

Computer Terms & Glossary 101



This page is meant to serve as a guide to the vast quantity of computer terms and acronyms in common use for the casual computer user. It is divided into two main sections; The first is dedicated to the basics and is meant more for beginners, while the second is meant instead to be used as a reference. In reality many of the terms in the second section are still quite common; the first section was deliberately kept as short as possible.

Terms in the second section may be looked up by either using the "find in page" function of your browser, or by appending "#*term*" (without the quotes and where *term* is the term of interest) to the "URL" or "go to" section of your browser, keeping in mind that case matters. The best method of searching for a term though is to use the Search Interface that will return not only the specific term sought but also other entries that reference it. Be aware that the terms referenced in the second part of this page will freely assume familiarity with the first part.

If you are instead actually trying to figure out what a particular filename extension means, you might instead try the filename extensions page.

If you want something added or see a problem with something already here (but keep in mind this guide is not meant to be overly technical) please send e-mail to the webmaster

Basic

A drive — The slot on your computer where you put in a 3 1/2" floppy disk. These drives are somewhat obsolete today as they have been replaced by flash drives.

Active Window — The last program window you clicked on — the one that's currently highlighted. Any keys you press affect this window. (The color of the title bar will change when a window is active).

Address — Like a street address, an email address gets email to one location, an address for a web page takes you to a web location (and is also called a URL)

Adware — A form of spyware that collects information about the user in order to display advertisements in the web browser based on the information it collects from the user's browsing patterns.

Application — A program or a piece of software that runs on your computer to let you perform some task, such as creating a spreadsheet, browsing the Internet, or writing a letter.

application & app An application (often called "app" for short) is simply a program with a GUI. Note that it is different from an applet.

Bandwidth — The transmission capacity of an electronic or optical telecommunications pathway. The range of frequencies is expressed in hertz, or transmission channels. The bandwidth determines how much information may be transmitted through a circuit.

Bookmark — Also known as a "favorite." Using an Internet browser, a bookmark is a saved link to a web page that has been added to a list of saved links.

boot

Starting up an OS is booting it. If the computer is already running, it is more often called rebooting.

Broadband — commonly refers to Internet access via cable, DSL, and cellular EVDO, which is considerably faster than analog dial-up. Internet access using a method to move data, voice and video over a multi channel, high-bandwidth transmission line. Broadband always refers to a higher-speed connection, the FCC defines broadband as a minimum upload speed of 200 Kbps.



Browser — Software like Netscape, Internet Explorer, Mozilla Firefox or Safari that one uses to navigate the World Wide Web. Also called “web browser” or “Internet browser.”

bug

A bug is a mistake in the design of something, especially [software](#). A really severe bug can cause something to [crash](#).

C drive — The main storage area on a computer, also called a hard drive.

Cache — A place where files are stored temporarily to make things go faster on your computer. Also called temporary files.

CD — “Compact Disk” A small optical disk on which data such as music, text, or graphic images is digitally encoded

chat

Chatting is like [e-mail](#), only it is done instantaneously and can directly involve multiple people at once. While e-mail now relies on one more or less standard [protocol](#), chatting still has a couple competing ones. Of particular note are [IRC](#) and [Instant Messenger](#). One step beyond chatting is called [MUDding](#).

click

To press and release a [mouse](#) button. When done twice in rapid succession, it is referred to as a double-click.

Clipart — Ready-made, usually copyright-free, illustrations sold in books, as part of a software package or on the Internet. They may be cut and pasted or inserted as artwork into a document.

Clipboard — A part of Windows that holds information you’ve cut or copied from a program or file. It holds that information so you can paste it into other programs or files.

Cookies — A message given to a web browser by a web server that is stored in a text file called cookie.txt. Cookies are used by the website you’ve visited to figure out which ads you’ve seen before, to call you by name, or in other ways to customize your experience on their web page.

cursor

A point of attention on the computer screen, often marked with a flashing line or block. Text typed into the computer will usually appear at the cursor.

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database

A database is a collection of data, typically organized to make common retrievals easy and efficient. Some common database programs include Oracle, Sybase, [Postgres](#), Informix, Filemaker, Adabas, etc.

desktop

A desktop system is a computer designed to sit in one position on a desk somewhere and not move around. The area on your screen where you move windows and icons around.

Digital — Related to a device that can read, write, or store information that is represented in numerical form, usually on computers.

directory

Also called “folder”, a directory is a collection of [files](#) typically created for organizational purposes. Note that a directory is itself a file, so a directory



can generally contain other directories. It differs in this way from a [partition](#).

disk
A device used to store programs and files for use by computers. PCs use internal hard disks to store the bulk of their data. Floppy disks are used to distribute files to others and to back up hard disk data. CD-ROMs and DVD-ROMs are the next generation of portable storage disks. A disk is a physical object used for storing data. It will not forget its data when it loses power. It is always used in conjunction with a [disk drive](#). Some disks can be removed from their drives, some cannot. Generally it is possible to write new information to a disk in addition to reading data from it, but this is not always the case.

Drag — Pressing the mouse button and holding it down as you move the pointer to the desired position, then releasing.

drive
A device for storing and/or retrieving data. Some drives (such as disk drives, zip drives, and tape drives) are typically capable of having new data written to them, but some others (like CD-ROMs or DVD-ROMs) are not. Some drives have [random access](#) (like disk drives, zip drives, CD-ROMs, and DVD-ROMs), while others only have [sequential access](#) (like tape drives).

Drop-Down Menu — A menu that drops from the relevant button when a user selects it.

Download — To copy a file from the Internet to your own computer.

DVD — (Digital Video Disc or Digital Versatile Disc) An optical digital disc for storing movies and data.

e-book
The concept behind an e-book is that it should provide all the functionality of an ordinary book but in a manner that is (overall) less expensive and more environmentally friendly. The actual

term e-book is somewhat confusingly used to refer to a variety of things: custom [software](#) to play e-book titles, dedicated [hardware](#) to play e-book titles, and the e-book titles themselves. Individual e-book titles can be free or commercial (but will always be less expensive than their printed counterparts) and have to be loaded into a player to be read. Players vary wildly in capability level. Basic ones allow simple reading and bookmarking; better ones include various features like [hypertext](#), illustrations, audio, and even limited video. Other optional features allow the user to mark-up sections of text, leave notes, circle or diagram things, highlight passages, program or customize settings, and even use [interactive fiction](#). There are many types of e-book; a couple popular ones include the [Newton book](#) and [Palm DOC](#).

e-mail

E-mail is short for electronic mail. It allows for the transfer of information from one computer to another, provided that they are hooked up via some sort of [network](#) (often the [Internet](#)). E-mail works similarly to FAXing, but its contents typically get printed out on the other end only on demand, not immediately and automatically as with FAX. A machine receiving e-mail will also not reject other incoming mail messages as a busy FAX machine will; rather they will instead be [queued](#) up to be received after the current batch has been completed. E-mail is only seven-[bit](#) clean, meaning that you should not expect anything other than [ASCII](#) data to go through uncorrupted without prior conversion via something like [uucode](#) or [bcode](#). Some mailers will do some conversion automatically, but unless you know your mailer is one of them, you may want to do the encoding manually.

FAQ — Stands for “Frequently Asked Questions.” Many websites will have a set of FAQ’s to handle common questions that users may have about the site or the product the site represents.



Favorite — Also known as a "Bookmark." Using an Internet browser, a favorite is a saved link to a web page that has been added to a list of saved links.

File — A collection of information in a format designed for computer use (ex: as a Word file, or an Adobe Acrobat file).

Filename — All files have a filename. Filenames can have up to 256 characters. Filenames include the name you give the file plus a "dot" followed by three characters. The three characters are called the "file extension" and give you and the computer information about whether the file is a spreadsheet, a word document, or a database.

firmware

Sort of in-between hardware and software, firmware consists of modifiable programs embedded in hardware. Firmware updates should be treated with care since they can literally destroy the underlying hardware if done improperly. There are also cases where neglecting to apply a firmware update can destroy the underlying hardware, so user beware.

Flash Drive — Also known as "Thumbnails or USB Drives" Flash drives are compact and easy-to-use USB devices that are similar in use to your computer hard drive. These drives plug into the USB port.

floppy

An extremely common type of removable disk. Floppies do not hold too much data, but most computers are capable of reading them. Note though that there are different competing format used for floppies, so that a floppy written by one type of computer might not directly work on another. Also sometimes called "diskette".

Folder — An area for storing files to keep them organized. Folders can contain other folders for further organization.

Font — A type face. Your computer comes with many fonts. You can purchase additional fonts,

in different styles or languages, and install them on your computer.

format

The manner in which data is stored; its organization. For example, VHS, SVHS, and Beta are three different formats of video tape. They are not 100% compatible with each other, but information can be transferred from one to the other with the proper equipment (but not always without loss; SVHS contains more information than either of the other two). Computer information can be stored in literally hundreds of different formats, and can represent text, sounds, graphics, animations, etc. Computer information can be exchanged via different computer types provided both computers can interpret the format used.

FTP — [File Transfer Protocol] - A communications protocol governing the transfer of files between two computers over a network.

Function Keys — Special keys on the keyboard that have different meanings depending on which program is running. Function keys are normally labeled F1 to F12.

graphics

Anything visually displayed on a computer that is not text.

Gigahertz — One billion hertz.

Hardware — The parts of the computer that you can touch. The mouse, keyboard, monitor, and CPU are all hardware.

Help — A feature in most programs that will let you search for information or directions on aspects of that program.

Highlight — To select an item. Different colors usually appear over a highlighted object to show that it has been selected.

Homepage — The main page of a website. This page usually tells what the website is for, who created it and what you can do in the website.



HTTP — [Hypertext Transfer Protocol] - A protocol used to request and transmit files, especially webpages and webpage components, over the Internet or other computer network.

Hyperlink — Also known as a "link." A hyperlink is a selectable connection from one word, picture, or information object to another. On the World Wide Web, the most common form of link is the highlighted word or picture that can be selected by the user (usually by clicking with a mouse), resulting in the immediate delivery and view of another file (e.g. another web page).

hypertext

A hypertext document is like a text document with the ability to contain pointers to other regions of (possibly other) hypertext documents.

Icon — A little picture on the Windows desktop that can launch a program. The icon picture is supposed to make it easier to figure out that object's function.

Internet

The Internet is the world-wide network of computers. There is only one Internet, and thus it is typically capitalized (although it is sometimes referred to as "the 'net"). It is different from an intranet.

IP — [Internet Protocol] - The set of standards responsible for ensuring that data packets transmitted over the Internet are routed to their intended destinations.

keyboard

A keyboard on a computer is almost identical to a keyboard on a typewriter. Computer keyboards will typically have extra keys, however. Some of these keys (common examples include Control, Alt, and Meta) are meant to be used in conjunction with other keys just like shift on a regular typewriter. Other keys (common examples include Insert, Delete, Home, End, Help, function keys, etc.) are meant to be used independently and often perform editing tasks. Keyboards on different platforms will often look slightly different and have somewhat different collections of

keys. Some keyboards even have independent shift lock and caps lock keys. Smaller keyboards with only math-related keys are typically called "keypads".

language

Computer programs can be written in a variety of different languages. Different languages are optimized for different tasks. Common languages include Java, C, C++, ForTran, Pascal, Lisp, and BASIC. Some people classify languages into two categories, higher-level and lower-level. These people would consider assembly language and machine language lower-level languages and all other languages higher-level. In general, higher-level languages can be either interpreted or compiled; many languages allow both, but some are restricted to one or the other. Many people do not consider machine language and assembly language at all when talking about programming languages.

laptop

A laptop is any computer designed to do pretty much anything a desktop system can do but run for a short time (usually two to five hours) on batteries. They are designed to be carried around but are not particularly convenient to carry around. They are significantly more expensive than desktop systems and have far worse battery life than PDA's. Calling a system a laptop implies nothing about its platform. By far the fastest laptops are the PowerPC based Macintoshes.

Logon/ Logoff — To begin or to end a session on a computer. Sometimes to Logon you need a username and a password.

Maximize — The act of making a single program's window fill the entire desktop. You can maximize a window by clicking on the maximize button in the upper right hand corner of the window.

Megahertz — One million hertz.

memory



Computer memory is used to temporarily store data. In reality, computer memory is only capable of remembering sequences of zeros and ones, but by utilizing the [binary](#) number system it is possible to produce arbitrary rational numbers and through clever [formatting](#) all manner of representations of pictures, sounds, and animations. The most common types of memory are [RAM](#), [ROM](#), and [flash](#).

Menu Bar — The menu bar is located near the top of a window and contains the names of the pull-down menus available, such as File, Edit, View, Options, and Help.

Minimize — The act of shrinking a window to the taskbar to temporarily get it out of the way. To minimize a window, click on the minimize button in the upper right hand corner of the window.

modem

A modem allows two computers to communicate over ordinary phone lines. It derives its name from **modulate** / **demodulate**, the process by which it converts digital computer data back and forth for use with an analog phone line.

monitor

The screen for viewing computer information is called a monitor.

mouse

In computer parlance a mouse can be both the physical object moved around to control a pointer on the screen, and the pointer itself. Unlike the animal, the proper plural of computer mouse is "mouses".

