Making Web Pages
Introduction to HTML

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MAKING WEB PAGES – INTRODUCTION TO HTML
SEMINAR
OBJECTIVES

During this seminar you learn how to create a Web page using HTML, Hypertext Markup Language. This enables you to make other Web pages and develop a Web site.

During this seminar you will:

1. Learn the basics of SGML, HTML, XML and XHTML
2. Understand what a markup language is in general and what HTML is specifically
3. Learn what XHTML is and why it is so important
4. Know what a meta language is and understand its importance
5. Understand the meanings of HTML-related acronyms and terminology
6. Create a Web page with text, headings, graphics, lists, an address, copyright and hypertext links
7. Structure an HTML document correctly
8. Learn HTML requirements and options
9. Incorporate non-ASCII characters on a Web page using entities
10. Adopt good HTML habits
11. Know where to find browser-usage statistics
12. Publish your Web page on a Web server
13. Test your Web page using different browsers and connections
14. Understand how to announce a Web page
15. Review guidelines for using announcement services
16. Learn the best ways to continue learning HTML

HTML ACRONYMS

ASCII	American Standard Code for Information Interchange
AU	Audio File (File Name Extension)
BMP	Bitmap (File Name Extension)
CERN	Conseil Européen de Recherche Nucléaire
CGI	Common Gateway Interface
CSS	Cascading Style Sheets
DSSSL	Document Style Semantics and Specification Language
DTD	Document Type Definition
FLSH	Flash (File Name Extension)
FPX	Flashpix (File Name Extension)
FTP	File Transfer Protocol
GIF	Graphic Interchange Format (File Name Extension)
HEX	Hexadecimal
HSB	Hue, Saturation and Brightness
HTML	Hypertext Markup Language
HTTP	Hypertext Transfer Protocol
ISO	International Standards Organization
JPEG	Joint Photographic Experts Group (File Name Extension)
JPG	Joint Photographic Experts Group (File Name Extension)
MIME	Multipurpose Internet Mail Extensions
MOV	QuickTime Movie (File Name Extension)
MP3	Moving Picture Experts Group Audio (File Name Extension)
MPEG	Moving Picture Experts Group (File Name Extension)
NCSA	National Center for Supercomputing Applications
PDF	Portable Document Format (File Name Extension)
PNG	Portable Network Graphic (File Name Extension)
RGB	Red, Green, Blue
S-HTTP	Secure Hypertext Transfer Protocol
SGML	Standard Generalized Markup Language
SMTP	Simple Mail Transfer Protocol
TCP/IP	Transmission Control Protocol/Internetworking Protocol
UIUC	University of Illinois Urbana Champaign
URI	Universal Resource Identifier
URL	Uniform Resource Locator
W3	World Wide Web Organization
WAV	Wave Sound File (File Name Extension)
WWW	World Wide Web
WYSIWYG	What You See Is What You Get
XBM	X Window System Bitmap (File Name Extension)
XHTML	Extensible Hypertext Markup Language
XML	Extensible Markup Language

HTML GLOSSARY

ASCII stands for the American Standard Code for Information Interchange. It is a U.S. standards organization.

The *ASCII character set* consists of 128 characters, produced by 7-bit bytes, representing the letters, numbers, punctuation marks, and other symbols of the Latin alphabet used in English and other languages.

An *ASCII file* is made up of characters from the 128-character, ASCII character set. Compare with binary file.

A *binary file* is any file that uses characters other than the basic 128 ASCII character set. Compare with ASCII file.

A *browser* simplifies the use of the World Wide Web and other resources available on the Internet. It is either a text-only or graphical user interface. Browsers such as Microsoft Internet Explorer and Netscape make it easy to access textual information, graphics, images, videos, and sound.

Cascading Style Sheet (CSS) is a W3C recommendation for style sheets that emphasizes the ability for both user and Web developer to influence presentation of a Web document.

CERN stands for Conseil Européen pour la Recherche Nucléaire (European Particle Physics Research Laboratory) and is located in Geneva, Switzerland. In addition to their work in high energy physics, they are the originators of the World Wide Web.

CGI, see *Common Gateway Interface*.

Common Gateway Interface (CGI) is a standard that defines how an executable file (a script, batch file, or other program) sends data to or receives data from a World Wide Web server. CGI programs are often used to carry out actions based on data input by users in the browser using an HTML form.

File Transfer Protocol, see *FTP*.

A *firewall* is a security measure designed to reduce the risk of unauthorized access to a network by limiting how data can pass between machines inside and outside the network.

Frames divide Web pages into multiple, sometimes scrollable regions. You can use frames to display more than one Web page at a time.

Frameset HTML refers to the use of the frame-related tags, attributes and values in HTML for creating a framed Web page. There may be mistakes in the HTML. See also*, frames.*

FTP stands for File Transfer Protocol and is a TCP/IP protocol that permits the transferring of files from one computer to another. FTP is used on the Internet to upload and download files to and from remote Internet-connected networks.

GIF is an acronym for Graphic Interchange Format and is a file name extension used for some graphics files. Pronounced like "gift" without the letter "t".
A *home page* is a hypertext document used on the World Wide Web. It can

give introductory information about an organization, person or subject and often serves as a "table of contents" for a Web site and has hypertext links to other Internet resources.

HTML is an acronym for Hypertext Markup Language and is an ASCII-based code used to format elements of documents for presentation by a World Wide Web browser.

HTTP is an acronym for Hypertext Transfer Protocol and allows servers and clients to communicate across a network. Specifically, it permits World Wide Web clients to retrieve documents from World Wide Web servers, as well as from FTP or NNTP servers.

