

Website Development Tools

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Web Development Tools

Introduction

Web pages can be built with nothing more than a text editor, a web browser, and some expert knowledge of the HyperText Markup Language (HTML). Many of us old-timers still prefer to build web pages using this technique.

As the web became more popular, people who are not experts in HTML have found the need to develop web pages. Perhaps it's the instructor for a class who wants his PowerPoint presentations online, or the department secretary who wants to put the latest meeting minutes on the department intranet or a community looking for widely scattered members & well managed memberships. These people need the information online, but don't have the time to learn all the details of how HTML works.

The solution has been web development tools. These programs promise to make web development as simple as using a word processor. This article of mine discusses HTML, graphic design, and other tools in the modern web developer's toolbox.

Web Development Tools

The following are all tools used by developers in Web Designing. Keep in mind that these tools change dramatically over time. The following is intended as a list of possible tools, not a recommendation of what the "best" tool is for any particular job.

Simple Text Editors

At its most basic level, an HTML document is an ordinary text file. It can be created using simple text editors by anyone who knows the Hypertext Markup Language (HTML).

Examples of this includes:

- "Notepad" in MS-Windows
- "Notespad" for Windows
- "Simpletext" on Macintosh
- "Emacs", "vi", "pico", etc. on Unix systems
- "ftpedit", to download, edit, and upload from an FTP site in one program

The advantage to this is total control over your HTML documents. You are not limited to the capabilities of a specific web development tool. You can build web pages that fully utilize all the capabilities of HTML.

The disadvantage is that you personally must know how to type HTML commands. You cannot rely on a "web development" program to do all the dirty work for you. There is a greater chance of causing problems such as typos when entering everything by hand. Also, you don't get to see what the page will look like until you load the page into a web browser. It isn't WYSIWYG (what you see is what you get).

People often find that they use other web development tools to build the web site. However, they still need to resort to hand tweaking with a text editor to get around limitations of their development tool.

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HTML Enhanced Text Editors

Some text editors have HTML extensions designed to make it easier to develop web pages. These are still not "WYSIWYG" development tools, but the enhancements do help eliminate some common mistakes like typos. They often include syntax checking, checks for standards adherence, spelling checkers, and other advanced features to assist the HTML developer.

Examples of these HTML-enhanced text editors used by people all around include:

- Notetab
- Webber32
- HTML-Kit

WYSIWYG HTML Editors

These are editors that let you build HTML documents, using a WYSIWYG editor similar to a word processor. These editors are designed for maintaining individual web pages, but do not include features for maintaining an overall web site.

The advantage of WYSIWYG editors is that it is easier for people to learn and use these editors if they are already familiar with using word processors.

The disadvantage of these tools is that they often are more limited than the text-based HTML-editors. Since WYSIWYG editors are more complex to develop, they often do not support the latest web innovations. Also, the editors often do not really show you exactly what you would see in the web browsers. Its more like "What you see is almost like what you get". Finally, the lack of site management features means these tools are not very useful for large web sites.

Some of the "WYSIWYG HTML Editors" include:

- Netscape Composer

Browser-based HTML Editors

Most web editing tools are separate programs that run on our microcomputers. However, there are some web editors designed to run as part of your web browser. This might be done as a Java applet downloaded to your computer, or as a program that lets the developer enter information into forms, which then writes the web pages for them. This can be done using various server side languages like Perl, ASP, PHP, Coldfusion etc

These are used most often in the "free web site" services, which let you, build web page that they host for free, so long as they can put their advertising on your web pages. They provide these web-based tools so that novice web developers can quickly build web sites from templates without having to purchase special development programs.

Some of these can also be used as part of larger systems. For example, you may have an "events calendar" system where you want to allow people to enter the event description-using HTML. That would let them link to pages with more detailed information or add pictures to the event description. Some of these "plug ins" replace a normal "<textarea>" tag with a smarter input area that assists you in writing HTML.

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Some of these tools include:

- WebEditPro
- Microsoft's Dynamic HTML Editing Component for Internet Explorer
- **123Microsoft Free Webpage For You (A Template System Designed By Me thru which you can create your homepage within seconds)**
(www.123microsoft.com/web)

Web Site Managers

A web site manager is a tool that not only lets you edit individual web pages, but also lets you manage an overall web site. For example, you can quickly change the style sheets used for your web site, or text in common menus on the site. There is no need to edit each individual file.