Mouse-Over — When a pointer (mouse, cursor) is rolled over a certain area of the screen, and something changes.

multimedia

This originally indicated a capability to work with and integrate various types of things including audio, still [graphics](#), and especially video. Now it is more of a marketing term and has little real meaning. Historically the [Amiga](#) was the first multimedia machine. Today in

addition to [AmigaOS](#), [IRIX](#) and [Solaris](#) are popular choices for high-end multimedia work.

NC

The term **network computer** refers to any (usually [desktop](#)) computer system that is designed to work as part of a [network](#) rather than as a stand-alone machine. This saves money on [hardware](#), [software](#), and maintenance by taking advantage of facilities already available on the network. The term "Internet appliance" is often used interchangeably with NC.

network

A network (as applied to computers) typically means a group of computers working together. It can also refer to the physical wire etc. connecting the computers. Two or more computers connected so that they share information and resources. The Internet is a giant network.

notebook

A notebook is a small [laptop](#) with similar price, performance, and battery life.

Operating System — The software that runs a computer, before any other programs are opened (ex: Windows 98, Windows 2000, Windows XP, Windows Vista, Macintosh OS10, Linux.)

organizer

An organizer is a tiny computer used primarily to store names, addresses, phone numbers, and date book information. They usually have some ability to exchange information with [desktop](#) systems. They boast even better battery life than [PDAs](#) but are far less capable. They are extremely inexpensive but are typically incapable of [running](#) any special purpose [applications](#) and are thus of limited use.

OS

The operating system is the [program](#) that manages a computer's resources. Common OSes include [Windows '95](#),



[MacOS](#), [Linux](#), [Solaris](#), [AmigaOS](#), [AIX](#), [Windows NT](#), etc.

PC

The term **personal computer** properly refers to any [desktop](#), [laptop](#), or [notebook](#) computer system. Its use is inconsistent, though, and some use it to specifically refer to [x86](#) based systems running [MS-DOS](#), [MS-Windows](#), [GEOS](#), or [OS/2](#). This latter use is similar to what is meant by a [WinTel](#) system.

PDA

A **personal digital assistant** is a small battery-powered computer intended to be carried around by the [user](#) rather than left on a desk. This means that the [processor](#) used ought to be power-efficient as well as fast, and the [OS](#) ought to be optimized for hand-held use. PDAs typically have an instant-on feature (they would be useless without it) and most are grayscale rather than color because of battery life issues. Most have a pen interface and come with a detachable stylus. None use [mouses](#). All have some ability to exchange data with [desktop](#) systems. In terms of raw capabilities, a PDA is more capable than an [organizer](#) and less capable than a [laptop](#) (although some high-end PDAs beat out some low-end laptops). By far the most popular PDA is the [Pilot](#), but other common types include [Newtons](#), [Psions](#), [Zauri](#), [Zoomers](#), and [Windows CE](#) hand-helds. By far the fastest current PDA is the Newton (based around a [StrongARM RISC processor](#)). Other PDAs are optimized for other tasks; few computers are as personal as PDAs and care must be taken in their purchase. [Feneric's PDA / Handheld Comparison Page](#) is perhaps the most detailed comparison of PDAs and handheld computers to be found anywhere on the web.

Phishing — The act of sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

Pointer — A small arrow or other symbol on the display screen that moves as you move the mouse.

platform

Roughly speaking, a platform represents a computer's family. It is defined by both the [processor](#) type on the [hardware](#) side and the [OS](#) type on the [software](#) side. Computers belonging to different platforms cannot typically [run](#) each other's [programs](#) (unless the programs are written in a [language](#) like [Java](#)).

portable

If something is portable it can be easily moved from one type of computer to another. The verb "to port" indicates the moving itself.

printer

A printer is a piece of [hardware](#) that will print computer information onto paper.

processor

The processor (also called central processing unit, or CPU) is the part of the computer that actually works with the data and [runs](#) the [programs](#). There are two main processor types in common usage today: [CISC](#) and [RISC](#). Some computers have more than one processor and are thus called "multiprocessor". This is distinct from [multitasking](#). Advertisers often use [megahertz](#) numbers as a means of showing a processor's speed. This is often extremely misleading; megahertz numbers are more or less meaningless when compared across different types of processors.

program

A specific set of ordered operations, or instructions, for a computer to perform. Typically, the program is put into a storage area accessible to the computer. Examples are Microsoft Word, Solitaire, and Internet Explorer.

A program is a series of instructions for a computer, telling it what to do or how to behave. The terms "[application](#)" and "[app](#)" mean almost the same thing (albeit applications generally have



GUIs). It is however different from an applet. Program is also the verb that means to create a program, and a programmer is one who programs.

Reboot — To shut down the computer and start it up again. A hard or cold reboot is when you start the computer from when it is powered off. A soft or warm reboot is when you use the Ctrl-Alt-Delete key combination to restart a computer after it is stalled in the middle of working.

run

Running a program is how it is made to do something. The term "execute" means the same thing.

Scanner — A device that can read text or illustrations printed on paper and translate the information into a form the computer can use.

Screensaver — A small program that takes over your monitor screen if there are no keystrokes or mouse movements for a specified period of time.

Scroll Bar — In Windows, a moveable bar that appears on the right or bottom of a window whenever the window contains more information than it can show at one time.

Server — A computer that manages resources for other computers. You can have a file server, email server, a print server, a network server, or a database server that all have their own jobs.

Shortcut — A Windows icon that serves as a push button for starting a program, or opening a file or directory.

software

The non-physical portion of the computer; the part that exists only as data; the programs. Another term meaning much the same is "code".

spreadsheet

An program used to perform various calculations. It is especially popular for financial applications. Some common spreadsheets include Lotus 123, Excel, OpenOffice Spreadsheet, Octave, Gnumeric, AppleWorks Spreadsheet, Oleo, and GeoCalc.

Spyware — Any software that covertly gathers user information through the user's Internet connection without his or her knowledge.

Start Menu — A menu of options that appears when the Start button (lower left hand corner of your screen) is clicked. From the start menu you can load programs, load files, change settings, find programs, or shut down your computer.

Status Bar — A horizontal bar at the bottom of the screen that displays information about commands, toolbar buttons, and other options. For example, in a web browser, the status bar will show you the progress as a page is downloading.

Task Manager — The Task Manager provides information about programs and processes running on your computer. It can be accessed by pressing Ctrl+Alt+Delete and choosing "Task Manager."

Taskbar — The bar in Windows that lists all currently running programs and open folders.

TCP/IP — [Transmission Control Protocol/Internet Protocol] - The wide-area-networking protocol that makes the Internet work.

Techminutes™ — Minutes of time that are used for pay-as-you-go computer repair services and can be used for any of our online services.

Title Bar — The bar at the top of a program's window that shows the name of the program, the name of the file or website that's open in it, and which has the minimize, maximize, and close buttons in the upper right corner.

Toolbar — A horizontal row of selectable image buttons that give the user a visible reminder of an easy way to do certain tasks in a program.

Upload — Opposite of download. When you upload a file, you move it from your own computer to a computer on the Internet.

URL — Stands for "Uniform Resource Locator." The series of letters and numbers, often beginning with an "http://", that signify a website address.



USB port — Stands for “Universal Serial Bus.” A plug on the computer’s exterior that connects peripheral devices, such as mice, modems, and keyboards.

user

The operator of a computer.

Virus — A piece of programming code usually disguised as something else that causes some unexpected and usually undesirable event. Viruses can be transmitted as attachments to an email, as downloads, or be present on a diskette or CD.

VoIP — (Voice Over IP) A telephone service that uses the Internet as a global telephone network, like Vonage, Packet8, Skype, and others.

WWW — Stands for “World Wide Web.” When the Internet was new, most web addresses started with www. To save typing, many websites do not use the “www” in their address.

Website — A place on the web, usually devoted to one theme, service, or organization. A website is composed of many web pages.

WiFi — “Wireless Fidelity” A way of networking computers over radio waves rather than wires.

Window — An on-screen box that contains information for you to look at or work with. Programs run in windows on your screen. Also called a “Program Window.” Not to be confused with “Windows,” which is an operating system.

word processor

A program designed to help with the production of textual documents, like letters and memos. Heavier duty work can be done with a desktop publisher. Some common word processors include MS-Word, OpenOffice Write, WordPerfect, AbiWord, AppleWorks Write, and GeoWrite.

www

The **World-Wide-Web** refers more or less to all the publically accessible documents on the Internet. It is used

quite loosely, and sometimes indicates only HTML files and sometimes FTP and Gopher files, too. It is also sometimes just referred to as “the web”.

Reference

65xx

The 65xx series of processors includes the 6502, 65C02, 6510, 8502, 65C816, 65C816S, etc. It is a CISC design and is not being used in too many new stand-alone computer systems, but is still being used in embedded systems, game systems (such as the Super NES), and processor enhancement add-ons for older systems. It was originally designed by MOS Technologies, but is now produced by The Western Design Center, Inc. It was the primary processor for many extremely popular systems no longer being produced, including the Commodore 64, the Commodore 128, and all the Apple][series machines.

68xx

The 68xx series of processors includes the 6800, 6805, 6809, 68000, 68020, 68030, 68040, 68060, etc. It is a CISC design and is not being used in too many new stand-alone computer systems, but is still being used heavily in embedded systems. It was originally designed by Motorola and was the primary processor for older generations of many current machines, including Macintoshes, Amigas, Sun workstations, HP workstations, etc. and the primary processor for many systems no longer being produced, such as the TRS-80. The PowerPC was designed in part to be its replacement.

a11y

Commonly used to abbreviate the word “accessibility”. There are eleven letters between the “a” and the “y”.

ADA

An object-oriented language at one point popular for military and some academic software. Lately C++ and Java have been getting more attention.

AI



Artificial intelligence is the concept of making computers do tasks once considered to require thinking. AI makes computers play chess, recognize handwriting and speech, helps suggest prescriptions to doctors for patients based on input symptoms, and many other tasks, both mundane and not.

AIX

The industrial strength OS designed by IBM to run on PowerPC and x86 based machines. It is a variant of UNIX and is meant to provide more power than OS/2.

AJaX

AJaX is a little like DHTML, but it adds asynchronous communication between the browser and Web site via either XML or JSON to achieve performance that often rivals desktop applications.

Alpha

An Alpha is a RISC processor invented by Digital and currently produced by Digital/Compaq and Samsung. A few different OSes run on Alpha based machines including Digital UNIX, Windows NT, Linux, NetBSD, and AmigaOS. Historically, at any given time, the fastest processor in the world has usually been either an Alpha or a PowerPC (with sometimes SPARCs and PA-RISCs making the list), but Compaq has recently announced that there will be no further development of this superb processor instead banking on the release of the somewhat suspect Merced.

AltiVec

AltiVec (also called the "Velocity Engine") is a special extension built into some PowerPC CPUs to provide better performance for certain operations, most notably graphics and sound. It is similar to MMX on the x86 CPUs. Like MMX, it requires special software for full performance benefits to be realized.

Amiga

A platform originally created and only produced by Commodore, but now owned by Gateway 2000 and produced by it and a few smaller companies. It was historically the first multimedia

machine and gave the world of computing many innovations. It is now primarily used for audio / video applications; in fact, a decent Amiga system is less expensive than a less capable video editing system. Many music videos were created on Amigas, and a few television series and movies had their special effects generated on Amigas. Also, Amigas can be readily synchronized with video cameras, so typically when a computer screen appears on television or in a movie and it is not flickering wildly, it is probably an Amiga in disguise. Furthermore, many coin-operated arcade games are really Amigas packaged in stand-up boxes. Amigas have AmigaOS for their OS. New Amigas have either a PowerPC or an Alpha for their main processor and a 68xx processor dedicated to graphics manipulation. Older (and low end) Amigas do everything with just a 68xx processor.

AmigaOS

The OS used by Amigas. AmigaOS combines the functionality of an OS and a window manager and is fully multitasking. AmigaOS boasts a pretty good selection of games (many arcade games are in fact written on Amigas) but has limited driver support. AmigaOS will run on 68xx, Alpha, and PowerPC based machines.

Apple][

The Apple][computer sold millions of units and is generally considered to have been the first home computer with a 1977 release date. It is based on the 65xx family of processors. The earlier Apple I was only available as a build-it-yourself kit.

AppleScript

A scripting language for Mac OS computers.

applet

An applet differs from an application in that it is not meant to be run stand-alone but rather with the assistance of another program, usually a browser.

AppleTalk



AppleTalk is a [protocol](#) for computer [networks](#). It is arguably inferior to [TCP/IP](#).

Aqua

The default [window manager](#) for [Mac OS X](#).

Archie

Archie is a system for searching through [FTP](#) archives for particular files. It tends not to be used too much anymore as more general modern search engines are significantly more capable.

ARM

An ARM is a [RISC processor](#) invented by Advanced RISC Machines, currently owned by Intel, and currently produced by both the above and Digital/Compaq. ARMs are different from most other processors in that they were not designed to maximize speed but rather to maximize speed per power consumed. Thus ARMs find most of their use on hand-held machines and [PDAs](#). A few different [OSes](#) run on ARM based machines including [Newton OS](#), [JavaOS](#), and (soon) [Windows CE](#) and [Linux](#). The StrongARM is a more recent design of the original ARM, and it is both faster and more power efficient than the original.

