

Web Development Technologies:

HTML – HTML (Hypertext Markup Language) is the set of markup symbols or codes inserted in a file intended for display on a World Wide Web browser page. The markup tells the Web browser how to display a Web page's words and images for the user. Each individual markup code is referred to as an element (but many people also refer to it as a tag).

CSS - A cascading style sheet (CSS) is a Web page derived from multiple sources such as defining text sizes from an external file. The web page default style overrides all defaults, but it's recommended that browsers provide ways for the viewer to override the style attributes in some respects. Since it's likely that different browsers will choose to implement CSS somewhat differently, the Web page creator must test the page with different browsers.

XML - XML (Extensible Markup Language) is a flexible way to create common information formats and share both the format and the data on the World Wide Web. Both XML and HTML contain markup symbols to describe the contents of a page or file. HTML, however, describes the content of a Web page (mainly text and graphic images) only in terms of how it is to be interested with and displayed. XML describes the content in terms of what data is being shown. For example, the word "phonenumber" placed within markup tags could indicate that the data following is a phone number. This means that an XML file can be processed purely as data by a program or it can be stored with similar data on another computer. Or, like an HTML file, it can be simply displayed.

ASP.NET - ASP.NET (originally called ASP+) is the next generation of Microsoft's Active Server Page (ASP), a feature of their Internet Information Server (IIS). Both ASP and ASP.NET allow a Web site builder to dynamically build Web pages on the fly by inserting queries to a relational database in the Web page. ASP.NET is different than its predecessor in two major ways: it supports code written in compiled languages such as Visual Basic, C++, C#, and Perl, and it features server controls that can separate the code from the content, allowing WYSIWYG editing of pages. Although ASP.NET is not backwards compatible with ASP, it is able to run side by side with ASP applications. ASP.NET files can be recognized by their .aspx extension.

C# - C# (pronounced "C-sharp") is a new object-oriented programming language from Microsoft, which aims to combine the computing power of C++ with the programming ease of Visual Basic. C# is based on C++ and contains features similar to those of Java.

C# is designed to work with Microsoft's .NET platform. Microsoft's aim is to facilitate the exchange of information and services over the Web, and to enable

developers to build highly portable applications. C# simplifies programming through its use of Extensible Markup Language (XML) and Simple Object Access Protocol (SOAP) which allow access to a programming object or method without requiring the programmer to write additional code for each step. Because programmers can build on existing code, rather than repeatedly duplicating it, C# is expected to make it faster and less expensive to get new products and services to market.

SQL –SQL (Structured Query Language) is a standard interactive and programming language for getting information from and updating a database. Queries take the form of a command language that lets you select, insert, update, find out the location of data, and so forth. There is also a programming interface.

Javascript – JavaScript is an interpreted programming or script language from Netscape. It is somewhat similar in capability to Microsoft's Visual Basic, and the UNIX-derived Perl. In general, script languages are easier and faster to code in than the more structured and compiled languages such as C and C++. Script languages generally take longer to process than compiled languages, but are very useful for shorter programs.

JavaScript code can be imbedded in HTML pages and interpreted by the Web browser (or client). JavaScript can also be run at the server as in Microsoft's Active Server Pages before the page is sent to the requestor. Both Microsoft and Netscape browsers support JavaScript, but sometimes in slightly different ways.

Development platforms or tools

Visual Studio.NET – Visual Studio .NET is Microsoft's visual programming environment for creating Web services based on use of the Extensible Markup Language (XML). The product suite provides a visual interface for identifying a program as a Web service, forms for building a user interface (including support for mobile device interfaces), features for integrating existing application data, and for debugging. Visual Studio .NET comes with the .NET Framework, including the Common Language Runtime, and includes several programming languages including Visual Basic, Visual C++, and Visual C#.

Visual Studio .NET aims at setting a benchmark of ease in application development for the Web in the present decade just as its Visual Basic set a benchmark for visual programming in the 1990s.

Dreamweaver – Web development tool which is used to create HTML web pages. Also, it automatically adds Javascript capability and related functionality to produce higher level development web pages.

Homesite - A hand-coder's dream—developers create professional Web sites fast with the code-editing features of Macromedia HomeSite 5. Effortlessly validate, reuse, navigate and format your code with integrated coding tools. Efficiently build, deploy and manage your entire Web site with project management, quality control and site deployment features, while wizards quickly create pages, tables, frames and JavaScript elements for you.

Photoshop – Graphics program used to create and modify graphic pictures on a web page.

Micromedia Flash - Flash, a popular authoring software developed by Macromedia, is used to create vector graphics-based animation programs with full-screen navigation interfaces, graphic illustrations, and simple interactivity in an antialiased, resizable file format that is small enough to stream across a normal modem connection. The software is ubiquitous on the Web, both because of its speed (vector-based animations, which can adapt to different display sizes and resolutions, play as they download) and for the smooth way it renders graphics. Flash files, unlike animated but rasterized GIF and JPEG, are compact, efficient, and designed for optimized delivery.

Fireworks - Powerful creative tools. Extensive format and standards support. Seamless integration. Macromedia Fireworks MX is the easiest way to create, optimize, and export interactive graphics in a single, web-centric environment.

MS Front Page – Web development tool which is part of the Microsoft Office Professional Suite. It is used to create HTML web pages. Also, it automatically adds Javascript capability and related functionality to produce higher level development web pages.

Web Browser

IE – Microsoft Internet Explorer which comes with every Microsoft windows operating system

Netscape – Provides the same capabilities as IE, but has a different style of operation.

Specialized Tools

Animated Gif Editor – Develops animated Gif's

Text Editors

Notepad – Simple text editor found on any Microsoft Windows product

VI – Line editor found on any Unix system