer that will be translated to very precise operating instructions to a robot, such as for assembling cars or laser-cutting signage.

CD-ROM

Compact Disc Read-Only Memory, an optically read disc designed to hold information such as music, reference materials, or computer software. A single CD-ROM can hold around 640 megabytes of data, enough for several encyclopaedias. Most software programs are now delivered on CD-ROMs.

CGI

Common Gateway Interface, a programming standard that allows visitors to fill out form fields on a Web page and have that information interact with a database, possibly

coming back to the user as another Web page. CGI may also refer to Computer-Generated Imaging, the process in which sophisticated computer programs create still and animated graphics, such as special effects for movies.

Chat

Typing text into a message box on a screen to engage in dialogue with one or more people via the Internet or other network.

Chip

A tiny wafer of silicon containing miniature electric circuits that can store millions of bits of information.

Client

A single user of a network application that is operated from a server. A client/server architecture allows many people to use the same data simultaneously. The program's main component (the data) resides on a centralized server, with smaller components (user interface) on each client.

Cookie

A text file sent by a Web server that is stored on the hard drive of a computer and relays back to the Web server things about the user, his or her computer, and/or his or her computer activities.

CPU

Central Processing Unit. The brain of the computer.

Cracker

A person who breaks in to a computer through a network, without authorization and with mischievous or destructive intent.

Crash

A hardware or software problem that causes information to be lost or the computer to malfunction. Sometimes a crash can cause permanent damage to a computer.

Cursor

A moving position-indicator displayed on a computer monitor that shows a computer operator where the next action or operation will take place.

Cyberspace

Slang for internet ie. An international conglomeration of interconnected computer networks. Begun in the late 1960s, it was developed in the 1970s to allow government and university researchers to share information. The Internet is not controlled by any single group or organization. Its original focus was research and communications, but it continues to expand, offering a wide array of resources for business and home users.

Database

A collection of similar information stored in a file, such as a database of addresses. This information may be created and stored in a database management system (DBMS).

Debug

Slang. To find and correct equipment defects or program malfunctions.

Default

The pre-defined configuration of a system or an application. In most programs, the defaults can be changed to reflect personal preferences.

Desktop

The main directory of the user interface. Desktops usually contain icons that represent links to the hard drive, a network (if there is one), and a trash or recycling can for files to be deleted. It can also display icons of frequently used applications, as requested by the user.

Desktop publishing

The production of publication-quality documents using a personal computer in combination with text, graphics, and page layout programs.

Directory

A repository where all files are kept on computer.

Disk

Two distinct types. The names refer to the media inside the container:

A hard disc stores vast amounts of data. It is usually inside the computer but can be a separate peripheral on the outside. Hard discs are made up of several rigid coated metal discs. Currently, hard discs can store 15 to 30 Gb (gigabytes).

A floppy disc, 3.5" square, usually inserted into the computer and can store about 1.4 megabytes of data. The 3.5" square floppies have a very thin, flexible disc inside. There is also an intermediate-sized floppy disc, trademarked Zip discs, which can store 250 megabytes of data.

Disk drive

The equipment that operates a hard or floppy disc.

Domain

Represents an IP (Internet Protocol) address or set of IP addresses that comprise a domain. The domain name appears in URLs to identify web pages or in email addresses. For example, the email address for the First Lady is `first.lady@whitehouse.gov`, `whitehouse.gov`, being the domain name. Each domain name ends with a suffix that indicates what top level domain it belongs to. These are : `.com` for commercial, `.gov` for government, `.org` for organization, `.edu` for educational institution, `.biz` for business, `.info` for information, `.tv` for television, `.ws` for website. Domain suffixes may also indicate the country in which the domain is registered. No two parties can ever hold the same domain name.

Domain name

The name of a network or computer linked to the Internet. Domains are defined by a common IP address or set of similar IP (Internet Protocol) addresses.

Download

The process of transferring information from a web site (or other remote location on a network) to the computer. It is possible to download a file which include text, image, audio, video and many others.

DOS

Disk Operating System. An operating system designed for early IBM-compatible PCs.

Drop-down menu

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