ASCII

The ASCII [character set](#) is the most popular one in common use. People will often refer to a bare text file without complicated embedded format instructions as an ASCII file, and such files can usually be transferred from one computer system to another with relative ease. Unfortunately there are a few minor variations of it that pop up here and there, and if you receive a text file that seems subtly messed up with punctuation marks altered or upper and lower case reversed, you are probably encountering one of the ASCII variants. It is usually fairly straightforward to translate from one ASCII variant to another, though. The ASCII character set is seven [bit](#) while pure [binary](#) is usually eight bit, so transferring a binary file through ASCII channels will

result in corruption and loss of data. Note also that the ASCII character set is a subset of the [Unicode](#) character set.

ASK

A [protocol](#) for an [infrared communications](#) port on a device. It predates the [IrDA](#) compliant infrared communications protocol and is not compatible with it. Many devices with infrared communications support both, but some only support one or the other.

assembly language

Assembly language is essentially [machine language](#) that has had some of the numbers replaced by somewhat easier to remember mnemonics in an attempt to make it more human-readable. The [program](#) that converts assembly language to machine language is called an assembler. While assembly language predates [FORTRAN](#), it is not typically what people think of when they discuss [computer languages](#).

Atom

Atom is an intended replacement for [RSS](#) and like it is used for syndicating a web site's content. It is currently not nearly as popular or well-supported by software [applications](#), however.

authoring system

Any [GUIs](#) method of designing new [software](#) can be called an authoring system. Any computer [language](#) name with the word "visual" in front of it is probably a version of that language built with some authoring system capabilities. It appears that the first serious effort to produce a commercial quality authoring system took place in the mid eighties for the [Amiga](#).

AWK

AWK is an [interpreted language](#) developed in 1977 by Aho, Weinberger, & Kernighan. It gets its name from its creators' initials. It is not particularly fast, but it was designed for creating small throwaway [programs](#) rather than full-blown [applications](#) -- it is designed to make the writing of the program fast, not the program itself. It is quite [portable](#) with versions existing for numerous [platforms](#), including a free



GNU version. Plus, virtually every version of UNIX in the world comes with AWK built-in.

BASIC

The **B**eginners' **A**ll-purpose **S**ymbolic **I**nstruction **C**ode is a computer language developed by Kemeny & Kurtz in 1964. Although it is traditionally interpreted, compilers exist for many platforms. While the interpreted form is typically fairly slow, the compiled form is often quite fast, usually faster than Pascal. The biggest problem with BASIC is portability; versions for different machines are often completely unlike each other; Amiga BASIC at first glance looks more like Pascal, for example. Portability problems actually go beyond even the cross platform level; in fact, most machines have multiple versions of incompatible BASICs available for use. The most popular version of BASIC today is called Visual BASIC. Like all BASICs it has portability issues, but it has some of the advantages of an authoring system so it is relatively easy to use.

baud

A measure of communications speed, used typically for modems indicating how many bits per second can be transmitted.

BBS

A **b**ulletin **b**oard **s**ystem is a computer that can be directly connected to via modem and provides various services like e-mail, chatting, newsgroups, and file downloading. BBSs have waned in popularity as more and more people are instead connecting to the Internet, but they are still used for product support and local area access. Most current BBSs provide some sort of gateway connection to the Internet.

bcode

Identical in intent to uucode, bcode is slightly more efficient and more portable across different computer types. It is the preferred method used by MIME.

BeOS

A lightweight OS available for both PowerPC and x86 based machines. It is often referred to simply as "Be".

beta

A beta version of something is not yet ready for prime time but still possibly useful to related developers and other interested parties. Expect beta software to crash more than properly released software does. Traditionally beta versions (of commercial software) are distributed only to selected testers who are often then given a discount on the proper version after its release in exchange for their testing work. Beta versions of non-commercial software are more often freely available to anyone who has an interest.

binary

There are two meanings for binary in common computer usage. The first is the name of the number system in which there are only zeros and ones. This is important to computers because all computer data is ultimately a series of zeros and ones, and thus can be represented by binary numbers. The second is an offshoot of the first; data that is not meant to be interpreted through a common character set (like ASCII) is typically referred to as binary data. Pure binary data is typically eight bit data, and transferring a binary file through ASCII channels without prior modification will result in corruption and loss of data. Binary data can be turned into ASCII data via uucoding or bcoding.

bit

A bit can either be on or off; one or zero. All computer data can ultimately be reduced to a series of bits. The term is also used as a (very rough) measure of sound quality, color quality, and even procesor capability by considering the fact that series of bits can represent binary numbers. For example (without getting too technical), an eight bit image can contain at most 256 distinct colors while a sixteen bit image can contain at most 65,536 distinct colors.

bitmap



A bitmap is a simplistic representation of an image on a computer, simply indicating whether or not [pixels](#) are on or off, and sometimes indicating their color. Often [fonts](#) are represented as bitmaps. The term "pixmap" is sometimes used similarly; typically when a distinction is made, pixmap refers to color images and bitmap refers to monochrome images.

blog

Short for web log, a blog (or weblog, or less commonly, 'blog) is a web site containing periodic (usually frequent) posts. Blogs are usually syndicated via either some type of [RSS](#) or [Atom](#) and often supports [TrackBacks](#). It is not uncommon for blogs to function much like newspaper columns. A blogger is someone who writes for and maintains a blog.

boolean

Boolean algebra is the mathematics of base two numbers. Since base two numbers have only two values, zero and one, there is a good analogy between base two numbers and the logical values "true" & "false". In common usage, booleans are therefore considered to be simple logical values like true & false and the operations that relate them, most typically "and", "or" and "not". Since everyone has a basic understanding of the concepts of true & false and basic conjunctions, everyone also has a basic understanding of boolean concepts -- they just may not realize it.

byte

A byte is a grouping of [bits](#). It is typically eight bits, but there are those who use non-standard byte sizes. Bytes are usually measured in large groups, and the term "kilobyte" (often abbreviated as K) means one-thousand twenty-four (1024) bytes; the term "megabyte" (often abbreviated as M) means one-thousand twenty-four (1024) K; the term gigabyte (often abbreviated as G) means one-thousand twenty-four (1024) M; and the term "terabyte" (often abbreviated as T) means one-thousand twenty-four (1024) G.

[Memory](#) is typically measured in kilobytes or megabytes, and disk space is typically measured in megabytes or gigabytes. Note that the multipliers here are 1024 instead of the more common 1000 as would be used in the metric system. This is to make it easier to work with the [binary](#) number system. Note also that some [hardware](#) manufacturers will use the smaller 1000 multiplier on M & G quantities to make their disk drives seem larger than they really are; buyer beware.

bytecode

Sometimes computer [languages](#) that are said to be either [interpreted](#) or [compiled](#) are in fact neither and are more accurately said to be somewhere in between. Such languages are compiled into bytecode which is then interpreted on the target system. Bytecode tends to be [binary](#) but will work on any machine with the appropriate [runtime environment](#) (or virtual machine) for it.

C

C is one of the most popular computer [languages](#) in the world, and quite possibly *the* most popular. It is a [compiled](#) language widely supported on many [platforms](#). It tends to be more [portable](#) than [FORTRAN](#) but less portable than [Java](#); it has been standardized by ANSI as "ANSI C" -- older versions are called either "K&R C" or "Kernighan and Ritchie C" (in honor of C's creators), or sometimes just "classic C". Fast and simple, it can be applied to all manner of general purpose tasks. C compilers are made by several companies, but the free [GNU](#) version (gcc) is still considered one of the best. Newer C-like [object-oriented](#) languages include both [Java](#) and [C++](#).

C#

C# is a [compiled object-oriented language](#) based heavily on [C++](#) with some [Java](#) features.

C++

C++ is a [compiled object-oriented language](#). Based heavily on [C](#), C++ is nearly as fast and can often be thought of as being just C with added features. It



is currently probably the second most popular object-oriented language, but it has the drawback of being fairly complex -- the much simpler but somewhat slower [Java](#) is probably the most popular object-oriented language. Note that C++ was developed independently of the somewhat similar [Objective-C](#); it is however related to [Objective-C++](#).

C64/128

The Commodore 64 computer to this day holds the record for being the most successful model of computer ever made with even the lowest estimates being in the tens of millions. Its big brother, the Commodore 128, was not quite as popular but still sold several million units. Both units sported [ROM](#)-based [BASIC](#) and used it as a default "OS". The C128 also came with [CP/M](#) (it was a not-often-exercised option on the C64). In their later days they were also packaged with [GEOS](#). Both are based on [65xx](#) family [processors](#). They are still in use today and boast a friendly and surprisingly active [user](#) community. There is even a current effort to [port Linux](#) to the C64 and C128 machines.

CDE

The common desktop environment is a popular commercial [window manager](#) (and much more -- as its name touts, it is more of a desktop environment) that runs under [X-Windows](#). Free work-alike versions are also available.

chain

Some computer devices support chaining, the ability to string multiple devices in a sequence plugged into just one computer port. Often, but not always, such a chain will require some sort of [terminator](#) to mark the end. For an example, a [SCSI scanner](#) may be plugged into a SCSI CD-ROM [drive](#) that is plugged into a SCSI hard drive that is in turn plugged into the main computer. For all these components to work properly, the scanner would also have to have a proper terminator in use. Device chaining has been around a long time, and it is interesting to note that

[C64/128 serial](#) devices supported it from the very beginning. Today the most common low-cost chainable devices in use support [USB](#) while the fastest low-cost chainable devices in use support [FireWire](#).

character set

Since in reality all a computer can store are series of zeros and ones, representing common things like text takes a little work. The solution is to view the series of zeros and ones instead as a sequence of [bytes](#), and map each one to a particular letter, number, or symbol. The full mapping is called a character set. The most popular character set is commonly referred to as [ASCII](#). The second most popular character set these days is [Unicode](#) (and it will probably eventually surpass ASCII). Other fairly common character sets include [EBCDIC](#) and [PETSCII](#). They are generally quite different from one another; [programs](#) exist to convert between them on most [platforms](#), though. Usually EBCDIC is only found on really old machines.

CISC

Complex instruction set computing is one of the two main types of processor design in use today. It is slowly losing popularity to [RISC](#) designs; currently all the fastest processors in the world are RISC. The most popular current CISC processor is the [x86](#), but there are also still some [68xx](#), [65xx](#), and [Z80s](#) in use.

CLI

A command-line interface is a text-based means of communicating with a [program](#), especially an [OS](#). This is the sort of interface used by [MS-DOS](#), or a [UNIX shell](#) window.

COBOL

The Common Business Oriented Language is a [language](#) developed back in 1959 and still used by some businesses. While it is relatively [portable](#), it is still disliked by many professional programmers simply because COBOL [programs](#) tend to be physically longer than equivalent



programs written in almost any other language in common use.

compiled

If a [program](#) is compiled, its original human-readable source has been converted into a form more easily used by a computer prior to it being [run](#). Such programs will generally run more quickly than [interpreted](#) programs, because time was pre-spent in the compilation phase. A program that compiles other programs is called a compiler.

compression

It is often possible to remove redundant information or capitalize on patterns in data to make a [file](#) smaller. Usually when a file has been compressed, it cannot be used until it is uncompressed. Image files are common exceptions, though, as many popular image file [formats](#) have compression built-in.

cookie

A cookie is a small [file](#) that a [web](#) page on another machine writes to your personal machine's [disk](#) to store various bits of information. Many people strongly detest cookies and the whole idea of them, and most [browsers](#) allow the reception of cookies to be disabled or at least selectively disabled, but it should be noted that both Netscape and MSIE have silent cookie reception enabled by default. Sites that maintain shopping carts or remember a reader's last position have legitimate uses for cookies. Sites without such functionality that still spew cookies with distant (or worse, non-existent) expiration dates should perhaps be treated with a little caution.

CP/M

An early [DOS](#) for [desktops](#), CP/M runs on both [Z80](#) and the [x86](#) based machines. CP/M provides only a [CLI](#) and there really is not any standard way to get a [window manager](#) to run on top of it. It is fairly complex and tricky to use. In spite of all this, CP/M was once the most popular DOS and is still in use today.

crash

If a [bug](#) in a [program](#) is severe enough, it can cause that program to crash, or to become inoperable without being restarted. On machines that are not [multitasking](#), the entire machine will crash and have to be [rebooted](#). On machines that are only partially multitasking the entire machine will sometimes crash and have to be rebooted. On machines that are fully multitasking, the machine should never crash and require a reboot.

Cray

A Cray is a high-end computer used for research and frequently heavy-duty [graphics](#) applications. Modern Crays typically have [Solaris](#) for their [OS](#) and sport sixty-four [RISC processors](#); older ones had various other configurations. Current top-of-the-line Crays can have over 2000 processors.

crippleware

Crippleware is a variant of [shareware](#) that will either self-destruct after its trial period or has built-in limitations to its functionality that get removed after its purchase.

CSS

Cascading style sheets are used in conjunction with [HTML](#) and [XHTML](#) to define the layout of [web](#) pages. While CSS is how current web pages declare how they should be displayed, it tends not to be supported well (if at all) by ancient [browsers](#). [XSL](#) performs this same function more generally.

desktop publisher

A [program](#) for creating newspapers, magazines, books, etc. Some common desktop publishing programs include FrameMaker, PageMaker, InDesign, and GeoPublish.