Hypertext is text with links to other computer documents, usually on the same or related subjects.

IE, see *Internet Explorer*.

An *inline image* is a picture included within the text of a document.

An *internet* (lowercase letter "i") is short for interconnected networks and is two or more computer networks connected together.

The *Internet* (uppercase letter "I") is a network made up of thousands of interconnected computer networks around the world.

Internet Explorer (IE) is a graphical user interface called a browser or client, first released by Microsoft in August 1995, that makes using the Internet easy. It provides access to textual information, graphics, images, videos and sounds. Using Internet Explorer, it is possible to access the World Wide Web and FTP servers. Internet Explorer is available free of charge from Microsoft at www.microsoft.com.

ISO-Latin-1 is a standard for numeric and character entities used to represent the characters in the Latin-1 character set promulgated by the International Standards Organization (ISO).

ISO8859-1, see *ISO-Latin-1*.

JPEG is an acronym for Joint Photographic Experts Group and is a file name extension for some graphics files. Pronounced "jay peg."

JPG, see *JPEG.*

Lynx is a full-screen, text-only, World Wide Web browser that was developed at the University of Kansas.

A *meta language* is a language used to create a markup language. SGML and XML are meta languages.

A *markup language* is a method of enhancing a document with notations that are used for formatting and/or information retrieval. In HTML the notations are tags, attributes and values.

Microsoft Internet Explorer, see *Internet Explorer*.

Mosaic is a graphical user interface called a browser or client. *Mosaic* was the first popular graphical browser, developed in 1993 at the National Center for Supercomputing Applications (NCSA) at the University of Illinois, Urbana-Champaign (UIUC). Mosaic is available free of charge at ftp.ncsa.uiuc.edu. Browsers such as *Mosaic* make it easy to find textual information, graphics, images, videos, and sound on the World Wide Web and other resources available on the Internet.

MPEG is an acronym for Motion Picture Experts Group and is a file name extension for some video files. Pronounced in two syllables, "em-peg."

MSIE, see *Internet Explorer*.

NCSA stands for National Center for Supercomputing Applications, which is located at the University of Illinois, Urbana-Champaign. It is the organization that developed *Mosaic*, the first popular graphical World Wide Web browser.

Netscape Communicator also called *Netscape Navigator* is graphical user interface called a browser or client, first released in October 1994 that makes using the Internet easy. It provides access to textual information, graphics, images, videos and sounds. Using *Netscape*, it is possible to access the World Wide Web and FTP servers; read and post to newsgroups, telnet to remote computers and send E-mail. *Netscape Navigator* is available free of charge from ftp.netscape.com.

Netscape Navigator, see *Netscape Communicator.*

Strict HTML refers to the use of HTML according to the rules for the markup language; there are no mistakes in the HTML.

Style sheets are code that allow Web developers more influence over the presentation of HTML documents. Style sheets are similar to "templates" used in desktop publishing and word processing software. For example, a style sheet can specify that the headlines of a document be rendered in red on a black background. Style sheets permit the separation of content from style. It is possible to store a style sheet separately from the document it applies to, and it is easy to change the presentation of a document by applying a different style sheet. Additionally, one style sheet can be applied to any number of documents.

Transitional HTML refers to a non-strict use of HTML, some but not all of the rules are followed; there are mistakes in the HTML.

URI, see *Universal Resource Identifier*.

URL, see *Uniform Resource Locator*.

Universal Resource Identifier (URI) is the name for a generic identifier. The URI specification defines the syntax for encoding arbitrary naming or addressing schemes, and includes a list of such schemes. Do not confuse URI with URL.

Uniform Resource Locator (URL) is the location and access method for a file in a directory that resides on any machine on a network or an internet. URLs can also point to documents in databases; they are commonly used to access resources on the Internet.

A *Web page* is a single HTML document that is accessed using the Hypertext Transfer Protocol (HTTP). See also *Web Site* and *Home Page*.

A *Web site* is a group of Web pages developed for a single subject, an individual or an organization.

World Wide Web (WWW or W3) is a system that links different kinds of Internet resources through a series of hypertext documents. The documents on the Web can include graphics and images and may have links to sound, image, and video files. From the Web computer users can access Web documents, FTP, Telnet sites, directories, and other Internet resources. Tim Berners-Lee, an English physicist, at CERN in Geneva, Switzerland, invented the WWW.

World Wide Web Consortium (W3C) stands for the World Wide Web Consortium and is the organization that develops standards for the World Wide Web. It promulgates the standards for such technologies as HTTP, HTML, XHTML, CSS, XML and XSL.

XHTML is an acronym for Extensible

Hypertext Markup Language. It is the sequel to HTML. Its purpose is to make easier to make content available on a wide variety of browser devices. XHTML is an initiative from the World Wide Web Consortium.

XML stands for Extensible Markup Language and is an initiative from the W3C defining a simple version of SGML for use on the World Wide Web.

HOW IT WORKS

HTML SCORECARD

Acronym	Name	Year Created	Inventor	Language Type
SGML	Standard Generalized Markup Language	Mid 1980s	IBM	meta
HTML	Hypertext Markup Language	1989	CERN	markup
XML	Extensible Markup Language	1998	W3C	meta-markup
XHTML	Extensible Hypertext Markup Language	2000	W3C	markup

BRIEF HTML OVERVIEW

HTML, Hypertext Markup Language, is a markup language created from *SGML*, Standard Generalized Markup Language. IBM invented SGML in the mid 1980s. It is a *meta language* which is a language used to created markup languages. HTML is the most famous markup language created from SGML. A *markup language* is a method of enhancing a document with notations that are used for formatting and/or information retrieval. In HTML the notations are tags, attributes and values.