Often these tools also include WYSIWYG capabilities, and other advanced editing and HTML verification features.

Some of the systems are:

- Macromedia Dreamweaver (www.macromedia.com/software/dreamweaver/)
- Microsoft Frontpage 2000 (www.microsoft.com/frontpage/)
- Allaire Homesite 4.5 (www.allaire.com/products/homesite/)
- Adobe Golive 4.0 (www.adobe.com/products/golive/)

Save As HTML Capabilities ...!!

These products are primarily NOT web development products. Instead, they are spreadsheet programs, word processors, database programs, presentation programs etc. which have had the ability to "save as html" added to the product.

The main problem with most of these products is that they try to make the HTML page look as close as possible to the printed document. Unfortunately design principles for web pages are not the same as design principles for printed documents, so often the web pages created by these tools are not as useful as pages developed with a tool specifically for building web sites.

Generally, these should be used for solving specific business needs (like getting spreadsheet data online quickly), but they should not be used as a generic web development tool.

Most word-processors, spreadsheets, presentation software, etc. support the "save as html" feature now. Try looking in the "file" menu of your favorite program for "Save As HTML" to see if it is there. Below we list a few of the more popular products:

- Microsoft Office products (www.microsoft.com/office/)

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Web Server/Developer Platforms

A Web Server/Developer Platform is a complete web development and web serving system in a box. These are similar to the "Web Site Managers" in that they include a web editor for building web pages. The difference is these systems also include their own web server for serving those pages. They also provide advanced support for using back-end databases or integration with other server-side programs that normal HTML editors don't provide. Some Web Server/Development Platforms mentioned in the group include:

- Cold Fusion Suite (Server & Studio) (www.allaire.com/products/ColdFusion/)
- Microsoft Back office Server (<http://www.microsoft.com/backofficeserver/>)
- Web Objects (www.apple.com/webobjects/)

Graphic Design Tools

Web sites use graphics in .gif or .jpg format. There are many different graphic editors available for developing files in these formats. Some of these even include features specifically for web site design, such as using appropriate color palettes, or optimizing pages for fast download time.

The following are some graphic design programs used by designers/developers.

- Adobe Photoshop (www.adobe.com/products/photoshop/)
- Adobe Illustrator
- Freehand
- ImageReady
- GraphicConverter
- Paintshop Pro (www.jasc.com)
- Microsoft Photoeditor
- QuarkXpress
- Fireworks
- Micrographx Draw/PhotoMagic

Plugin Development Tools

A "plugin" is a program that enhances a web browser's capabilities. Examples include Adobe Acrobat files (for displaying copies of printed manuals online), Macromedia Flash (for streaming download of animations), etc. These are not part of the HTML standard and they all require the installation of special plugin programs in the web browser before they will work. However, some of these are so popular that almost everyone has them.

Streaming Animation Tools

The only animation format supported commonly by web browsers is animated .gif images. However, other manufacturers have come up with more efficient animation techniques that you can view if you have their plugin installed.

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Some of the development tools for these vendors are:

- Macromedia Flash (www.macromedia.com/software/flash/)
- Macromedia Director Shockwave Studio (www.macromedia.com/software/director/)
- Livemotion

Document Distribution Tools

These are tools used to distribute duplicate copies of paper documents over the web. The intention is to have people see a document that looks exactly like the printed version, which they can print on their local printers, or view on their computer screen.

- Adobe Acrobat (www.adobe.com/products/acrobat/)

Server Features/Services

E-Mail Suite

- Unlimited auto mailing lists with password protection.
- Unlimited E-Mail aliases.
- Unlimited E-Mail autoresponders.
- Primary POP account acts as a catch-all account

Site Access

- Unique IP address.
- Complete 24 hour FTP access.
- Complete 24 hour Telnet access.
- Anonymous FTP access.
- Unlimited site updation

Content Development

- MS FrontPage extensions 97,98 & 2000 supported.
- Pre-installed CGI scripts for guest book, counters, etc, Full CGI-BIN support.
- Support for TCL, Perl, Python and C.
- Streaming audio/video (on qualifying accounts only).

Database

- MSQL
- MySQL
- MIVA
- PHP front-end

Visitor Tracking

- Log files.
- WUSAGE - Graphical visitor tracking software preinstalled.
- Livestats (Available on Windows NT Platforms)