DHTML

Dynamic [HTML](#) is simply the combined use of both [CSS](#) and [JavaScript](#) together in the same document; a more extreme form is called [AJaX](#). Note that DHTML is quite different from the similarly named [DTML](#).

dict



A [protocol](#) used for looking up definitions across a [network](#) (in particular the [Internet](#)).

digital camera

A digital camera looks and behaves like a regular camera, except instead of using film, it stores the image it sees in [memory](#) as a [file](#) for later transfer to a computer. Many digital cameras offer additional storage besides their own internal memory; a few sport some sort of [disk](#) but the majority utilize some sort of [flash](#) card. Digital cameras currently lack the resolution and color palette of real cameras, but are usually much more convenient for computer applications. Another related device is called a [scanner](#).

DIMM

A physical component used to add [RAM](#) to a computer. Similar to, but incompatible with, [SIMMs](#).

DNS

Domain name service is the means by which a name (like [www.saugus.net](#) or [ftp.saugus.net](#)) gets converted into a real [Internet](#) address that points to a particular machine.

DoS

In a **denial of service** attack, many individual (usually compromised) computers are used to try and simultaneously access the same public resource with the intent of overburdening it so that it will not be able to adequately serve its normal users.

DOS

A **disk operating system** manages [disks](#) and other system resources. Sort of a subset of [OSes](#), sort of an archaic term for the same. [MS-DOS](#) is the most popular [program](#) currently calling itself a DOS. [CP/M](#) was the most popular prior to MS-DOS.

download

To download a [file](#) is to copy it from a remote computer to your own. The opposite is [upload](#).

DR-DOS

The [DOS](#) currently produced by Caldera (originally produced by Design Research as a successor to [CP/M](#)) designed to work like [MS-DOS](#). While similar to CP/M in many ways, it utilizes simpler commands. It provides only a [CLI](#), but either [Windows 3.1](#) or [GEOS](#) may be run on top of it to provide a [GUI](#). It only runs on [x86](#) based machines.

driver

A driver is a piece of [software](#) that works with the [OS](#) to control a particular piece of [hardware](#), like a [printer](#) or a [scanner](#) or a [mouse](#) or whatever.

DRM

Depending upon whom you ask, DRM can stand for either Digital Rights Management or Digital Restrictions Management. In either case, DRM is used to place restrictions upon the usage of digital media ranging from software to music to video.

DTML

The **Document Template Mark-up Language** is a subset of [SGML](#) and a superset of [HTML](#) used for creating documents that dynamically adapt to external conditions using its own custom tags and a little bit of [Python](#). Note that it is quite different from the similarly named [DHTML](#).

EDBIC

The EDBIC [character set](#) is similar to (but less popular than) the [ASCII](#) character set in concept, but is significantly different in layout. It tends to be found only on old machines..

emacs

Emacs is both one of the most powerful and one of the most popular text editing [programs](#) in existence. Versions can be found for most [platforms](#), and in fact multiple companies make versions, so for a given platform there might even be a choice. There is even a free [GNU](#) version available. The drawback with emacs is that it is not in the least bit [lightweight](#). In fact, it goes so far in the other direction that even its advocates will occasionally joke about it. It is



however extremely capable. Almost anything that one would need to relating to text can be done with emacs and is probably built-in. Even if one manages to find something that emacs was not built to do, emacs has a built-in [Lisp interpreter](#) capable of not only extending its text editing capabilities, but even of being used as a [scripting language](#) in its own right.

embedded

An embedded system is a computer that lives inside another device and acts as a component of that device. For example, current cars have an embedded computer under the hood that helps regulate much of their day to day operation.

An embedded file is a [file](#) that lives inside another and acts as a portion of that file. This is frequently seen with [HTML](#) files having embedded audio files; audio files often embedded in HTML include [AU](#) files, [MIDI](#) files, [SID](#) files, [WAV](#) files, [AIFF](#) files, and [MOD](#) files. Most [browsers](#) will ignore these files unless an appropriate [plug-in](#) is present.

emulator

An emulator is a [program](#) that allows one computer [platform](#) to mimic another for the purposes of [running](#) its software. Typically (but not always) running a program through an emulator will not be quite as pleasant an experience as running it on the real system.

endian

A [processor](#) will be either "big endian" or "little endian" based upon the manner in which it encodes multiple [byte](#) values. There is no difference in performance between the two encoding methods, but it is one of the sources of difficulty when reading [binary](#) data on different [platforms](#).

environment

An environment (sometimes also called a runtime environment) is a collection of external variable items or parameters that a [program](#) can access when [run](#). Information about the computer's

[hardware](#) and the [user](#) can often be found in the environment.

EPOC

EPOC is a [lightweight OS](#). It is most commonly found on the [Psion PDA](#).

extension

Filename extensions originate back in the days of [CP/M](#) and basically allow a very rough grouping of different [file](#) types by putting a tag at the end of the name. To further complicate matters, the tag is sometimes separated by the name proper by a period "." and sometimes by a tab. While extensions are semi-enforced on CP/M, [MS-DOS](#), and [MS-Windows](#), they have no real meaning aside from convention on other [platforms](#) and are only optional.

FAQ

A frequently asked questions [file](#) attempts to provide answers for all commonly asked questions related to a given topic.

FireWire

An incredibly fast type of [serial](#) port that offers many of the best features of [SCSI](#) at a lower price. Faster than most types of [parallel](#) port, a single FireWire port is capable of [chaining](#) many devices without the need of a [terminator](#). FireWire is similar in many respects to [USB](#) but is significantly faster and somewhat more expensive. It is heavily used for connecting audio/video devices to computers, but is also used for connecting storage devices like [drives](#) and other assorted devices like [printers](#) and [scanners](#).

fixed width

As applied to a [font](#), fixed width means that every character takes up the same amount of space. That is, an "i" will be just as wide as an "m" with empty space being used for padding. The opposite is [variable width](#). The most common fixed width font is Courier.

flash

Flash memory is similar to [RAM](#). It has one significant advantage: it does not lose its contents when power is lost; it has two main disadvantages: it is



slower, and it eventually wears out. Flash memory is frequently found in PCMCIA cards.

font

In a simplistic sense, a font can be thought of as the physical description of a character set. While the character set will define what sets of bits map to what letters, numbers, and other symbols, the font will define what each letter, number, and other symbol looks like. Fonts can be either fixed width or variable width and independently, either bitmapped or vectored. The size of the large characters in a font is typically measured in points.

Forth

A language developed in 1970 by Moore. Forth is fairly portable and has versions on many different platforms. While it is no longer an very popular language, many of its ideas and concepts have been carried into other computer programs. In particular, some programs for doing heavy-duty mathematical and engineering work use Forth-like interfaces.

FORTRAN

FORTRAN stands for **formula translation** and is the oldest computer language in the world. It is typically compiled and is quite fast. Its primary drawbacks are portability and ease-of-use -- often different FORTRAN compilers on different platforms behave quite differently in spite of standardization efforts in 1966 (FORTRAN 66 or FORTRAN IV), 1978 (FORTRAN 77), and 1991 (FORTRAN 90). Today languages like C and Java are more popular, but FORTRAN is still heavily used in military software. It is somewhat amusing to note that when FORTRAN was first released back in 1958 its advocates thought that it would mean the end of software bugs. In truth of course by making the creation of more complex software practical, computer languages have merely created new types of software bugs.

FreeBSD

A free variant of Berkeley UNIX available for Alpha and x86 based machines. It is not as popular as Linux.

freeware

Freeware is software that is available for free with no strings attached. The quality is often superb as the authors are also generally users.

FTP

The file transfer protocol is one of the most commonly used methods of copying files across the Internet. It has its origins on UNIX machines, but has been adapted to almost every type of computer in existence and is built into many browsers. Most FTP programs have two modes of operation, ASCII, and binary. Transmitting an ASCII file via the ASCII mode of operation is more efficient and cleaner. Transmitting a binary file via the ASCII mode of operation will result in a broken binary file. Thus the FTP programs that do not support both modes of operation will typically only do the binary mode, as binary transfers are capable of transferring both kinds of data without corruption.

gateway

A gateway connects otherwise separate computer networks.

GEOS

The **graphic environment operating system** is a lightweight OS with a GUI. It runs on several different processors, including the 65xx (different versions for different machines -- there are versions for the C64, the C128, and the Apple][, each utilizing the relevant custom chip sets), the x86 (although the x86 version is made to run on top of MS-DOS (or PC-DOS or DR-DOS) and is not strictly a full OS or a window manager, rather it is somewhat in between, like Windows 3.1) and numerous different PDAs, embedded devices, and hand-held machines. It was originally designed by Berkeley Softworks (no real relation to the Berkeley of UNIX fame) but is currently in a more interesting state: the company GeoWorks develops and



promotes development of GEOS for hand-held devices, PDAs, & and embedded devices and owns (but has ceased further development on) the x86 version. The other versions are owned (and possibly still being developed) by the company CMD.

Glulx

A virtual machine optimized for running interactive fiction, interactive tutorials, and other interactive things of a primarily textual nature. Glulx has been ported to several platforms, and in many ways an upgrade to the Z-machine.

GNOME

The **GNU network object model environment** is a popular free window manager (and much more -- as its name touts, it is more of a desktop environment) that runs under X-Windows. It is a part of the GNU project.

GNU

GNU stands for **GNU's not UNIX** and is thus a recursive acronym (and unlike the animal name, the "G" here is pronounced). At any rate, the GNU project is an effort by the Free Software Foundation (FSF) to make all of the traditional UNIX utilities free for whoever wants them. The Free Software Foundation programmers know their stuff, and the quality of the GNU software is on par with the best produced commercially, and often better. All of the GNU software can be downloaded for free or obtained on CD-ROM for a small service fee.

Documentation for all GNU software can be downloaded for free or obtained in book form for a small service fee. The Free Software Foundation pays its bills from the collection of service fees and the sale of T-shirts, and exists mostly through volunteer effort. It is based in Cambridge, MA.

gopher

Though not as popular as FTP or http, the gopher protocol is implemented by many browsers and numerous other programs and allows the transfer of files

across networks. In some respects it can be thought of as a hybrid between FTP and http, although it tends not to be as good at raw file transfer as FTP and is not as flexible as http. The collection of documents available through gopher is often called "gopherspace", and it should be noted that gopherspace is older than the web. It should also be noted that gopher is not getting as much attention as it once did, and surfing through gopherspace is a little like exploring a ghost town, but there is an interesting VR interface available for it, and some things in gopherspace still have not been copied onto the web.

GUI

A **graphical user interface** is a graphics-based means of communicating with a program, especially an OS or window manager. In fact, a window manager can be thought of as a GUI for a CLI OS.

HP-UX

HP-UX is the version of UNIX designed by Hewlett-Packard to work with their PA-RISC and 68xx based machines.

HTML

The **Hypertext Mark-up Language** is the language currently most frequently used to express web pages (although it is rapidly being replaced by XHTML). Every browser has the built-in ability to understand HTML. Some browsers can additionally understand Java and browse FTP areas. HTML is a proper subset of SGML.

http

The **hypertext transfer protocol** is the native protocol of browsers and is most typically used to transfer HTML formatted files. The secure version is called "https".

Hurd

The Hurd is the official GNU OS. It is still in development and is not yet supported on too many different processors, but promises to be the most powerful OS available. It (like all the GNU software) is free.

**i18n**

Commonly used to abbreviate the word "internationalization". There are eighteen letters between the "i" and the "n". Similar to (and often used along with) [i18n](#).

iCalendar

The iCalendar standard refers to the [format](#) used to store calendar type information (including events, to-do items, and journal entries) on the [Internet](#). iCalendar data can be found on some [World-Wide-Web](#) pages or attached to [e-mail](#) messages.

icon

A small [graphical](#) display representing an object, action, or modifier of some sort.

IDE

Loosely speaking, a [disk format](#) sometimes used by [MS-Windows](#), [Mac OS](#), [AmigaOS](#), and (rarely) [UNIX](#). EIDE is enhanced IDE; it is much faster. Generally IDE is inferior (but less expensive) to [SCSI](#), but it varies somewhat with system [load](#) and the individual IDE and SCSI components themselves. The quick rundown is that: SCSI-I and SCSI-II will almost always outperform IDE; EIDE will almost always outperform SCSI-I and SCSI-II; SCSI-III and UltraSCSI will almost always outperform EIDE; and heavy system loads give an advantage to SCSI. Note that although loosely speaking it is just a format difference, it is deep down a [hardware](#) difference.

Inform

A [compiled, object-oriented language](#) optimized for creating [interactive fiction](#).

infrared communications

A device with an infrared port can communicate with other devices at a distance by beaming infrared light signals. Two incompatible [protocols](#) are used for infrared communications: [IrDA](#) and [ASK](#). Many devices support both.

Instant Messenger

AOL's Instant Messenger is a means of [chatting](#) over the [Internet](#) in [real-](#)

[time](#). It allows both open group discussions and private conversations. Instant Messenger uses a different, [proprietary protocol](#) from the more standard [IRC](#), and is not supported on as many [platforms](#).

interactive fiction

Interactive fiction (often abbreviated "IF" or "I-F") is a form of literature unique to the computer. While the reader cannot influence the direction of a typical story, the reader plays a more active role in an interactive fiction story and completely controls its direction. Interactive fiction works come in all the sizes and genres available to standard fiction, and in fact are not always even fiction per se (interactive tutorials exist and are slowly becoming more common).

interpreted

If a [program](#) is interpreted, its actual human-readable source is read as it is [run](#) by the computer. This is generally a slower process than if the program being run has already been [compiled](#).

intranet

An intranet is a private [network](#). There are many intranets scattered all over the world. Some are connected to the [Internet](#) via [gateways](#).