Tim Berners-Lee, an English physicist, invented HTML in 1989. He was working at CERN, Conseil Européen pour la Recherche Nucléaire or the European Laboratory for Particle Physics. In addition to inventing HTML, Tim also invented HTTP, Hypertext Transfer Protocol, the first Web browser and the first Web server. To learn how the Web was invented and evolved in the beginning, read the book written by Tim Berners-Lee, *Weaving the Web: The Original Design and Ultimate Destiny of the World Wide Web by Its Inventor,* published by HarperCollins Publishers in 1999. Tim's book also gives an overview of the work of the W3C *World Wide Web Consortium*, the official body now responsible for the development of the Web.

HOW HTML WORKS

Basic HTML consists of tags and elements, attributes and values. You learn what each of these is very soon. Strict HTML is similar to an outline. There are guidelines and requirements that must be followed. This is true with Strict HTML.

EXAMPLE OF AN OUTLINE

Proper Outline Example	Improper Outline Example
I. A. B. 1. 2. 3. a. b. 1). 2). a.) b.) II.	A. B. 1. a. b. 1). 2). a.) b.) II.

Question: What's improper in the outline example on the right?
Answer: You cannot have II. without I. You cannot have 1. without 2.

EXAMPLE OF STRICT HTML

Proper HTML Example	Improper HTML Example
<H1> </H1> <H2> </H2> <H3> </H3> <H4> </H4> <H5> </H5> <H6> </H6>	<H2> </H2> <H3> </H3> <H4> </H4> <H6> </H6>

Question: What's improper in the HTML example on the right?
Answer: You cannot have <H2> without <H1>. You cannot have <H6> without <H5>.

Strict HTML is not very common on the Web. *Strict HTML* refers to the use of HTML according to the rules for the markup language; there are no mistakes in the HTML. Pages made using Strict HTML don't win contests for their design.

Instead, many Web developers use Transitional HTML that has fewer requirements. *Transitional HTML* refers to a non-strict use of HTML, some but not all of the rules are followed; there are mistakes in the HTML. As a result Web developers use HTML in

non-conventional ways to create cool-looking Web pages. The non-conventional use of HTML is called Transitional HTML or non-strict HTML.

THE WEB TAKES A GIANT STEP FORWARD XML AND XHTML

XML – SGML for the Web

XML stands for Extensible Markup Language and is an initiative from the World Wide Web Consortium that defines a simple version of SGML for use on the World Wide Web. Remember *SGML* stands for Standard Generalized Markup Language and is a meta language created in the mid 1980s by IBM.

XML is SGML for the Web. The W3 Consortium whittled down SGML so that just the parts needed for the Web are included. Therefore, XML is much easier than SGML. However, the W3 Consortium continues to develop XML and there is an ever-growing amount to learn.

XML is a misnomer. It is not only a markup language like HTML, but also a meta language like SGML. So XML is a meta-markup language.

XML is used to make markup languages by creating a *DTD*, which stands for Document Type Definition, or an XML schema. DTDs and XML schemas are code that defines a markup language. The code consists of a set of markup tags, attributes, entities and their uses. There is a DTD for HTML. It was written using SGML.

XML can also be used to make documents. XML documents are given the file name extension .xml.

XML is a standard. It is not new. The World Wide Web Consortium promulgated version one of XML on February 10, 1998. It is located at:

Extensible Markup Language (XML) 1.0 Recommendation
http://www.w3.org/XML

XHTML – The Sequel to HTML

The current standard for HTML, HTML 4.01, is the final version. HTML will no longer be revised. XHTML has taken its place. *XHTML* is the sequel to HTML. Its purpose is to make content more easily available on a wide variety of browser devices. XHTML is an initiative from the World Wide Web Consortium.

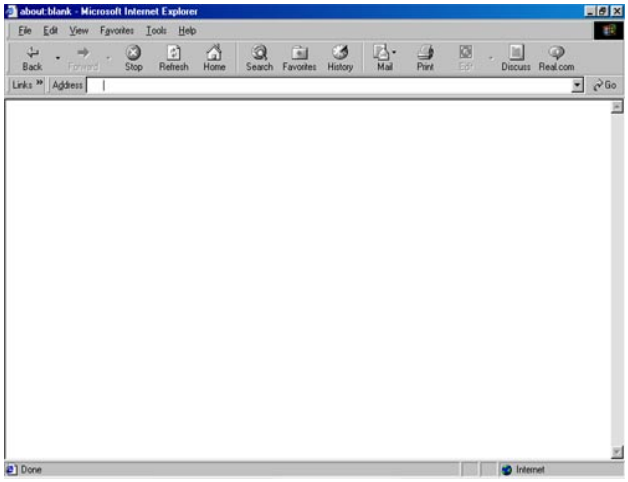
When HTML was written, no one knew how popular the Web would be. Consequently, HTML has some shortcomings. XML was created knowing how useful the Internet and the Web are.

XHTML is a standard. It is not new. The World Wide Web Consortium promulgated version one of XHTML on January 26, 2000. It is located at:

http://www.w3.org/MarkUp

HTML DOCUMENT STRUCTURE

A good starting point for learning XHTML and XML is HTML. Let's start by learning the proper structure for an HTML document. Each Web page should have these tags.




```
Starting root tag     <html>

                      <head>
                      <title>

                      </title>
                      </head>

                      <body>

                      </body>

Ending root tag       </html>
```

An HTML document starts and ends with the <html> and </html> tags. This is called the root tag.

