Web alert

Web jargon

As is the case with most technological innovations, impenetrable jargon is rife on the World Wide Web. The aim of this web alert is to familiarise you with a few of the terms that you might come across whilst surfing the web.

Cache

A cache is an area where web documents are stored for a time so as to speed up subsequent requests for them. Web browsers maintain their own cache of retrieved documents and this cache is used where possible. Your department, company or university might also have their own cache so as to reduce internet traffic. Before a file is retrieved from a cache, a brief check is made to ensure that the date the original file was last altered is the same as that of the cached copy.

Cookies

Cookies are bits of information sent by a web server and stored by a web browser. The browser sends back the cookie each time it accesses that server. The server can store any information in a cookie, but it is typically used to authenticate users without requiring them to login every time they visit a site. Other uses include sending personalised pages to a user and maintaining a list of items that a user has selected for purchase.

GIF (Graphics interchange format)

GIF is one of the two main formats used for graphics on the Web (the other being JPEG). GIF images are compressed and are therefore very suitable for downloading via the internet. They are most commonly used for logos and line drawings. GIF images have filenames ending in .gif.

HTML (Hypertext markup language)

HTML is the language in which web pages are written. It defines the structure and formatting of a document, for example, a <p> tag indicates a new paragraph. The most important feature of HTML is the ability to embed hyperlinks to URLs in a Web page. HTML is still evolving and the standard is specified by the W3C (see below).

HTTP (Hypertext transfer protocol)

HTTP is the protocol that underlies the web. It defines the rules that web browsers and servers use in their communications. The current version of the protocol is HTTP 1.1.

Java

Java is a cross-platform programming language developed by Sun Microsystems. Its platform-independent nature makes it ideal for use on the web. Small applications written in Java (called applets) can be incorporated into web pages and executed by any Java-capable browser. These applets can be used to enhance the functionality and interactivity of web pages.

JavaScript

Despite its name, JavaScript is not related to Java. Instead, it is a scripting language developed by Netscape for use with their Navigator browser. When embedded in a web page, JavaScript can be used to respond to user actions, such as moving the cursor over a certain area of the page. Microsoft have their own version of JavaScript called JScript. Inconsistencies between the two languages mean that it can be difficult to write JavaScript that behaves the same way in Netscape Navigator and Microsoft Internet Explorer.

JPEG (Joint photographic experts group)

JPEG is one of the two main formats used for graphics on the web (the other being GIF). Unlike the GIF format, the JPEG algorithm is only designed for the compression of images of natural scenes, for example, a photograph of a tree. JPEG images have filenames ending in .jpg or .jpeg.

Plug-ins

A standard part of the functionality of a web browser is to display certain file types, such as HTML and GIF. The display of other file types (such as VRML) might require additional software. If this software is designed to be closely integrated with the browser then it is known as a plug-in. Plug-ins are loaded when the browser is launched and therefore can be run instantly and unobtrusively.

URL (Uniform resource locator)

A URL uniquely specifies the address of any object on the Internet. An example of a URL is mailto:ian.sealy@bristol.ac.uk. URLs are extensively used on the web. The part of the URL before the first colon defines the protocol to be used. The URL of a web document therefore always starts with http, for example, http://www.ilrt.bris.ac.uk/.

VRML (Virtual reality modelling language)

VRML is the standard for rendering three-dimensional graphics on the web. A plug-in is needed to view VRML files.

W3C (World Wide Web consortium)

The W3C (http://www.w3.org/) is the main standards body for the web. Its goal is to develop common protocols that ensure interoperability. The director of the W3C is Tim Berners-Lee, the creator of the world wide web.

Web server

A web server is a program running on a web site that sends out web pages in response to HTTP requests from remote web browsers. web servers are therefore integral to the Web and are available for virtually every computer platform. The most widely used web server is Apache (http://www.apache.org/).

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