IP

IP is the family of [protocols](#) that makes up the [Internet](#). The two most common flavors are [TCP/IP](#) and [UDP/IP](#).

IRC

Internet relay chat is a means of [chatting](#) over the [Internet](#) in [real-time](#). It allows both open group discussions and private conversations. IRC [programs](#) are provided by many different companies and will work on many different [platforms](#). AOL's [Instant Messenger](#) utilizes a separate incompatible [protocol](#) but is otherwise very similar.

IrDA

The **Infrared Data Association (IrDA)** is a voluntary organization of various manufacturers working together to ensure that the [infrared communications](#) between different computers, [PDAs](#),



printers, digital cameras, remote controls, etc. are all compatible with each other regardless of brand. The term is also often used to designate an IrDA compliant infrared communications port on a device. Informally, a device able to communicate via IrDA compliant infrared is sometimes simply said to "have IrDA". There is also an earlier, incompatible, and usually slower type of infrared communications still in use called ASK.

IRI

An Internationalized Resource Identifier is just a URI with i18n.

IRIX

The variant of UNIX designed by Silicon Graphics, Inc. IRIX machines are known for their graphics capabilities and were initially optimized for multimedia applications.

ISDN

An integrated service digital network line can be simply looked at as a digital phone line. ISDN connections to the Internet can be four times faster than the fastest regular phone connection, and because it is a digital connection a modem is not needed. Any computer hooked up to ISDN will typically require other special equipment in lieu of the modem, however. Also, both phone companies and ISPs charge more for ISDN connections than regular modem connections.

ISP

An Internet service provider is a company that provides Internet support for other entities. AOL (America Online) is a well-known ISP.

Java

A computer language designed to be both fairly lightweight and extremely portable. It is tightly bound to the web as it is the primary language for web applets. There has also been an OS based on Java for use on small hand-held, embedded, and network computers. It is called JavaOS. Java can be either interpreted or compiled. For web applet use it is almost always interpreted. While its interpreted form

tends not to be very fast, its compiled form can often rival languages like C++ for speed. It is important to note however that speed is not Java's primary purpose -- raw speed is considered secondary to portability and ease of use.

JavaScript

JavaScript (in spite of its name) has nothing whatsoever to do with Java (in fact, it's arguably more like NewtonScript than Java). JavaScript is an interpreted language built into a browser to provide a relatively simple means of adding interactivity to web pages. It is only supported on a few different browsers, and tends not to work exactly the same on different versions. Thus its use on the Internet is somewhat restricted to fairly simple programs. On intranets where there are usually fewer browser versions in use, JavaScript has been used to implement much more complex and impressive programs.

jiffy

A jiffy is 1/60 of a second. Jiffies are to seconds as seconds are to minutes.

joystick

A joystick is a physical device typically used to control objects on a computer screen. It is frequently used for games and sometimes used in place of a mouse.

JSON

The JSON is used for data interchange between programs, an area in which the ubiquitous XML is not too well-suited. JSON is lightweight and works extremely cleanly with languages including JavaScript, Python, Java, C++, and many others.

JSON-RPC

JSON-RPC is like XML-RPC but is significantly more lightweight since it uses JSON in lieu of XML.

KDE

The **K** desktop environment is a popular free window manager (and much more -- as its name touts, it is more of a desktop environment) that runs under X-Windows.

**Kerberos**

Kerberos is a network authentication protocol. Basically it preserves the integrity of passwords in any untrusted network (like the Internet). Kerberized applications work hand-in-hand with sites that support Kerberos to ensure that passwords cannot be stolen.

kernel

The very heart of an OS is often called its kernel. It will usually (at minimum) provide some libraries that give programmers access to its various features.

i10n

Commonly used to abbreviate the word "localization". There are ten letters between the "l" and the "n". Similar to (and often used along with) i18n.

library

A selection of routines used by programmers to make computers do particular things.

lightweight

Something that is lightweight will not consume computer resources (such as RAM and disk space) too much and will thus run on less expensive computer systems.

Linux

Believe it or not, one of the fastest, most robust, and powerful multitasking OSES is available for free. Linux can be downloaded for free or be purchased on CD-ROM for a small service charge. A handful of companies distribute Linux including Red Hat, Debian, Caldera, and many others. Linux is also possibly available for more hardware combinations than any other OS (with the possible exception of NetBSD). Supported processors include: Alpha, PowerPC, SPARC, x86, and 68xx. Most processors currently not supported are currently works-in-progress or even available in beta. For example, work is currently underway to provide support for PA-RISC, 65xx, StrongARM, and Z80. People have even successfully gotten Linux working on PDAs. As you may have guessed, Linux can be made quite lightweight. Linux is a variant of

UNIX and as such, most of the traditional UNIX software will run on Linux. This especially includes the GNU software, most of which comes with the majority of Linux distributions. Fast, reliable, stable, and inexpensive, Linux is popular with ISPs, software developers, and home hobbyists alike.

Lisp

Lisp stands for **list** processing and is the second oldest computer language in the world. Being developed in 1959, it lost the title to FORTRAN by only a few months. It is typically interpreted, but compilers are available for some platforms. Attempts were made to standardize the language, and the standard version is called "Common Lisp". There have also been efforts to simplify the language, and the results of these efforts is another language called Scheme. Lisp is a fairly portable language, but is not particularly fast. Today, Lisp is most widely used with AI software.

load

There are two popular meanings for load. The first means to fetch some data or a program from a disk and store it in memory. The second indicates the amount of work a component (especially a processor) is being made to do.

Logo

Logo is an interpreted language designed by Papert in 1966 to be a tool for helping people (especially kids) learn computer programming concepts. In addition to being used for that purpose, it is often used as a language for controlling mechanical robots and other similar devices. Logo interfaces even exist for building block / toy robot sets. Logo uses a special graphics cursor called "the turtle", and Logo is itself sometimes called "Turtle Graphics". Logo is quite portable but not particularly fast. Versions can be found on almost every computer platform in the world. Additionally, some other languages (notably some Pascal versions) provide Logo-like interfaces for graphics-intensive programming.

**lossy**

If a process is lossy, it means that a little quality is lost when it is performed. If a format is lossy, it means that putting data into that format (or possibly even manipulating it in that format) will cause some slight loss. Lossy processes and formats are typically used for performance or resource utilization reasons. The opposite of lossy is lossless.

Lua

Lua is a simple interpreted language. It is extremely portable, and free versions exist for most platforms.

Mac OS

Mac OS is the OS used on Macintosh computers. There are two distinctively different versions of it; everything prior to version 10 (sometimes called Mac OS Classic) and everything version 10 or later (called Mac OS X).

Mac OS Classic

The OS created by Apple and originally used by Macs is frequently (albeit slightly incorrectly) referred to as Mac OS Classic (officially Mac OS Classic is this original OS running under the modern Mac OS X in emulation. Mac OS combines the functionality of both an OS and a window manager and is often considered to be the easiest OS to use. It is partially multitasking but will still sometimes crash when dealing with a buggy program. It is probably the second most popular OS, next only to Windows XP (although it is quickly losing ground to Mac OS X) and has excellent driver support and boasts a fair selection of games. Mac OS will run on PowerPC and 68xx based machines.

Mac OS X

Mac OS X (originally called Rhapsody) is the industrial strength OS produced by Apple to run on both PowerPC and x86 systems (replacing what is often referred to as Mac OS Classic. Mac OS X is at its heart a variant of UNIX and possesses its underlying power (and the ability to run many of the traditional UNIX tools, including the GNU tools).

It also was designed to mimic other OSes on demand via what it originally referred to as "boxes" (actually high-performance emulators); it has the built-in capability to run programs written for older Mac OS (via its "BlueBox", officially called Mac OS Classic) and work was started on making it also run Windows '95 / '98 / ME software (via what was called its "YellowBox"). There are also a few rumors going around that future versions may even be able to run Newton software (via the "GreenBox"). It provides a selection of two window managers built-in: Aqua and X-Windows (with Aqua being the default).

machine language

Machine language consists of the raw numbers that can be directly understood by a particular processor. Each processor's machine language will be different from other processors' machine language. Although called "machine language", it is not usually what people think of when talking about computer languages. Machine language dressed up with mnemonics to make it a bit more human-readable is called assembly language.

Macintosh

A Macintosh (or a Mac for short) is a computer system that has Mac OS for its OS. There are a few different companies that have produced Macs, but by far the largest is Apple. The oldest Macs are based on the 68xx processor; somewhat more recent Macs on the PowerPC processor, and current Macs on the x86 processor. The Macintosh was really the first general purpose computer to employ a GUI.

MacTel

An x86 based system running some flavor of Mac OS.

mainframe

A mainframe is any computer larger than a small piece of furniture. A modern mainframe is more powerful than a modern workstation, but more expensive and more difficult to maintain.

**MathML**

The **Math Mark-up Language** is a subset of XML used to represent mathematical formulae and equations. Typically it is found embedded within XHTML documents, although as of this writing not all popular browsers support it.

megahertz

A million cycles per second, abbreviated MHz. This is often used misleadingly to indicate processor speed, because while one might expect that a higher number would indicate a faster processor, that logic only holds true within a given type of processors as different types of processors are capable of doing different amounts of work within a cycle. For a current example, either a 200 MHz PowerPC or a 270 MHz SPARC will outperform a 300 MHz Pentium.

Merced

The Merced is a RISC processor developed by Intel with help from Hewlett-Packard and possibly Sun. It is just starting to be released, but is intended to eventually replace both the x86 and PA-RISC processors. Curiously, HP is recommending that everyone hold off using the first release and instead wait for the second one. It is expected some day to be roughly as fast as an Alpha or PowerPC. It is expected to be supported by future versions of Solaris, Windows-NT, HP-UX, Mac OS X, and Linux. The current semi-available Merced processor is called the Itanium. Its overall schedule is way behind, and some analysts predict that it never will really be released in significant quantities.

MFM

Loosely speaking, An old disk format sometimes used by CP/M, MS-DOS, and MS-Windows. No longer too common as it cannot deliver close to the performance of either SCSI or IDE.

middleware

Software designed to sit in between an OS and applications. Common examples are Java and Tcl/Tk.

MIME

The **multi-purpose Internet mail extensions** specification describes a means of sending non-ASCII data (such as images, sounds, foreign symbols, etc.) through e-mail. It commonly utilizes bcode.

MMX

Multimedia extensions were built into some x86 CPUs to provide better performance for certain operations, most notably graphics and sound.

MOB

A **movable object** is a graphical object that is manipulated separately from the background. These are seen all the time in computer games. When implemented in hardware, MOBs are sometimes called sprites.

Modula-2

Modula-2 is an object-oriented language based on Pascal by its original author in 1977. Modula-3 is a further enhanced form. Both versions are compiled languages.

MOTD

A **message of the day**. Many computers (particularly more capable ones) are configured to display a MOTD when accessed remotely.

Motif

Motif is a popular commercial window manager that runs under X-Windows. Free work-alike versions are also available.

MS-DOS

The DOS produced by Microsoft. Early versions of it bear striking similarities to the earlier CP/M, but it utilizes simpler commands. It provides only a CLI, but either OS/2, Windows 3.1, Windows '95, Windows '98, Windows ME, or GEOS may be run on top of it to provide a GUI. It only runs on x86 based machines.

MS-Windows

MS-Windows is the name collectively given to several somewhat incompatible OSes all produced by Microsoft. They are: Windows CE, Windows NT,



[Windows 3.1](#), [Windows '95](#), [Windows '98](#), [Windows ME](#), [Windows 2000](#), and [Windows XP](#).

MUD

A **multi-user dimension** (also sometimes called multi-user dungeon, but in either case abbreviated to "MUD") is sort of a combination between the online [chatting](#) abilities provided by something like [IRC](#) and a role-playing game. A MUD built with [object oriented](#) principles in mind is called a "Multi-user dimension object-oriented", or MOO. Yet another variant is called a "multi-user shell", or MUSH. Still other variants are called multi-user role-playing environments (MURPE) and multi-user environments (MUSE). There are probably more. In all cases the differences will be mostly academic to the regular [user](#), as the same [software](#) is used to connect to all of them. Software to connect to MUDs can be found for most [platforms](#), and there are even [Java](#) based ones that can run from within a [browser](#).

multitasking

Some [OSes](#) have built into them the ability to do several things at once. This is called multitasking, and has been in use since the late sixties / early seventies. Since this ability is built into the [software](#), the overall system will be slower [running](#) two things at once than it will be running just one thing. A system may have more than one [processor](#) built into it though, and such a system will be capable of running multiple things at once with less of a performance hit.

nagware

Nagware is a variant of [shareware](#) that will frequently remind its [users](#) to register.

NetBSD

A free variant of Berkeley [UNIX](#) available for [Alpha](#), [x86](#), [68xx](#), [PA-RISC](#), [SPARC](#), [PowerPC](#), [ARM](#), and many other types of machines. Its emphasis is on [portability](#).

netiquette

The established conventions of online politeness are called netiquette. Some conventions vary from site to site or online medium to online medium; others are pretty standard everywhere. [Newbies](#) are often unfamiliar with the [conventional rules of netiquette](#) and sometimes embarrass themselves accordingly. Be sure not to send that incredibly important [e-mail](#) message before [reading about netiquette](#).

newbie

A newbie is a novice to the online world or computers in general.

news

Usenet news can generally be thought of as public [e-mail](#) as that is generally the way it behaves. In reality, it is implemented by different [software](#) and is often accessed by different [programs](#). Different newsgroups adhere to different topics, and some are "moderated", meaning that humans will try to manually remove off-topic posts, especially [spam](#). Most established newsgroups have a [FAQ](#), and people are strongly encouraged to read the FAQ prior to posting.