Question: What is the difference between the starting and ending <html> tags?
Answer: The ending tag has a slash.

An HTML document is like you. It has a head and a body. Like you, the head should come first.

What goes in your <head></head>?

Things that do not appear in the body go in the head. The title does not appear in the body, so put the <title></title> tags in the head. For example,

```
<head>
<title>Computer College Silicon Valley, Hands-on Web Developer Training</title>
</head>
```

Other things that go in the head include JavaScript scripts, style sheet code and <meta> tags. You learn about these in other seminars.

What goes in your <body></body>?

The content that the user sees in the browser goes in the body. The body is the main part of the browser where the content of the HTML document is displayed.

ELEMENTS, TAGS, ATTRIBUTES AND VALUES

An element is a section within an HTML document that begins with a starting tag and finishes with an ending tag.

HTML	EXAMPLE 1	EXAMPLE 2
	<p align="center">	<a href="http://www.yahoo.com">
1. TAG	<p	<a
2. ATTRIBUTE	align=	href=
3. VALUE	center	http://www.yahoo.com

1. An HTML tag appears to the right of the lesser than sign, <.
2. An attribute is to the right of the tag and is always preceded with a space. A tag may have more than one attribute. A tag may have any number of attributes and they can be in any order.
3. A value is what follows the equal sign, =.

ENDING TAGS

Notice that the <title> tag has an ending </title> tag. The starting and ending tags are the same except for the slash in the ending the tag. Look ahead to the Basic HTML Tags on page 13. You see that not all tags have an ending tag. These are empty elements. Non-empty elements that require an ending tag are more common than empty elements.

TO USE QUOTES OR NOT TO USE QUOTES

Quotes are required if there are any non-alphanumeric characters following the equal sign. Follow this rule if optimizing a Web page, making the file size as small as

possible. For example, use quotation marks with:

1) URLs with slashes such as src="http://www.ccsv.com "
2) Multiple words as in alt="CCSV is H.O.T."
3) Hexadecimal values for colors as in color="#cc0033"
4) Values that begin with a plus sign as in size="+2"

XHTML requires that all values are surrounded with quotes. This would be a good habit to adopt.

Exercise One: Open an HTML Document in an Editor and a Browser

1. Open the file, template.html, from your disk in a text editor.
2. Save your document to your floppy disk as yourname.html.
   Substitute yourname with your first name.
   An HTML document is saved as a text-only document.
3. View your Web page in the browser of your choice.

Exercise Two: Properly Structure an HTML Document

1. The HTML structural tags in template.html have several mistakes.
   Correct the mistakes.
2. Save your document to your floppy disk as yourname.html.
   An HTML document is saved as a text-only document.
3. View your corrected Web page in the browser of your choice.
   Corrections are on page 13.

Question: Do you see any differences?
Answer: Good news! The browser tolerates some HTML errors.

Exercise Three: Create an HTML Document

1. If necessary open the file, yourname.html, from your disk in a text editor.
2. Use the Basic HTML Tags Reference on page 14 to customize your Web page.
3. Save your document as yourname.html.
4. View your corrected Web page in the IE and Netscape browsers.

NOTE: When working on Web pages, Web developers usually leave open

1. the editor and
2. the browsers

used for making and testing Web pages.

template.html

TEMPLATE HTML (CORRECTED)

```
<html>
<head>
<title>Computer College Silicon Valley</title>
</head>
<body>
<a name="top">
<p align="center">
<img src="webschool.gif" alt="Computer College Silicon Valley Web School
graphic"></a>
<h2 align="center">Welcome to</h2>
<h3 align="center">Computer College Silicon Valley's<br>
Web Page</h3>
This is an example of HTML, Hypertext Markup Language. It's really quite
simple.
Here is:
<ul>
<li>A point
<li>Another point
<li>Yet another point
</ul>
<p>
Here's an example of a hypertext link.
<p>
<a href="http://yahoo.com">Yahoo - A Guide to the WWW</a>
<p>
Computer College Silicon Valley (CCSV)<br>
1733 Woodside Road<br>
Redwood City, CA 94061 USA<br>
Telephone: (650) 369-3648<br>
E-mail: <a href="mailto:ccsv@ccsv.com">ccsv@ccsv.com</a><br>
<p>
<center>
<b><i>&lt;Technology Training for the 21st Century&gt;</i></b>
</center>
<p>
<a href="#top">Go back to the top</a>
<p>
<h6>&#169;2001, Computer College Silicon Valley. All rights
reserved.</h6>
</body>
</html>
```

BASIC HTML TAGS REFERENCE

HTML files are ASCII, text-only files. They may be created in a text editor such as *Teach Text (Mac)*, *Simple Text (Mac)* or Microsoft *WordPad (PC), Notepad (PC)* or *Edit (PC)*, a word processor such as Microsoft *Word* or an HTML editor or converter such as Microsoft FrontPage or Macromedia Dreamweaver.

HTML tags are not case sensitive. Blank lines can be added in an HTML file. The browser does not display them. What is the difference between a starting tag and an ending tag? Do all tags have an ending tag?

