
ELIZABETH CITY STATE UNIVERSITY
TO LIVE IS TO LEARN
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<HTML>

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Introduction

Purpose

The following guide is meant to be a job aid to help you in developing and troubleshooting you personal and team web pages. Utilizing this guide, the help pages from your development program (Dreamweaver/FrontPage), and resources from the web will allow you to create an inviting and usable web page.

Purpose

The purpose of a web page is to convey information via text or images to a reader. This idea must be kept in mind when the temptation appears to add more "bells and whistles". Fancy animated buttons and music add nothing to a researcher's page on seagrass. They only slow down the reader's download or distract them from the real message you are trying to convey.

Getting Started

The first step in building a web page is to open your word processor. It is recommended that you utilize the basic word processors (*Simpletext* for Macintosh, *Notepad* for the PC) as other more sophisticated programs tend to have hidden code.

Creation Steps

Follow these steps:

1. Open the word processor
2. Go to File>Save As…
3. Select File Type to be "All Files"
4. Name the file with the extension ".html" on the end (example: index.html)
5. Save

You have now created your first web page.

Viewing Your Web Page

To view your web page.

1. Open the browser of your choice (Netscape or Explorer).
2. Select File>Open…
3. Select Browse
4. Locate your file
5. Select Open, then OK

If your file is already open in the browser and you have made changes to it then just select the "Refresh" button on the toolbar to see your updated page.

The Basics

HTML Hypertext Markup Language

The computer language that the web uses is labeled *HTML* or *Hypertext Markup Language*. HTML can be read across many platforms which makes it an excellent tool for communication. This language is made up of Tags which determine the color, font, pictures, etc… that the browser will display.

Tags

Tags usually appear within Angle Brackets <> found at the bottom of the keyboard. A simple tag example is <BOLD> my name </BOLD>. The two tags here are called opening and closing tags. The only difference is the slash "/" before the closing tag. The majority of tags used will have closing tags. The omission of the closing tag is the mistake most often found in beginning web pages. Tags are not case sensitive, but it is a good practice to place them in caps for quick recognition.

Attributes

Many of the tags can be modified by using attributes. These are items placed within the tag that specify anything from height to color. An example is the BGCOLOR (background color) attribute that can be utilized with the BODY and other tags. The attribute would look like this: <BODY BGCOLOR=”RED”>

HTML

The first tag needed in a web page is the <HTML></HTML> tag. This lets the browser know what type of page it is opening. These tags will be the first and last tags on your page.

HEAD

The <HEAD></HEAD> tag is used to execute scripts, titles, and other items that will happen before the page is shown. Some of these items will be discussed later in this aid.

BODY

This tag is where the “meat” of the webpage can be found. Text, images, and other items will be placed between these tags. So up to now your text file should look like this:

```
<HTML>
        <HEAD>
        </HEAD>
        <BODY>
        </BODY>
</HTML>
```

BODY Attributes

These are some of the font attributes that can be used.

1. BGCOLOR – Use the hexadecimal representation (see appendix) or simply use a color name such as white, red, black, etc… <BODY BGCOLOR=WHITE>
2. BACKGROUND – Allows for an image to be used in the background. <BODY BACKGROUND=”sky.jpg”>

TITLE

This tag is placed inside the HEAD tag of your document. This tag shows the title of you page and is the bookmark title when a reader bookmarks your page.

```
<HTML>
        <HEAD>
        <TITLE>Jerri’s Resume</TITLE>
        </HEAD>
        <BODY>
        </BODY>
</HTML>
```

Text Modifiers

Paragraphs and Breaks

There are two way of creating line breaks in HTML. The first is the use of the paragraph tag <P></P>. When text is placed between these tags, a double line break will appear.