Newton

Although Newton is officially the name of the [lightweight OS](#) developed by Apple to run on its MessagePad line of [PDAs](#), it is often used to mean the MessagePads (and compatible PDAs) themselves and thus the term "Newton OS" is often used for clarity. The Newton OS is remarkably powerful; it is fully [multitasking](#) in spite of the fact that it was designed for small machines. It is optimized for hand-held use, but will readily transfer data to all manner of [desktop](#) machines. Historically it was the first PDA. Recently Apple announced that it will discontinue further development of the Newton [platform](#), but will instead work to base future hand-held devices on either [Mac OS](#) or [Mac OS X](#) with some effort dedicated to making the new devices capable of [running](#) current Newton [programs](#).

Newton book



Newton books provide all the functionality of ordinary books but add searching and [hypertext](#) capabilities. The [format](#) was invented for the [Newton](#) to provide a means of making volumes of data portable, and is particularly popular in the medical community as most medical references are available as Newton books and carrying around a one pound Newton is preferable to carrying around twenty pounds of books, especially when it comes to looking up something. In addition to medical books, numerous references, most of the classics, and many contemporary works of fiction are available as Newton books. Most fiction is available for free, most references cost money. Newton books are somewhat more capable than the similar [Palm DOC](#); both are specific types of [e-books](#).

Newton Script

A [interpreted, object-oriented language](#) for [Newton MessagePad](#) computers.

nybble

A nybble is half a [byte](#), or four [bits](#). It is a case of computer whimsy; it only stands to reason that a small byte should be called a nybble. Some authors spell it with an "i" instead of the "y", but the "y" is the original form.

object-oriented

While the specifics are well beyond the scope of this document, the term "object-oriented" applies to a philosophy of [software](#) creation. Often this philosophy is referred to as object-oriented design (sometimes abbreviated as OOD), and [programs](#) written with it in mind are referred to as object-oriented programs (often abbreviated OOP). Programming [languages](#) designed to help facilitate it are called object-oriented languages (sometimes abbreviated as OOL) and [databases](#) built with it in mind are called object-oriented databases (sometimes abbreviated as OODB or less fortunately OOD). The general notion is that an object-oriented approach to creating software starts with modeling the real-world problems trying to be

solved in familiar real-world ways, and carries the analogy all the way down to structure of the program. This is of course a great over-simplification. Numerous object-oriented programming languages exist including: [Java](#), [C++](#), [Modula-2](#), [Newton Script](#), and [ADA](#).

Objective-C & ObjC

Objective-C (often called "ObjC" for short) is a [compiled object-oriented language](#). Based heavily on [C](#), Objective-C is nearly as fast and can often be thought of as being just C with added features. Note that it was developed independently of [C++](#); its object-oriented extensions are more in the style of [Smalltalk](#). It is however related to [Objective-C++](#).

Objective-C++ & ObjC++

Objective-C++ (often called "ObjC++" for short) is a curious hybrid of [Objective-C](#) and [C++](#), allowing the syntax of both to coexist in the same source files.

office suite

An office suite is a collection of [programs](#) including at minimum a [word processor](#), [spreadsheet](#), drawing program, and minimal [database](#) program. Some common office suites include MS-Office, AppleWorks, ClarisWorks, GeoWorks, Applixware, Corel Office, and StarOffice.

open source

Open source [software](#) goes one step beyond [freeware](#). Not only does it provide the software for free, it provides the original source code used to create the software. Thus, curious [users](#) can poke around with it to see how it works, and advanced users can modify it to make it work better for them. By its nature, open source software is pretty well immune to all types of computer [virus](#).

OpenBSD

A free variant of Berkeley [UNIX](#) available for [Alpha](#), [x86](#), [68xx](#), [PA-RISC](#), [SPARC](#), and [PowerPC](#) based machines. Its emphasis is on security.

OpenDocument & ODF



OpenDocument (or ODF for short) is the suite of open, [XML](#)-based [office suite](#) application formats defined by the OASIS consortium. It defines a [platform](#)-neutral, non-[proprietary](#) way of storing documents.

OpenGL

A low-level 3D [graphics library](#) with an emphasis on speed developed by SGI.

OS/2

OS/2 is the [OS](#) designed by IBM to run on [x86](#) based machines. It is semi-compatible with [MS-Windows](#). IBM's more industrial strength OS is called [AIX](#).

PA-RISC

The PA-RISC is a [RISC processor](#) developed by Hewlett-Packard. It is currently produced only by HP. At the moment only one [OS](#) runs on PA-RISC based machines: [HP-UX](#). There is an effort underway to [port Linux](#) to them, though.

Palm DOC

Palm DOC [files](#) are quite similar to (but slightly less capable than) [Newton books](#). They were designed for [Palm Pilots](#) but can now be read on a couple other [platforms](#), too. They are a specific type of [e-book](#).

Palm Pilot

The Palm Pilot (also called both just Palm and just Pilot, officially now just Palm) is the most popular [PDA](#) currently in use. It is one of the least capable PDAs, but it is also one of the smallest and least expensive. While not as full featured as many of the other PDAs (such as the [Newton](#)) it performs what features it does have quite well and still remains truly pocket-sized.

parallel

Loosely speaking, parallel implies a situation where multiple things can be done simultaneously, like having multiple check-out lines each serving people all at once. Parallel connections are by their nature more expensive than [serial](#) ones, but usually faster. Also, in a related use of the word, often [multitasking](#) computers are said to be

capable of running multiple [programs](#) in parallel.

partition

Sometimes due to hardware limitations, [disks](#) have to be divided into smaller pieces. These pieces are called partitions.

Pascal

Named after the mathematician Blaise Pascal, Pascal is a [language](#) designed by Niklaus Wirth originally in 1968 (and heavily revised in 1972) mostly for purposes of education and training people how to write computer [programs](#). It is a typically [compiled](#) language but is still usually slower than [C](#) or [FORTRAN](#). Wirth also created a more powerful [object-oriented](#) Pascal-like language called [Modula-2](#).

PC-DOS

The [DOS](#) produced by IBM designed to work like [MS-DOS](#). Early versions of it bear striking similarities to the earlier [CP/M](#), but it utilizes simpler commands. It provides only a [CLI](#), but either [Windows 3.1](#) or [GEOS](#) may be run on top of it to provide a [GUI](#). It only runs on [x86](#) based machines.

PCMCIA

The Personal Computer Memory Card International Association is a standards body that concern themselves with PC Card technology. Often the PC Cards themselves are referred to as "PCMCIA cards". Frequently [flash memory](#) can be found in PC card form.

Perl

Perl is an [interpreted language](#) extremely popular for [web applications](#).

PET

The Commodore PET (Personal Electronic Transactor) is an early (circa 1977-1980, around the same time as the [Apple II](#)) home computer featuring a [ROM](#)-based [BASIC](#) developed by Microsoft which it uses as a default "OS". It is based on the [65xx](#) family of [processors](#) and is the precursor to the [VIC-20](#).

PETSCII



<p>The PETSCII character set gets its name from "PET ASCII"; it is a variant of the ASCII character set originally developed for the Commodore PET that swaps the upper and lower case characters and adds over a hundred graphic characters in addition to other small changes. If you encounter some text that seems to have uppercase where lowercase is expected and vice-versa, it is probably a PETSCII file.</p> <p>PHP Named with a recursive acronym (PHP: Hypertext Preprocessor), PHP provides a means of creating web pages that dynamically modify themselves on the fly.</p> <p>ping Ping is a protocol designed to check across a network to see if a particular computer is "alive" or not. Computers that recognize the ping will report back their status. Computers that are down will not report back anything at all.</p> <p>pixel The smallest distinct point on a computer display is called a pixel.</p> <p>plug-in A plug-in is a piece of software designed not to run on its own but rather work in cooperation with a separate application to increase that application's abilities.</p> <p>point There are two common meanings for this word. The first is in the geometric sense; a position in space without size. Of course as applied to computers it must take up some space in practise (even if not in theory) and it is thus sometimes synonomous with pixel. The other meaning is related most typically to fonts and regards size. The exact meaning of it in this sense will unfortunately vary somewhat from person to person, but will often mean 1/72 of an inch. Even when it does not exactly mean 1/72 of an inch, larger point sizes always indicate larger fonts.</p> <p>PowerPC</p>	<p>The PowerPC is a RISC processor developed in a collaborative effort between IBM, Apple, and Motorola. It is currently produced by a few different companies, of course including its original developers. A few different OSes run on PowerPC based machines, including Mac OS, AIX, Solaris, Windows NT, Linux, Mac OS X, BeOS, and AmigaOS. At any given time, the fastest processor in the world is usually either a PowerPC or an Alpha, but sometimes SPARCs and PA-RISCs make the list, too.</p> <p>proprietary This simply means to be supplied by only one vendor. It is commonly misused. Currently, most processors are non-proprietary, some systems are non-proprietary, and every OS (except for arguably Linux) is proprietary.</p> <p>protocol A protocol is a means of communication used between computers. As long as both computers recognize the same protocol, they can communicate without too much difficulty over the same network or even via a simple direct modem connection regardless whether or not they are themselves of the same type. This means that WinTel boxes, Macs, Amigas, UNIX machines, etc., can all talk with one another provided they agree on a common protocol first.</p> <p>Psion The Psion is a fairly popular brand of PDA. Generally, it is in between a Palm and a Newton in capability. It runs the EPOC OS.</p> <p>Python Python is an interpreted, object-oriented language popular for Internet applications. It is extremely portable with free versions existing for virtually every platform.</p> <p>queue A queue is a waiting list of things to be processed. Many computers provide printing queues, for example. If something is being printed and the user requests that another item be printed,</p>
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the second item will sit in the printer queue until the first item finishes printing at which point it will be removed from the queue and get printed itself.

QuickDraw

A high-level 3D [graphics library](#) with an emphasis on quick development time created by Apple.

RAM

Random access memory is the short-term memory of a computer. Any information stored in RAM will be lost if power goes out, but the computer can read from RAM far more quickly than from a [drive](#).

random access

Also called "dynamic access" this indicates that data can be selected without having to skip over earlier data first. This is the way that a CD, record, laserdisc, or DVD will behave -- it is easy to selectively play a particular track without having to fast forward through earlier tracks. The other common behavior is called [sequential access](#).

RDF

The **Resource Description Framework** is built upon an [XML](#) base and provides a more modern means of accessing data from [Internet](#) resources. It can provide metadata (including annotations) for [web](#) pages making (among other things) searching more capable. It is also being used to refashion some existing formats like [RSS](#) and [iCalendar](#); in the former case it is already in place (at least for newer RSS versions), but it is still experimental in the latter case.

real-time

Something that happens in real-time will keep up with the events around it and never give any sort of "please wait" message.

Rexx

The **Restructured Extended Executor** is an [interpreted language](#) designed primarily to be embedded in other applications in order to make them

consistently programmable, but also to be easy to learn and understand.

RISC

Reduced instruction set computing is one of the two main types of processor design in use today, the other being [CISC](#). The fastest processors in the world today are all RISC designs. There are several popular RISC processors, including [Alphas](#), [ARMs](#), [PA-RISCs](#), [PowerPCs](#), and [SPARC](#)s.

robot

A robot (or 'bot for short) in the computer sense is a [program](#) designed to automate some task, often just sending messages or collecting information. A spider is a type of robot designed to traverse the [web](#) performing some task (usually collecting data).

robust

The adjective robust is used to describe [programs](#) that are better designed, have fewer [bugs](#), and are less likely to [crash](#).

ROM

Read-only memory is similar to [RAM](#) only cannot be altered and does not lose its contents when power is removed.

RSS

RSS stands for either **Rich Site Summary**, **Really Simple Syndication**, or **RDF Site Summary**, depending upon whom you ask. The general idea is that it can provide brief summaries of articles that appear in full on a [web](#) site. It is well-formed [XML](#), and newer versions are even more specifically well-formed [RDF](#).

Ruby

Ruby is an [interpreted, object-oriented language](#). Ruby was fairly heavily influenced by [Perl](#), so people familiar with that language can typically transition to Ruby easily.

scanner

A scanner is a piece of [hardware](#) that will examine a picture and produce a computer [file](#) that represents what it sees. A [digital camera](#) is a related device. Each has its own limitations.

**Scheme**

Scheme is a typically interpreted computer language. It was created in 1975 in an attempt to make Lisp simpler and more consistent. Scheme is a fairly portable language, but is not particularly fast.

script

A script is a series of OS commands. The term "batch file" means much the same thing, but is a bit dated. Typically the same sort of situations in which one would say DOS instead of OS, it would also be appropriate to say batch file instead of script. Scripts can be run like programs, but tend to perform simpler tasks. When a script is run, it is always interpreted.