Starting Tag	Ending Tag	Tag Function
<!--…-->	None	Adds a comment that is not displayed by the browser
<a>		Starts and ends an anchor or hypertext links. Requires an attribute such as href = or name=
<address>	</address>	Starts and ends italized text
		Starts and ends boldface text
<blink>	</blink>	Starts and ends blinking, Netscape only
<blockquote>	</blockquote>	Starts and ends indention left and right
<body>	</body>	Starts and ends the body of an HTML document
 	None	Inserts a line break, compare with
		Starts and ends text centering
		Creates a division within a document that can span multiple paragraphs
<h1>…<h6>	</h1>…</h6>	Starts and ends a heading, 6 headings possible, <h1>…<h6>. <h1> is the largest
<html>	</html>	Root tag, starts and ends an HTML document
		Starts and ends italicized text
<img>	None	Inserts an inline image. Use with src and alt attributes as in: <img src="imagename.gif" alt="This is an alternative">
	None	Creates a bullet, number, letter or Roman numeral that precedes an entry in a list
<marquee>	</marquee>	Starts and ends a scrolling marquee, MSIE only
		Starts and ends an ordered list which is a numbered list
	(Optional)	Inserts two line breaks to make a blank line, compare with
<title>	</title>	Starts and ends the document title which appears in the browser's title bar
		Starts and ends an unordered list which is a list with bullets

LINKS TO E-MAIL

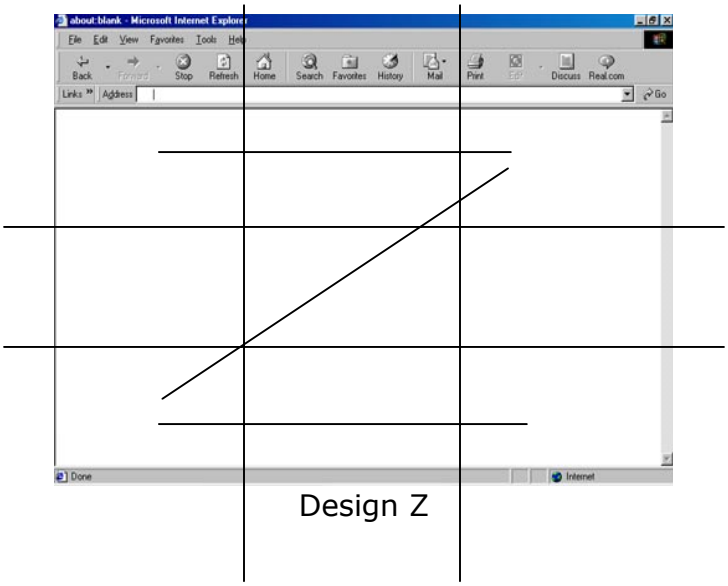
Using the element
username@machine.name
allows a user to easily send an e-mail message from a browser if the browser can send E-mail and has been configured with the name of the user's SMTP, Simple Mail Transport Protocol, server. Check your Internet Services Provider's Web site for your SMTP server name.

For example, ccsv@ccsv.com allows a user to easily send an E-mail message from the Web page where this link appears.

WEB PAGE DESIGN

Many Web users read from left to right, top to bottom. We can use this knowledge to predict where the user looks in the browser window, and what he or she sees and remembers. Using the "Design Z" we can create more effective Web pages with the knowledge that users look:

1. Upper left 1st
2. Upper right 2nd
3. Bottom left 3rd
4. Bottom right 4th



Design Z

Based on the logic of the Design Z, put a brand name and logo, key information and the links you want the user to click in the four numbered areas. Conversely, put information users will look for such as a link to prices in an area that is not so quickly viewed.

To see an example of the use of the Design Z go to:

http://www.ccsv.com

WEB GRAPHICS

The three types of graphics supported by most graphical browsers are:

.gif .jpg .xbm

Other types of graphics supported by some Web browsers include:

.bmp .png .fpx .flsh

See the HTML acronyms on page 3 for the meanings of these graphic file name extensions. You learn more about Web graphics in the Computer College Web graphics seminars.

HTML FOR WEB GRAPHICS

To include a graphic on a Web page use the <img> tag. The <img> tag is an empty tag, which means it has no ending tag.

ATTRIBUTES TO THE <img> TAG

You can use the following attributes to the <img> tag. For example:

<img src="webschool.gif" height="149" width="295" alt="Web School" >

A) src = indicates the file name of the graphic. For example,
B) height = height of the graphic expressed in pixels.
C) width= width of the graphic expressed in pixels.

Netscape says that a graphic loads faster if its height and width are included in the <img> tag. However, if graphics are changed and are not exactly the same size, it can be disadvantageous to have the height and width included in the <img> tag.

D) alt = is the alternative to the graphic. The following are examples of when the alternative displays.

When does the alt display?

1. When pointing to the graphic in the browser
2. When images are turned off
3. When the graphic is being downloaded from the Web
4. When using a text-only browser
5. When outputting the page in text-only mode

CHARACTER AND NUMERIC ENTITIES

HTML documents are ASCII, text-only files. *ASCII* stands for the American Standard Code for Information Interchange. The ASCII character set consists of 128 characters, produced by 7-bit bytes, representing the letters, numbers, punctuation marks, and other symbols of the Latin alphabet used in English and other languages.

Question: How do you put a non-ASCII character such as the copyright symbol, ©, in an ASCII file such as an HTML document?

Answer: Use an entity that is a code composed of a string of ASCII characters used to represent non-ASCII characters. For example, ©.

There are numeric and character entities. Numeric entities are composed of numbers while character entities are composed of alpha characters. The following are a few of these codes that are part of the ISO-Latin-1 character set, ISO8859-1. For a complete list of the Latin-1 entities see a good HTML reference such as the *Hip Pocket Guide to HTML 4.01* by Ed Tittel et al.

Notice that numeric entities start with an ampersand followed by a pound sign, and end with a semicolon. Character entities do not use the pound sign.