The next line break tag is the break tag
. This tag creates a single line break. It is one of the few tags that do not use a closing tag.

```
<HTML>
        <HEAD>
        <TITLE>Jerri’s Resume</TITLE>
        </HEAD>
```

```
        <BODY>
        <P></P>
        <P></P>
        <BR>
        </BODY>
</HTML>
```

HEADINGS

Heading tags are used to modify the size of your text. They use the letter H and the numbers 1 through 6 with 1 being the largest and 6 being the smallest.

```
<HTML>
        <HEAD>
        <TITLE>Jerri's Resume</TITLE>
        </HEAD>
        <BODY>
        <P><H1>VERY BIG</H1></P>
        <P><H3>Medium</H3></P>
        <H6>very small</H6><BR>
        </BODY>
</HTML>
```

FONT

The font tag enables the developer to further modify the given text with other attributes. The tag by itself has no affect, but utilized with attributes, it can set the color, font, style, and size of the text.

```
<HTML>
        <HEAD>
        <TITLE>Jerri's Resume</TITLE>
        </HEAD>
        <BODY>
        <P>
        <FONT COLOR="#66FF00" SIZE="-1" FACE="TIMES
        NEW ROMAN, TIMES, SERIF">This is a modified
        font</FONT></P>
        </BODY>
</HTML>
```

FONT Attributes

These are some of the font attributes that can be used.

3. COLOR – Use the hexadecimal representation (see appendix) or simply use a color name such as white, red, black, etc…
4. SIZE – Use a relational size +/- 1 to 7 to set your font larger or smaller. Always use a plus or minus sign to allow the font to change with the change in the monitors viewing size
5. FACE – Use this to set the font. Avoid special fonts that may only appear on your computer. Good fonts to use are Helvetica, Verdana, and Arial. Stay away from serif fonts such as Times and Courier as they are harder to read unless used at a large size.

Numbered and Bulleted lists

There are two methods of arranging text into lists. The first is the Unordered List <UL></UL> which creates a bulleted list of items. The second is the Ordered List <OL></OL> which created a numbered list. Each item in either type of list will use the List Item tag <LI></LI>.

```
<HTML>
        <HEAD>
        <TITLE>Jerri's Resume</TITLE>
        </HEAD>
        <BODY>
```

```
        <OL>
        <LI>Item one</LI>
        <LI>Item two</LI>
        <LI>Item three</LI>
        <LI>Item four</LI>
        </OL>
        </BODY>
</HTML>

<HTML>
        <HEAD>
        <TITLE>Jerri's Resume</TITLE>
        </HEAD>
        <BODY>
        <UL>
        <LI>Item one</LI>
        <LI>Item two</LI>
        <LI>Item three</LI>
        <LI>Item four</LI>
        </UL>
        </BODY>
</HTML>
```

The list tags can be nested within each other to create multilevel lists.

STRONG The STRONG tag bolds any text within the opening and closing tags. <STRONG></ STRONG >

EM The EM tag is read by the browser as an italic style. <EM></EM>

CENTER The center tag centers the text within it. <CENTER></CENTER>

*** *** Browsers do not read spaces as a default. Multiple spaces in your code become one when read by the browser. To get by this you can use the special character ** ** to create multiple spaces. For example, to create four spaces simply use: **   **
Notice that this is not a tag as it is not enclosed in angle brackets. A complete list of special characters can be found in the appendix.

Creating Links

A HREF The A HREF tag creates a link to another file or image. There are two different types of links.

Relative Links Relative links are those which reference another file in relation to the current documents position.

For example, if you are working in the file index.html and you want to link the text "resume" to the file resume.html located in the same folder, the tag would look like this:

```
<A HREF="resume.html>resume</A>
```

If the file was in another folder, the path to that file from your current location would be specified:
<A HREF=”resumes/jerri/resume.html”>resume</A>

Absolute Links

Absolute links are those which specify the entire path for the page requested from the server down to the file. This link always begins with “http://” followed by the path.
<A HREF=”http://www.htmlclass.com/files/plane.html”>plane</A>
<A HREF=”http://www.yahoo.com”>Yahoo</A>

Links to Internal Locations

If your web page is very long or organized in a logical manner, you can create links to certain points within it. The first step is to create an anchor tag at a certain location within your document:
<A NAME=”Bottom”>bottom </A>

Next, insert the link to the “bottom” :
<A HREF=”#Bottom”>go to the bottom</A>

NOTE: If your anchor position is already in view, clicking the link will not change your screens appearance.