SCSI

Loosely speaking, a disk format sometimes used by MS-Windows, Mac OS, AmigaOS, and (almost always) UNIX. Generally SCSI is superior (but more expensive) to IDE, but it varies somewhat with system load and the individual SCSI and IDE components themselves. The quick rundown is that: SCSI-I and SCSI-II will almost always outperform IDE; EIDE will almost always outperform SCSI-I and SCSI-II; SCSI-III and UltraSCSI will almost always outperform EIDE; and heavy system loads give an advantage to SCSI. Note that although loosely speaking it is just a format difference, it is deep down a hardware difference.

sequential access

This indicates that data cannot be selected without having to skip over earlier data first. This is the way that a cassette or video tape will behave. The other common behavior is called random access.

serial

Loosely speaking, serial implies something that has to be done linearly, one at a time, like people being served in a single check-out line. Serial connections are by their nature less expensive than parallel connections (including things like SCSI) but are typically slower.

server

A server is a computer designed to provide various services for an entire network. It is typically either a workstation or a mainframe because it will usually be expected to handle far greater loads than ordinary desktop systems. The load placed on servers also necessitates that they utilize robust OSes, as a crash on a system that is currently being used by many people is far worse than a crash on a system that is only being used by one person.

SGML

The Standard Generalized Mark-up Language provides an extremely generalized level of mark-up. More common mark-up languages like HTML and XML are actually just popular subsets of SGML.

shareware

Shareware is software made for profit that allows a trial period before purchase. Typically shareware can be freely downloaded, used for a period of weeks (or sometimes even months), and either purchased or discarded after it has been learned whether or not it will satisfy the user's needs.

shell

A CLI designed to simplify complex OS commands. Some OSes (like AmigaOS, the Hurd, and UNIX) have built-in support to make the concurrent use of multiple shells easy. Common shells include the Korn Shell (ksh), the Bourne Shell (sh or bsh), the Bourne-Again Shell, (bash or bsh), the C-Shell (csh), etc.

SIMM

A physical component used to add RAM to a computer. Similar to, but incompatible with, DIMMs.

Smalltalk

Smalltalk is an efficient language for writing computer programs. Historically it is one of the first object-oriented languages, and is not only used today in its pure form but shows its influence in other languages like Objective-C.

Solaris



Solaris is the commercial variant of [UNIX](#) currently produced by Sun. It is an industrial strength, nigh bulletproof, powerful [multitasking OS](#) that will run on [SPARC](#), [x86](#), and [PowerPC](#) based machines.

spam

Generally spam is unwanted, unrequested [e-mail](#) or [Usenet news](#). It is typically sent out in bulk to huge address lists that were automatically generated by various [robots](#) endlessly searching the [Internet](#) and newsgroups for things that resemble e-mail addresses. The legality of spam is a topic of much debate; it is at best only borderline legal, and spammers have been successfully persecuted in some states.

SPARC

The SPARC is a [RISC processor](#) developed by Sun. The design was more or less released to the world, and it is currently produced by around a dozen different companies too numerous to even bother mentioning. It is worth noting that even computers made by Sun typically sport SPARCs made by other companies. A couple different [OSes](#) run on SPARC based machines, including [Solaris](#), [SunOS](#), and [Linux](#). Some of the newer SPARC models are called UltraSPARCs.

sprite

A sprite is a small [MOB](#), usually implemented in [hardware](#).

SQL

SQL (pronounced **Sequel**) is an [interpreted language](#) specially designed for [database](#) access. It is supported by virtually every major modern database system.

Sugar

The [window manager](#) used by the OLPC [XO](#). It is made to run on top of [Linux](#).

SunOS

SunOS is the commercial variant of [UNIX](#) formerly produced (but still supported) by Sun.

SVG

Scalable Vector Graphics data is an [XML](#) file that is used to hold graphical data that can be resized without loss of quality. SVG data can be kept in its own file, or even embedded within a web page (although not all browsers are capable of displaying such data).

Tcl/Tk

The Tool Command Language is a [portable interpreted computer language](#) designed to be easy to use. Tk is a [GUI](#) toolkit for Tcl. Tcl is a fairly popular language for both integrating existing [applications](#) and for creating [Web applets](#) (note that applets written in Tcl are often called Tcklets). Tcl/Tk is available for free for most [platforms](#), and [plug-ins](#) are available to enable many [browsers](#) to play Tcklets.

TCP/IP

TCP/IP is a [protocol](#) for computer [networks](#). The [Internet](#) is largely built on top of TCP/IP (it is the more reliable of the two primary [Internet Protocols](#) -- TCP stands for **T**ransmission **C**ontrol **P**rotocol).

terminator

A terminator is a dedicated device used to mark the end of a device [chain](#) (as is most typically found with [SCSI](#) devices). If such a chain is not properly terminated, weird results can occur.

TEX

TEX (pronounced "tek") is a freely available, industrial strength typesetting [program](#) that can be [run](#) on many different [platforms](#). These qualities make it exceptionally popular in schools, and frequently [software](#) developed at a university will have its documentation in TEX [format](#). TEX is not limited to educational use, though; many professional books were typeset with TEX. TEX's primary drawback is that it can be quite difficult to set up initially.

TrackBack

TrackBacks essentially provide a means whereby different web sites can post messages to one another not just to inform each other about citations, but



also to alert one another of related resources. Typically, a [blog](#) may display quotations from another blog through the use of TrackBacks.

UDP/IP

UDP/IP is a [protocol](#) for computer [networks](#). It is the faster of the two primary [Internet Protocols](#). UDP stands for User **D**atagram **P**rotocol.

Unicode

The Unicode [character set](#) is a superset of the [ASCII](#) character set with provisions made for handling international symbols and characters from other languages. Unicode is sixteen [bit](#), so takes up roughly twice the space as simple ASCII, but is correspondingly more flexible.

UNIX

UNIX is a family of [OSes](#), each being made by a different company or organization but all offering a very similar look and feel. It can not quite be considered non-[proprietary](#), however, as the differences between different vendor's versions can be significant (it is still generally possible to switch from one vendor's UNIX to another without too much effort; today the differences between different UNIXes are similar to the differences between the different [MS-Windows](#); historically there were two different UNIX camps, Berkeley / BSD and AT&T / System V, but the assorted vendors have worked together to minimize the differences). The free variant [Linux](#) is one of the closest things to a current, non-proprietary OS; its development is controlled by a non-profit organization and its distribution is provided by several companies. UNIX is powerful; it is fully [multitasking](#) and can do pretty much anything that any OS can do (look to the [Hurd](#) if you need a more powerful OS). With power comes complexity, however, and UNIX tends not to be overly friendly to beginners (although those who think UNIX is difficult or cryptic apparently have not used [CP/M](#)). [Window managers](#) are available for UNIX (running under [X-Windows](#)) and once properly configured common operations

will be almost as simple on a UNIX machine as on a [Mac](#). Out of all the OSes in current use, UNIX has the greatest range of hardware support. It will [run](#) on machines built around many different [processors](#). [Lightweight](#) versions of UNIX have been made to run on [PDAs](#), and in the other direction, full featured versions make full advantage of all the resources on large, multi-processor machines. Some different UNIX versions include [Solaris](#), [Linux](#), [IRIX](#), [AIX](#), [SunOS](#), [FreeBSD](#), Digital UNIX, [HP-UX](#), [NetBSD](#), [OpenBSD](#), etc.

upload

To upload a [file](#) is to copy it from your computer to a remote computer. The opposite is [download](#).

UPS

An **un**interrupted **p**ower supply uses heavy duty batteries to help smooth out its input power source.

URI

A Uniform **R**esource **I**dentifier is basically just a unique address for almost any type of resource. It is similar to but more general than a [URL](#); in fact, it may also be a [URN](#).

URL

A Uniform **R**esource **L**ocator is basically just an address for a [file](#) that can be given to a [browser](#). It starts with a [protocol](#) type (such as [http](#), [ftp](#), or [gopher](#)) and is followed by a colon, machine name, and file name in [UNIX](#) style. Optionally an octothorpe character "#" and arguments will follow the file name; this can be used to further define position within a page and perform a few other tricks. Similar to but less general than a [URI](#).

URN

A Uniform **R**esource **N**ame is basically just a unique address for almost any type of resource unlike a [URL](#) it will probably not resolve with a [browser](#).

USB

A really fast type of [serial](#) port that offers many of the best features of [SCSI](#) without the price. Faster than many



types of [paralle](#) port, a single USB port is capable of [chaining](#) many devices without the need of a [terminator](#). USB is much slower (but somewhat less expensive) than [FireWire](#).

uucode

The point of uucode is to allow 8-bit [binary](#) data to be transferred through the more common 7-bit [ASCII](#) channels (most especially [e-mail](#)). The facilities for dealing with uucoded files exist for many different machine types, and the most common programs are called "uuencode" for encoding the original binary file into a 7-bit file and "uudecode" for restoring the original binary file from the encoded one. Sometimes different uuencode and uudecode programs will work in subtly different manners causing annoying compatibility problems. [Bcode](#) was invented to provide the same service as uucode but to maintain a tighter standard.

variable width

As applied to a [font](#), variable width means that different characters will have different widths as appropriate. For example, an "i" will take up much less space than an "m". The opposite of variable width is [fixed width](#). The terms "proportional width" and "proportionally spaced" mean the same thing as variable width. Some common variable width fonts include Times, Helvetica, and Bookman.

VAX

The VAX is a computer [platform](#) developed by Digital. Its plural is VAXen. VAXen are large expensive machines that were once quite popular in large businesses; today modern [UNIX workstations](#) have all the capability of VAXen but take up much less space. Their [OS](#) is called [VMS](#).

vector

This term has two common meanings. The first is in the geometric sense: a vector defines a direction and magnitude. The second concerns the [formatting](#) of [fonts](#) and images. If a font is a vector font or an image is a vector

image, it is defined as lines of relative size and direction rather than as collections of [pixels](#) (the method used in [bitmapped](#) fonts and images). This makes it easier to change the size of the font or image, but puts a bigger [load](#) on the device that has to display the font or image. The term "outline font" means the same thing as vector font.

Veronica & Veronica2

Although traditionally written as a proper name, Veronica is actually an acronym for "very easy rodent-oriented [network](#) index to computerized [archives](#)", where the "rodent" refers to [gopher](#). The acronym was obviously a little forced to go along with the pre-existing (and now largely unused) [Archie](#), in order to have a little fun with a comic book reference. Regardless, Veronica (or these days more likely Veronica2) is essentially a search engine for gopher resources.

VIC-20

The Commodore VIC-20 computer sold millions of units and is generally considered to have been the first affordable home computer. It features a [ROM](#)-based [BASIC](#) and uses it as a default "[OS](#)". It is based on the [65xx](#) family of [processors](#). VIC (in case you are wondering) can stand for either [video interface c](#) or [video interface computer](#). The VIC-20 is the precursor to the [C64/128](#).

virtual machine

A virtual machine is a machine completely defined and implemented in [software](#) rather than [hardware](#). It is often referred to as a "runtime environment"; code [compiled](#) for such a machine is typically called [bytecode](#).

virtual memory

This is a scheme by which [disk](#) space is made to substitute for the more expensive [RAM](#) space. Using it will often enable a computer to do things it could not do without it, but it will also often result in an overall slowing down of the system. The concept of swap space is very similar.

virtual reality



<p>virtual reality</p> <p>Virtual reality (often called VR for short) is generally speaking an attempt to provide more natural, human interfaces to <u>software</u>. It can be as simple as a pseudo 3D interface or as elaborate as an isolated room in which the computer can control the <u>user's</u> senses of vision, hearing, and even smell and touch.</p>	<p>virus</p> <p>A virus is a <u>program</u> that will seek to duplicate itself in <u>memory</u> and on <u>disks</u>, but in a subtle way that will not immediately be noticed. A computer on the same <u>network</u> as an infected computer or that uses an infected disk (even a <u>floppy</u>) or that <u>downloads</u> and <u>runs</u> an infected program can itself become infected. A virus can only spread to computers of the same <u>platform</u>. For example, on a network consisting of a <u>WinTel</u> box, a <u>Mac</u>, and a <u>Linux</u> box, if one machine acquires a virus the other two will probably still be safe. Note also that different platforms have different general levels of resistance; <u>UNIX</u> machines are almost immune, <u>Win '95 / '98 / ME / XP</u> is quite vulnerable, and most others lie somewhere in between.</p>	<p>VMS</p> <p>The industrial strength <u>OS</u> that runs on <u>VAXen</u>.</p>	<p>VoIP</p> <p>VoIP means "Voice over <u>IP</u>" and it is quite simply a way of utilizing the <u>Internet</u> (or even in some cases <u>intranets</u>) for telephone conversations. The primary motivations for doing so are cost and convenience as VoIP is significantly less expensive than typical telephone long distance packages, plus one high speed Internet connection can serve for multiple phone lines.</p>	<p>VRML</p> <p>A Virtual Reality Modeling Language file is used to represent <u>VR</u> objects. It has essentially been superseded by <u>X3D</u>.</p>	<p>W3C</p> <p>The World Wide Web Consortium (usually abbreviated <u>W3C</u>) is a non-</p>
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profit, advisory body that makes suggestions on the future direction of the World Wide Web, HTML, CSS, and browsers.

Waba

An extremely lightweight subset of Java optimized for use on PDAs.

WebDAV

WebDAV stands for Web-based Distributed Authoring and Versioning, and is designed to provide a way of editing Web-based resources in place. It serves as a more modern (and often more secure) replacement for FTP in many cases.