Character	Numeric Entity	Character Entity	Description
©	&#169;		Copyright
>	&#62;	&gt;	Greater Than
<	&#60;	&lt;	Less Than
é	&#233;	&eacute;	Lowercase e, acute accent
ñ	&#241;	&ntilde;	Lowercase n, tilde
£	&#163;		Pound Sterling
®	&#174;		Trademark
¥	&#165;		Yen Sign

Question: Which should I use, character or numeric entities?
Answer: It is safer to use numeric entities. The character entities may not be implemented consistently in all of the browsers.

PUBLISHING A WEB PAGE ON A WEB SERVER

Once you've finished creating your Web page, structure is correct and all tags are in the proper places, you make it available on the Internet. To do this you upload it to the hard drive of a Web server.

You may already have space available on a Web server for your Web pages. Most Internet Service Providers, ISPs, provide some space, usually 10 to 50 megabytes, on their server for you to put your files. If your ISP does not provide space on their Web server, you can investigate leasing space for $10-60/month from one of the many Web server services such as those listed at:

http://www.hostindex.com

There are also many free Web hosting options. For a list of free Web-hosting services go to Yahoo and search for free Web pages or type the following URL:
www.yahoo.com/

Question: Why are there free Web hosting options?
Answer: Advertising. When accessing your Web page ads appear on the screen.

FTP - File Transfer Protocol

Uploading your Web page to a server requires a process called File Transfer Protocol, FTP. This is the Internet way of uploading and downloading files from one computer to another. FTP can be done with programs such as WS-FTP (PC), Fetch (Mac), or FTP (UNIX). These are programs specifically designed to transfer files. They are shareware or freeware. WS FTP is included on your disk.

When using FTP software you have a choice to transfer files as ASCII or binary. HTML documents are ASCII, text-only files so they are uploaded as ASCII. Non-ASCII files are binary and are transferred as binary. For example, .gif and .jpg are binary. Sound files are also transferred as binary.

Question: I accidentally uploaded my html document as binary. What should I do?
Answer: Just resend it as text-only file. It will be slightly smaller, 7-bit bytes as opposed to 8-bit bytes.

TESTING A WEB PAGE

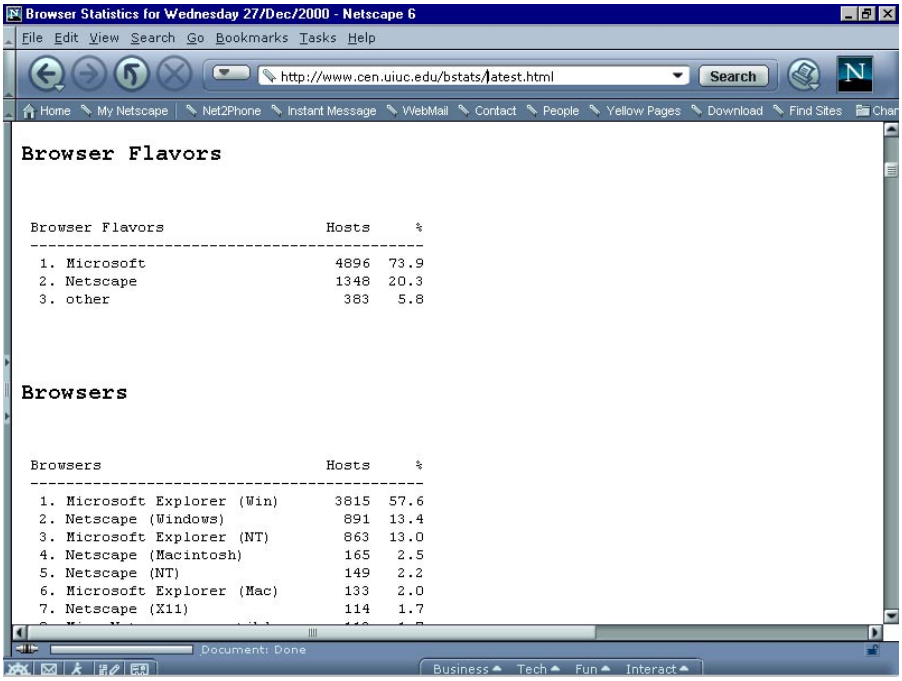
After uploading a Web page to a Web server you want to view it and test it. It is important to test your Web pages using the browsers, resolutions, monitor sizes and connection speeds used by the potential users of your Web page(s). Web servers have a log file that provides usage information but if you do not have access to it look at some general browser statistics.

BROWSER STATISTICS

Even the simplest Web page can look differently, depending on the browser, version and platform. If you do not know which browser and platform the user of your Web page uses, look up general browser statistics.

The table below summarizes which browsers were used by hosts assessing the Yahoo database. These statistics are from December 27, 2000. Complete and up-to-date statistics are available at:

http://www.cen.uiuc.edu/bstats/latest.html



If you do not know the resolution, connection speed and monitor size of your users, test each page using the following:

1.) Resolutions: 640 x 480, 800 x 600, 1024 x 768

2.) Connection Speeds: 28.8 bps, 56 bps

3.) Monitor Sizes: 15”, 17”, 21”

Below are examples of the template Web page as rendered by the text-only browser *Lynx*, Microsoft *Internet Explorer* and *Netscape*.

Question: What are the differences?
Answer: Even with a page as simple as this you notice some variation.