Working with Images

IMAGE SRC

Images can be quickly inserted into your page by using the image source tag. For example:
<IMAGE SRC=”tr.jpg”>
will display the image tr as long as it is in the same folder as the html file.

If it had been in another folder the code might have been:
<IMAGE SRC=”images/tr.jpg”>

Note that a closing tag is not used.

Image Modifiers

Several attributes can be used to modify the images. These are a few:

1. HEIGHT/WIDTH – Used to specify the height and width of your image in pixels. Note: Changing the height and width of an image may distort it. It is recommended to change the size in a graphic program before inserting it.
   <IMAGE SRC=”tr.jpg” HEIGHT=55 WIDTH=55>
2. ALIGN – Sets the alignment (left, center, right, justify) for the image.
   <IMAGE SRC=”tr.jpg” ALIGN=”right”>
3. ALT – Presents text to be displayed if the image cannot be retreived.
   <IMAGE SRC=”tr.jpg” ALT=”Tennessee River Turtle”>
4. BORDER – Sets the size of the border. The default is 0.
   <IMAGE SRC=”tr.jpg” BORDER=0>

Horizontal Lines

The tag **<HR>** inserts a horizontal line into your page. The tag has no closing tag and has several attributes that can be set such as color, size (height in pixels), width (in percentage), and alignment.

Tables

Purpose

Tables are used to place objects where you desire them. Several tags along with their modifiers enable you to create simple or intricate tables. Tables can be nested within each other to create a more intricate layout.

TABLE

The first tag used is the table tag. **<TABLE></TABLE>** There are several modifiers that can be used with this tag such as bgcolor, align, background, border, height/width, and others that can be found in the appendix.

TR

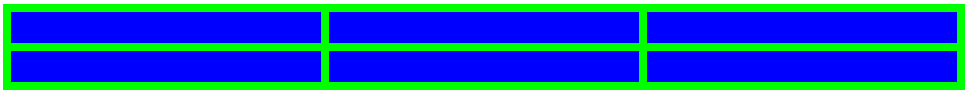
The TR tag specifies a row of cells in a table. The **<TR>** tag is used at the beginning of the row and **</TR>** at the end of the row. Once again there are several attributes that can be used for the TR tag.

TD

The TD tag is used to start and end a cell within a table. <TD></TD>

Given the last three tags, Table, TR, and TD, the following code yields a table with three columns (cells) and two rows. The attributes give it a border of 3 pixels with a blue background and a green border.

```
<TABLE BORDER=1 BGCOLOR=”BLUE”>
        <TR>
                <TD></TD>
                <TD></TD>
                <TD></TD>
        </TR>
        <TR>
                <TD></TD>
                <TD></TD>
                <TD></TD>
        </TR>
</TABLE>
```



Appendix 1 - Tag Reference

Basic Tags

`<html></html>`
Creates an HTML document

`<head></head>`
Sets off the title and other information that isn't displayed on the Web page itself

`<body></body>`
Sets off the visible portion of the document

Header Tags

`<title></title>`
Puts the name of the document in the title bar

Body Attributes

`<body bgcolor=?>`
Sets the background color, using name or hex value

`<body text=?>`
Sets the text color, using name or hex value

`<body link=?>`
Sets the color of links, using name or hex value

`<body vlink=?>`
Sets the color of followed links, using name or hex value

`<body alink=?>`
Sets the color of links on click

Text Tags

`<pre></pre>`
Creates preformatted text

`<hl></hl>`
Creates the largest headline

`<h6></h6>`
Creates the smallest headline

`<b></b>`
Creates bold text

`<i></i>`
Creates italic text

`<tt></tt>`
Creates teletype, or typewriter-style text

`<cite></cite>`
Creates a citation, usually italic

`<em></em>`
Emphasizes a word (with italic or bold)

