Computer Science E-1: Understanding Computers and the Internet Harvard University Extension School Fall 2005

Lecture 10 Jargon Website Development

Apache Apache Software Foundation, a non-profit corporation that oversees several important software projects, one of which is the Apache HTTP Server, the world's most popular web server.

ASP Active Server Pages. Microsoft's server-side scripting technology for dynamically generated web pages. An add-on to IIS.

attribute An optional modifier of an HTML or XHTML element. Each attribute necessitates a value, and an element may have zero or more attributes.

C++ A programming language developed in the 1980s by Bjarne Stroustrup of Bell Labs. It originates from two older programming languages, C and Smalltalk, combining the computing power and low-level functions of the former with the object-oriented model of the latter. C++ used to be the most popular programming language for about a decade, losing some of its advocates to Java and C#.

CGI Common Gateway Interface. A standard for passing data between a client and a webserver. Allows a client's web browser to use data from a program executed on the web server.

CSS Cascading Style Sheets. A language used to describe the presentation of a document written in a markup language. Commonly used to style webpages written in HTML or XHTML.

DHTML Dynamic HTML. Denotes a collection of technologies collectively used to create dynamic web pages. These technologies include a static markup language (HTML or XHTML), a stylesheet language (CSS), and a client-side scripting language (JavaScript).

doctype Document Type Declaration. A declaration that associates a markup document with its type definition. A doctype declaration has to present in all XHTML documents for them to be valid.

element A lexical unit of an HTML or XHTML document demarcating its content. Elements generally consist of three parts: a start tag marking the beginning of an element, some amount of content, and an end tag.

Computer Science E-1: Understanding Computers and the Internet Harvard University Extension School Fall 2005

hexadecimal Of or relating to the base-16 numeric system. Uses the digits 0 - 9 and the letters

a-f (to represent the values 10-15). For example, the hexadecimal number 3f is

63 in decimal (3x16 + 15) and 001111111 in binary.

HTML HyperText Markup Language. A markup language used to create webpages

viewable in a browser. Structures information with tags, denoting parts of text as

headings, paragraphs, hyperlinks, etc.

httpd Apache's HTTP server.

IIS Internet Information Services. A set of Internet-based services for Microsoft

Windows-based servers, and the second most popular webserver after Apache.

Java A programming language developed by James Gosling and his team at Sun

Microsystems. Its stricter object model, easier syntax, and powerful networking features made the language a strong competitor to C++. Java is, arguably, the most

popular computer language today.

JavaScript An object-oriented programming language mostly used to create dynamic content

in web pages. It has C-like syntax and is similar to other scripting languages, having

little to do with Java, despite its name.

JSP JavaServer Pages. A Java-based technology that allows for dynamic generation of

HTML and XHTML.

octal Of or relating to the base-8 numeric system. Uses the digits 0 - 7. For example,

the octal number 125 is 85 in decimal $(1 \times 8^2 + 2 \times 8^1 + 5 \times 8^0)$ and 55 in

hexadecimal.

parse To analyze a stream of input (such as a computer program) to determine its

grammatical structure and break it down into individual tokens.

Perl Procedural programming language created by Larry Wall. Its compact syntax and

large collection of text-processing functions make it the language of choice for quick information-processing scripts, but it may not be feasible to creating large-scale applications. It has been "backronymed" as Practical Extraction and Report

Language.

PHP: Hypertext Processor' (a recursive acronym) or "Pretty Hypertext

Processor". A programming language used to create server-side applications and

dynamic web content. A popular alternative to Microsoft's ASP technology.

Computer Science E-1: Understanding Computers and the Internet Harvard University Extension School Fall 2005

pretty-print To present an object (such as a webpage, or part thereof) in such a manner as to

make its structure easier to perceive (e.g., nicely indented with frequent line breaks).

property A feature of an HTML or XHTML element that can be controlled by CSS;

a property has a value associated with it, usually written as property: value.

script A program written in a scripting programming language.

SSI Server Side Includes. A server-side scripting language primarily used to include

contents of a file.

stylesheet A language used to describe the style of elements in a document marked up using a

markup language. CSS is the widely used stylesheet language for HTML and

XHTML today.

A label used to include metadata to the contents of a document. In HTML and

XHTML, tags are used to demarcate the beginning and end of a certain representation of information. For example all text between the
b> and tags will be bold, and everything between the and tags will be considered a

paragraph. Many tags also have a set of optional attribute="value" pairs.

valid An XHMTL document is said to be "valid" if it conforms to a doctype

(i.e., contains no errors).

web-safe Any of

colors

Any of the 216 colors originally used in webpages.

webserver A computer that receives HTTP requests from clients' web browsers, and in return

serves them webpages, which are usually HTML or XHTML documents. Also, a

computer program that provides the functionality just described.

well-formed An XHTML document is said to be "well-formed" if, among other things, all

elements' and attributes' names are in lowercase, all attributes' values are flanked by

single or double quotes, and all tags are balanced.

XHTML eXtensible HyperText Markup Language. Has the same expressive capabilities as

HTML, but a stricter syntax, which allows for better automation of data processing.

Specifically, XHTML requires that all webpages written in it be well-formed.