TESTING A WEB PAGE - Lynx – Text-Only Browser

Computer College Silicon Valley Web Page (p1 of 2)

Computer College Silicon Valley Web School graphic

WELCOME TO

Computer College Silicon Valley's
Web Page

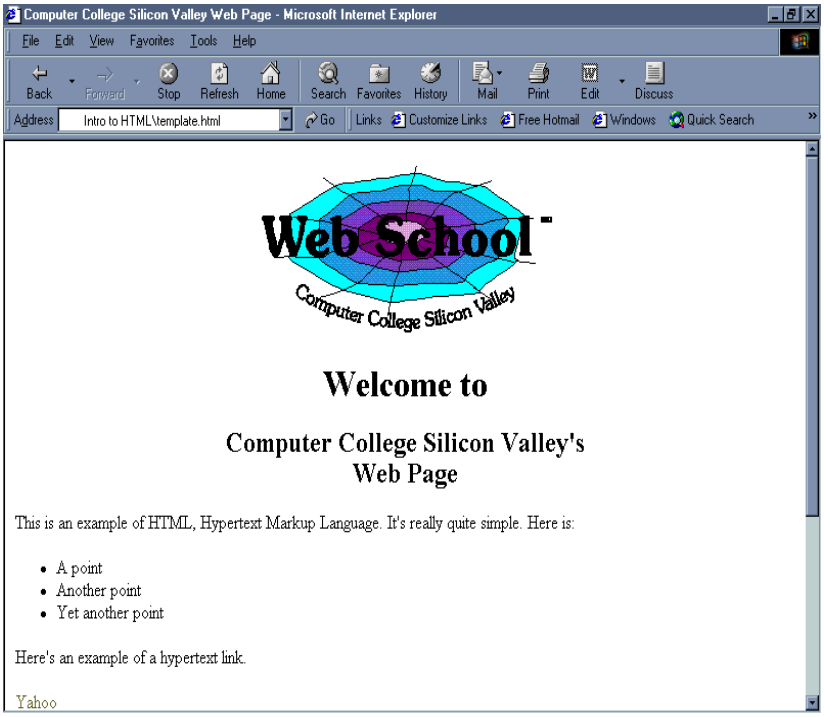
This is an example of HTML, Hypertext Markup Language. It's
Really quite simple. Here is:

* A point
* Another point
* Yet another point

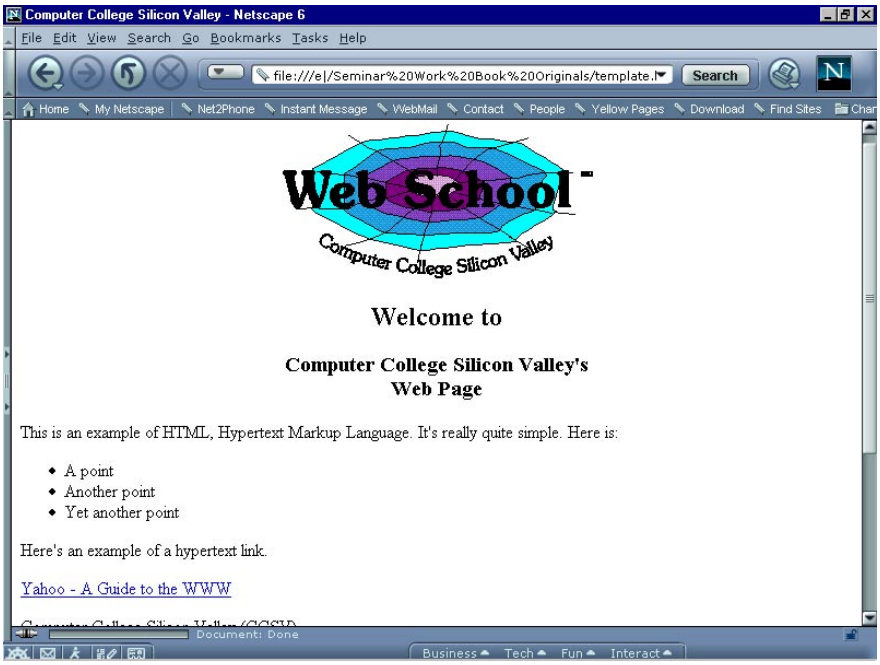
Here's an example of a hypertext link.

-- press space for next page --
Arrow keys: Up and Down to move. Right to follow a link; Left to go back.
H)elp O)ptions P)rint G)o M)ain screen Q)uit /=search [delete]=history list
Alt-Z FOR HELP | VT100 | FDX | 57600 N81 | LOG CLOSED | PRINT OFF | ON-LINE

TESTING A WEB PAGE – MICROSOFT INTERNET EXPLORER



TESTING A WEB PAGE – NETSCAPE



ANNOUNCING A WEB PAGE

Once your Web page has been uploaded to a Web server, it has its own uniform resource locator (URL). The URL is the location of your page on the Internet. If you want people to find your Web page you can announce it, usually free-of-charge, to the various search engines, portals and WWW directories. Yahoo maintains a list of these search utilities:

1. Search Engines
   http://dir.yahoo.com/Computers_and_Internet/Internet/World_Wide_Web/Searching_the_Web/Search_Engines
2. Portals
   http://dir.yahoo.com/Business_and_Economy/Shopping_and_Services/Communication_and_Information_Management/Internet_and_World_Wide_Web/Portals
3. WWW Directories
   http://dir.yahoo.com/Computers_and_Internet/Internet/World_Wide_Web/Searching_the_Web/Web_Directories

Because there are thousands of search engines, portals and WWW directories announcing a Web page to more than a few of these utilities can be a daunting task. Here are some solutions:

1) Announce your page to the most popular search engines, portals and WWW directories.
2) Use an announcement service. These can be free to over $895.