`<strong></strong>`
Emphasizes a word (with italic or bold)

`<font size=?></font>`
Sets size of font, from 1 to 7, use + or – and the number)

`<font color=?></font>`
Sets font color, using name or hex value

Links

`<a href="URL"></a>`
Creates a hyperlink

`<a href="mailto:EMAIL"></a>`
Creates a mailto link

`<a name="NAME"></a>`
Creates a target location within a document

`<a href="#NAME"></a>`
Links to that target location from elsewhere in the document

Formatting

`<p></p>`
Creates a new paragraph

`<p align=?>`
Aligns a paragraph to the left, right, or center

`<br>`
Inserts a line break

`<blockquote></blockquote>`
Indents text from both sides

`<dl></dl>`
Creates a definition list

`<dt>`
Precedes each definition term

`<dd>`
Precedes each definition

`<ol></ol>`
Creates a numbered list

`<li></li>`
Precedes each list item, and adds a number

`<ul></ul>`
Creates a bulleted list

`<div align=?>`
A generic tag used to format large blocks of HTML, also used for stylesheets

Graphical Elements

`<img src="name">`
Adds an image

`<img src="name" align=?>`
Aligns an image: left, right, center; bottom, top, middle

`<img src="name" border=?>`
Sets size of border around an image

`<hr>`
Inserts a horizontal rule

`<hr size=?>`
Sets size (height) of rule

`<hr width=?>`
Sets width of rule, in percentage or absolute value

`<hr noshade>`
Creates a rule without a shadow

Tables

`<table></table>`
Creates a table

`<tr></tr>`
Sets off each row in a table

`<td></td>`
Sets off each cell in a row

`<th></th>`
Sets off the table header (a normal cell with bold, centered text)

Table Attributes

`<table border=#>`
Sets width of border around table cells

`<table cellspacing=#>`
Sets amount of space between table cells

`<table cellpadding=#>`
Sets amount of space between a cell's border and its contents

`<table width=# or %>`
Sets width of table — in pixels or as a % of document width

`<tr align=?> or <td align=?>`
Sets alignment for cell(s) (left, center, or right)

`<tr valign=?> or <td valign=?>`
Sets vertical alignment for cell(s) (top, middle, or bottom)

`<td colspan=#>`
Sets number of columns a cell should span

`<td rowspan=#>`
Sets number of rows a cell should span (default=1)

`<td nowrap>`
Prevents the lines within a cell from being broken to fit

Frames

`<frameset></frameset>`
Replaces the <body> tag in a frames document; can also be nested in other framesets

`<frameset rows="value,value">`
Defines the rows within a frameset, using number in pixels, or percentage of w idth

`<frameset cols="value,value">`
Defines the columns within a frameset, using number in pixels, or percentage of width

`<frame>`
Defines a single frame — or region — within a frameset

`<noframes></noframes>`
Defines what will appear on browsers that don't support frames

Frames Attributes

`<frame src="URL">`
Specifies which HTML document should be displayed

`<frame name="name">`
Names the frame, or region, so it may be targeted by other frames

`<frame marginwidth=#>`
Defines the left and right margins for the frame; must be equal to or greater than 1

`<frame marginheight=#>`
Defines the top and bottom margins for the frame; must be equal to or greater than 1

`<frame scrolling=VALUE>`
Sets whether the frame has a scrollbar; value may equal "yes," "no," or "auto." The default, as in ordinary documents, is auto.

`<frame noresize>`
Prevents the user from resizing a frame

Forms

For functional forms, you'll have to run a CGI script. The HTML just creates the appearance of a form.

`<form></form>`
Creates all forms

`<select multiple name="NAME" size=?></select>`
Creates a scrolling menu. Size sets the number of menu items visible before you need to scroll.