WebTV

A WebTV box hooks up to an ordinary television set and displays web pages. It will not display them as well as a dedicated computer.

window manager

A window manager is a program that acts as a graphical go-between for a user and an OS. It provides a GUI for the OS. Some OSes incorporate the window manager into their own internal code, but many do not for reasons of efficiency. Some OSes partially make the division. Some common true window managers include CDE (Common Desktop Environment), GNOME, KDE, Aqua, OpenWindows, Motif, FVWM, Sugar, and Enlightenment. Some common hybrid window managers with OS extensions include Windows ME, Windows 98, Windows 95, Windows 3.1, OS/2 and GEOS.

Windows '95

Windows '95 is currently the second most popular variant of MS-Windows. It was designed to be the replacement Windows 3.1 but has not yet done so completely partly because of suspected security problems but even more because it is not as lightweight and will not work on all the machines that Windows 3.1 will. It is more capable than Windows 3.1 though and now has excellent driver support and more games available for it than any other platform. It is made to run on top of



MS-DOS and will not do much of anything if MS-DOS is not on the system. It is thus not strictly an OS per se, but nor is it a true window manager either; rather the combination of MS-DOS and Windows '95 result in a full OS with GUI. It is partially multitasking but has a much greater chance of crashing than Windows NT does (or probably even Mac OS) if faced with a buggy program. Windows '95 runs only on x86 based machines. Currently Windows '95 has several Y2K issues, some of which have patches that can be downloaded for free, and some of which do not yet have fixes at all.

Windows '98

Windows '98 is quite possibly the second most popular form of MS-Windows, in spite of the fact that its official release is currently a point of legal debate with at least nineteen states, the federal government, and a handful of foreign countries as it has a few questionable features that might restrict the novice computer user and/or unfairly compete with other computer companies. It also has some specific issues with the version of Java that comes prepackaged with it that has never been adequately fixed, and it still has several Y2K issues, most of which have patches that can be downloaded for free (in fact, Microsoft guarantees that it will work properly through 2000 with the proper patches), but some of which do not yet have fixes at all (it won't work properly through 2001 at this point). In any case, it was designed to replace Windows '95.

Windows 2000

Windows 2000 was the intended replacement for Windows NT and in that capacity received relatively lukewarm support. Being based on Windows NT, it inherits some of its driver support problems. Originally it was also supposed to replace Windows '98, but Windows ME was made to do that instead, and the merger between Windows NT and Windows '98 was postponed until Windows XP.

Windows 3.1

Windows 3.1 remains a surprisingly popular variant of MS-Windows. It is lighter weight than either Windows '95 or Windows NT (but not lighter weight than GEOS) but less capable than the other two. It is made to run on top of MS-DOS and will not do much of anything if MS-DOS is not on the system. It is thus not strictly an OS per se, but nor is it a true window manager, either; rather the combination of MS-DOS and Windows 3.1 result in a full OS with GUI. Its driver support is good, but its game selection is limited. Windows 3.1 runs only on x86 based machines. It has some severe Y2K issues that may or may not be fixed.

Windows CE

Windows CE is the lightweight variant of MS-Windows. It offers the general look and feel of Windows '95 but is targeted primarily for hand-held devices, PDAs, NCs, and embedded devices. It does not have all the features of either Windows '95 or Windows NT and is very different from Windows 3.1. In particular, it will not run any software made for any of the other versions of MS-Windows. Special versions of each program must be made. Furthermore, there are actually a few slightly different variants of Windows CE, and no variant is guaranteed to be able to run software made specifically for another one. Driver support is also fairly poor for all types, and few games are made for it. Windows CE will run on a few different processor types, including the x86 and several different processors dedicated to PDAs, embedded systems, and hand-held devices.

Windows ME

Windows ME is yet another flavor of MS-Windows (specifically the planned replacement for Windows '98). Windows ME currently runs only on the x86 processor.

Windows NT

Windows NT is the industrial-strength variant of MS-Windows. Current revisions offer the look and feel of Windows '95 and older revisions offer



the look and feel of [Windows 3.1](#). It is the most [robust](#) flavor of MS-Windows and is fully [multitasking](#). It is also by far the most expensive flavor of MS-Windows and has far less software available for it than Windows '95 or '98. In particular, do not expect to play many games on a Windows NT machine, and expect some difficulty in obtaining good [drivers](#). Windows NT will run on a few different [processor](#) types, including the [x86](#), the [Alpha](#), and the [PowerPC](#). Plans are in place to [port](#) Windows NT to the [Merced](#) when it becomes available.

Windows Vista

Windows Vista is the newest flavor of [MS-Windows](#) (specifically the planned replacement for [Windows XP](#)). Windows Vista (originally known as Longhorn) currently only runs on [x86 processors](#).

Windows XP

Windows XP is yet another flavor of [MS-Windows](#) (specifically the planned replacement for both [Windows ME](#) and [Windows 2000](#)). Windows XP currently only runs on the [x86 processors](#). Windows XP is currently the most popular form of MS-Windows.

WinTel

An [x86](#) based system running some flavor of [MS-Windows](#).

workstation

Depending upon whom you ask, a workstation is either an industrial strength [desktop](#) computer or its own category above the desktops. Workstations typically have some flavor of [UNIX](#) for their [OS](#), but there has been a recent trend to call high-end [Windows NT](#) and [Windows 2000](#) machines workstations, too.

WYSIWYG

What you see is what you get; an adjective applied to a [program](#) that attempts to exactly represent printed output on the screen. Related to [WYSIWYM](#) but quite different.

WYSIWYM

What you see is what you mean; an adjective applied to a [program](#) that does not attempt to exactly represent printed output on the screen, but rather defines how things are used and so will adapt to different paper sizes, etc. Related to [WYSIWYG](#) but quite different.

X-Face

X-Faces are small monochrome images embedded in headers for both provides a [e-mail](#) and [news](#) messages. Better mail and news applications will display them (sometimes automatically, sometimes only per request).

X-Windows

X-Windows provides a [GUI](#) for most [UNIX](#) systems, but can also be found as an add-on library for other computers. Numerous [window managers](#) run on top of it. It is often just called "X".

X3D

Extensible **3D** Graphics data is an [XML](#) file that is used to hold three-dimensional graphical data. It is the successor to [VRML](#).

x86

The x86 series of [processors](#) includes the Pentium, Pentium Pro, Pentium II, Pentium III, Celeron, and Athlon as well as the 786, 686, 586, 486, 386, 286, 8086, 8088, etc. It is an exceptionally popular design (by far the most popular [CISC](#) series) in spite of the fact that even its fastest model is significantly slower than the assorted [RISC](#) processors. Many different [OSes](#) run on machines built around x86 processors, including [MS-DOS](#), [Windows 3.1](#), [Windows '95](#), [Windows '98](#), [Windows ME](#), [Windows NT](#), [Windows 2000](#), [Windows CE](#), [Windows XP](#), [GEOS](#), [Linux](#), [Solaris](#), [OpenBSD](#), [NetBSD](#), [FreeBSD](#), [Mac OS X](#), [OS/2](#), [BeOS](#), [CP/M](#), etc. A couple different companies produce x86 processors, but the bulk of them are produced by Intel. It is expected that this processor will eventually be completely replaced by the [Merced](#), but the Merced development schedule is somewhat behind. Also, it should be noted that the Pentium III processor has



stirred some controversy by including a "fingerprint" that will enable individual computer usage of web pages etc. to be accurately tracked.

XBL

An XML Binding Language document is used to associate executable content with an XML tag. It is itself an [XML](#) file, and is used most frequently (although not exclusively) in conjunction with [XUL](#).

XHTML

The Extensible Hypertext Mark-up Language is essentially a cleaner, stricter version of [HTML](#). It is a proper subset of [XML](#).

XML

The Extensible Mark-up Language is a subset of [SGML](#) and a superset of [XHTML](#). It is used for numerous things including (among many others) [RSS](#) and [RDF](#).

XML-RPC

XML-RPC provides a fairly [lightweight](#) means by which one computer can execute a [program](#) on a co-operating machine across a [network](#) like the [Internet](#). It is based on [XML](#) and is used for everything from fetching stock quotes to checking weather forecasts.

XO

The energy-efficient, kid-friendly [laptop](#) produced by the OLPC project. It runs [Sugar](#) for its [window manager](#) and [Linux](#) for its [OS](#). It sports numerous built-in features like wireless [networking](#), a video camera & microphone, a few [USB](#) ports, and audio in/out jacks. It comes with several educational [applications](#) (which it refers to as "Activities"), most of which are written in [Python](#).

XSL

The Extensible Stylesheet Language is like [CSS](#) for [XML](#). It provides a means of describing how an XML resource should be displayed.

XSLT

[XSL](#) Transformations are used to transform one type of [XML](#) into

another. It is a component of [XSL](#) that can be (and often is) used independently.

XUL

An XML User-Interface Language document is used to define a user interface for an application using XML to specify the individual controls as well as the overall layout.

Y2K

The general class of problems resulting from the wrapping of computers' internal date timers is given this label in honor of the most obvious occurrence -- when the year changes from 1999 to 2000 (abbreviated in some [programs](#) as 99 to 00 indicating a backwards time movement). Contrary to popular belief, these problems will not all manifest themselves on the first day of 2000, but will in fact happen over a range of dates extending out beyond 2075. A computer that does not have problems prior to the beginning of 2001 is considered "Y2K compliant", and a computer that does not have problems within the next ten years or so is considered for all practical purposes to be "Y2K clean". Whether or not a given computer is "clean" depends upon both its [OS](#) and its [applications](#) (and in some unfortunate cases, its [hardware](#)). The quick rundown on common home / small business machines (roughly from best to worst) is that:

- All [Mac OS](#) systems are okay until at least the year 2040. By that time a patch should be available.
- All [BeOS](#) systems are okay until the year 2040 (2038?). By that time a patch should be available.
- Most [UNIX](#) versions are either okay or currently have free fixes available (and typically would not have major problems until 2038 or later in any case).
- [NewtonOS](#) has a problem with the year 2010, but has a free fix available.



- Newer [AmigaOS](#) systems are okay; older ones have a problem with the year 2000 but have a free fix available. They also have a year 2077 problem that does not yet have a free fix.
- Some [OS/2](#) systems have a year 2000 problem, but free fixes are available.
- All [CP/M](#) versions have a year 2000 problem, but free fixes are available.
- [PC-DOS](#) has a year 2000 problem, but a free fix is available.
- [DR-DOS](#) has a year 2000 problem, but a free fix is available.
- Different versions of [GEOS](#) have different problems ranging from minor year 2000 problems (with fixes in the works) to larger year 2080 problems (that do not have fixes yet). The only problem that may not have a fix in time is the year 2000 problem on the Apple][version of GEOS; not only was that version discontinued, unlike the other GEOS versions it no longer has a parent company to take care of it.
- All [MS-Windows](#) versions (except possibly [Windows 2000](#) and [Windows ME](#)) have multiple problems with the year 2000 and/or 2001, most of which have free fixes but some of which still lack free fixes as of this writing. Even new machines off the shelf that are labelled "Y2K Compliant" usually are not unless additional software is purchased and installed. Basically [WinNT](#) and [WinCE](#) can be properly patched, [Windows '98](#) can be patched to work properly through 2000 (possibly not 2001), [Windows '95](#) can be at least partially patched for 2000 (but not 2001) but is not being

guaranteed by Microsoft, and [Windows 3.1](#) cannot be fully patched.

- [MS-DOS](#) has problems with at least the year 2000 (and probably more). None of its problems have been addressed as of this writing. Possible fixes are to change over to either PC-DOS or DR-DOS.

Results vary wildly for common applications, so it is better to be safe than sorry and check out the ones that you use. It should also be noted that some of the biggest expected Y2K problems will be at the two ends of the computer spectrum with older legacy [mainframes](#) (such as power some large banks) and some of the various tiny [embedded](#) computers (such as power most burglar alarms and many assorted appliances). Finally, it should also be mentioned that some older [WinTel](#) boxes and [Amigas](#) may have Y2K problems in their hardware requiring a card addition or replacement.

Z-Machine

A [virtual machine](#) optimized for running [interactive fiction](#), interactive tutorials, and other interactive things of a primarily textual nature. Z-Machines have been [ported](#) to almost every [platform](#) in use today. Z-machine [bytecode](#) is usually called Z-code. The [Glulx](#) virtual machine is of the same idea but somewhat more modern in concept.

Z80

The Z80 series of [processors](#) is a [CISC](#) design and is not being used in too many new stand-alone computer systems, but can still be occasionally found in [embedded](#) systems. It is the most popular processor for [CP/M](#) machines.

Zaurus

The Zaurus is a brand of [PDA](#). It is generally in between a [Palm](#) and a [Newton](#) in capability.

zip



There are three common zips in the computer world that are completely different from one another. One is a type of removable removable disk slightly larger (physically) and vastly larger (capacity) than a floppy. The second is a group of programs used for running interactive fiction. The third is a group of programs used for compression.

Zoomer

The Zoomer is a type of PDA. Zoomers all use GEOS for their OS and are / were produced by numerous different companies and are thus found under numerous different names. The "classic" Zoomers are known as the Z-7000, the Z-PDA, and the GRiDpad and were made by Casio, Tandy, and AST respectively. Newer Zoomers include HP's OmniGo models, Hyundai's Gulliver (which may not have actually been released to the general public), and Nokia's Communicator line of PDA / cell phone hybrids.