Lecture 10
Jargon
Website Development

AJAX   Asynchronous JavaScript and XML. A framework that enables web pages to exchange data with a web server without reloading the entire page, thereby creating a more seamless experience for a visitor.

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.

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 00111111 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   "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.

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.

tag   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 `</b>` tags will be bold, and everything between the `<p>` and `</p>` 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 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.