GUIDELINES FOR USING ANNOUNCEMENT SERVICES

When using an announcement service, be careful! Before giving your credit card number to one of these services:

A) Make sure they respond to your e-mail inquiry
B) Make sure they answer the telephone
C) Make sure you have a postal address for the service
D) Get a list of search engines, portals and WWW directories where your page will be announced
E) Find out how will you be informed that your page has been announced

Yahoo has a very good category with links to information about Web page announcement and promotion. You can go to Yahoo and do a search for announcement services or type the following URL:

http://dir.yahoo.com/Computers_and_Internet/Internet/World_Wide_Web/Site_Announcement_and_Promotion/

Another Yahoo category has links to information on how to improve the placement of your page in the listings generated by the search engines, portals and WWW directories. At Yahoo search for Placement Improvement or type the following URL:

http://dir.yahoo.com/Computers_and_Internet/Internet/World_Wide_Web/Site_Announcement_and_Promotion/Search_Engine_Placement_Improvement

MAKING WEB PAGES - INTRODUCTION TO HTML
SEMINAR
SELF-CHECK QUESTIONS

(True/False – Select One)

T F 1. HTML stands for Hypertext Markup Language and is a new programming language.

T F 2. HTML documents are ASCII, text-only and can be made with any text editor, word processor, or HTML editor or converter.

T F 3. You need to be connected to the Internet when creating a Web page.

T F 4. The structure of an HTML document dictates that it should have a head and a body and that the <head> tag appears before the <body> tag.

T F 5. HTML tags are case sensitive and therefore must always be capitalized.

T F 6. Blank lines in an HTML file do not display in the browser.

T F 7. Quotation marks must surround a value if it has any non-alphanumeric characters.

T F 8. HTML is virtually etched in stone and will not be changed.

T F 9. The following is proper HTML for placing a graphic on a Web page: <img src=graphicname.gif>

T F 10. HTML documents are FTPed to the Web server as ASCII files but graphics are sent as binary files.

T F 11. You should test your Web page by viewing it in different browsers; versions of the browsers, and by using different speed connections, resolutions and monitor sizes.

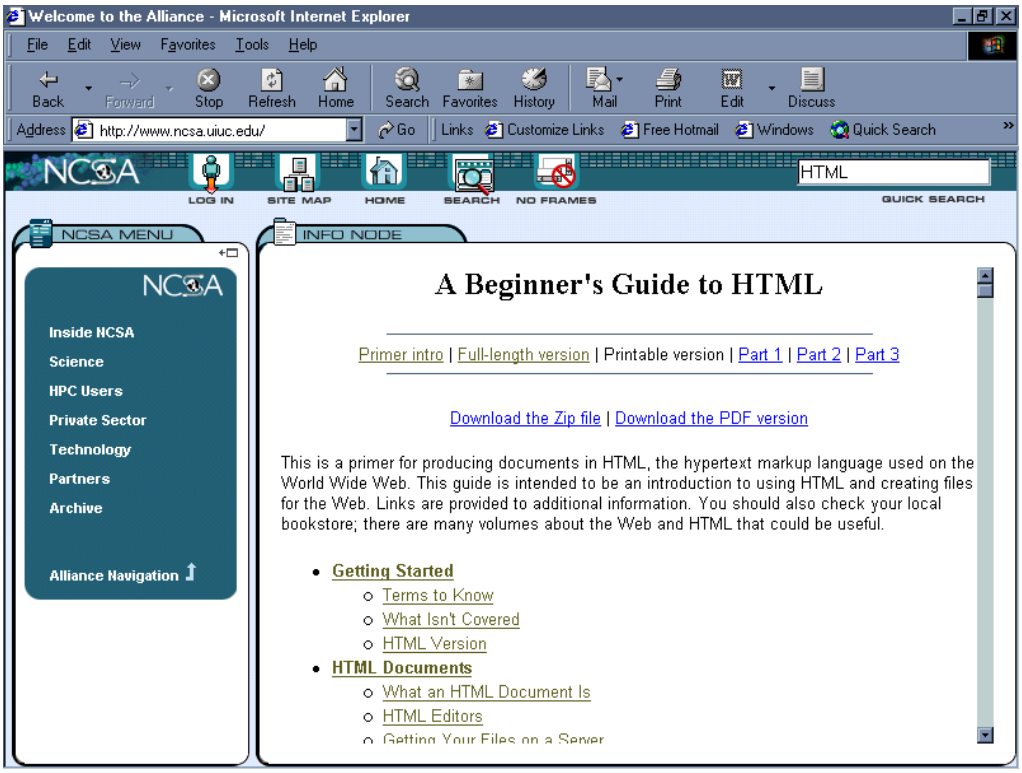
HOW TO GO ON
LEARNING HTML

ONLINE RESOURCE

A good way to learn HTML is to read *A Beginner's Guide to HTML*. It is available at:

http://www.ncsa.uiuc.edu

htmlprim.html



HTML BOOKS

Hip Pocket Guide to HTML 4.01 by Ed Tittel, Natanya Pitts, Chelsea Valentine
Published by Hungry Minds, Inc. June 2000
Paperback - 256 pages Spiral edition
ISBN: 0764547194 ; $19.99

HTML 4 for the World Wide Web Visual Quickstart Guide, by Elizabeth Castro.
Published by Peachpit Press January 15, 2000
Paperback - 384 pages 4th edition
ISBN: 0201354934 ; $14.99
http://www.cookwood.com/html4_4e/html44ebookframe.html

Web Pages That Suck : Learn Good Design by Looking at Bad Design
by Vincent Flanders, Michael Willis
Published by Sybex March 1998
Paperback - 288 pages 1st edition
ISBN: 078212187X ; $39.00
http://www.webpagesthatsuck.com