`<option>`
Sets off each menu item

`<select name="NAME"></select>`
Creates a pulldown menu

`<option>`
Sets off each menu item

`<textarea name="NAME" cols=40 rows=8></textarea>`
Creates a text box area. Columns set the width; rows set the height.

`<input type="checkbox" name="NAME">`
Creates a checkbox. Text follows tag.

`<input type="radio" name="NAME" value="x">`
Creates a radio button. Text follows tag

`<input type=text name="foo" size=20>`
Creates a one-line text area. Size sets length, in characters.

`<input type="submit" value="NAME">`
Creates a Submit button

`<input type="image" border=0 name="NAME" src="name.gif">`
Creates a Submit button using an image

`<input type="reset">`
Creates a Reset button

Appendix 2 - Color Reference

When you're adding a color to your Web page with HTML, sometimes you can just type in the name of the color. But more often than not, you'll need to use what's called the hex code, which is something that the browser will be able to understand. Choose a color from the list below and look to its left to get the hex code. If we wanted our background to be red, for example, we'd type **bgcolor="#FF0000".**

Hex Code	Color
#FFFFFF	
#FFFFCC	
#FFFF99	
#FFFF66	
#FFFF33	
#FFFF00	
#FFCCFF	
#FFCCCC	
#FFCC99	
#FFCC66	
#FFCC33	
#FFCC00	
#FF99FF	
#FF99CC	
#FF9999	
#FF9966	
#FF9933	
#FF9900	
#FF66FF	
#FF66CC	
#FF6699	
#FF6666	
#FF6633	
#FF6600	
#FF33FF	
#FF33CC	
#FF3399	
#FF3366	
#FF3333	
#FF3300	
#FF00FF	
#FF00CC	
#FF0099	
#FF0066	
#FF0033	
#FF0000	
#66FFFF	
#66FFCC	
#66FF99	
#66FF66	
#66FF33	
#66FF00	
#66CCFF	
#66CCCC	
#66CC99	
#66CC66	
#66CC33	
#66CC00	
#6699FF	
#6699CC	
#669999	
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#6666FF	
#6666CC	
#666699	
#666666	
#666633	
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#6633FF	
#6633CC	
#663399	
#663366	
#663333	
#663300	
#6600FF	
#6600CC	
#660099	
#660066	
#660033	
#660000	
#CCFFFF	
#CCFFCC	
#CCFF99	
#CCFF66	
#CCFF33	
#CCFF00	
#CCCCFF	
#CCCCCC	
#CCCC99	
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#CCCC33	
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#CC3333	
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#33FFFF	
#33FFCC	
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#339966	
#339933	
#339900	
#3366FF	
#3366CC	
#336699	
#336666	
#336633	
#336600	
#3333FF	
#3333CC	
#333399	
#333366	
#333333	
#333300	
#3300FF	
#3300CC	
#330099	
#330066	
#330033	
#330000	
#99FFFF	
#99FFCC	
#99FF99	
#99FF66	
#99FF33	
#99FF00	
#99CCFF	
#99CCCC	
#99CC99	
#99CC66	
#99CC33	
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#9999FF	
#9999CC	
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#9900FF	
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#00FFFF	
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#009933	
#009900	
#0066FF	
#0066CC	
#006699	
#006666	
#006633	
#006600	
#0033FF	
#0033CC	
#003399	
#003366	
#003333	
#003300	
#0000FF	
#0000CC	
#000099	
#000066	
#000033	
#000000	

Appendix 3 – Special Character Reference

Name Code	# Code	Glyph	Description
‘		‘	left single quote
’		’	right single quote
‚		‚	single low-9 quote
“		“	left double quote
”		”	right double quote
„		„	double low-9 quote
†		†	dagger
‡		‡	double dagger
‰		‰	per mill sign
‹		‹	single left-pointing angle quote
›		›	single right-pointing angle quote
♠		♠	black spade suit
♣		♣	black club suit
♥		♥	black heart suit
♦		♦	black diamond suit
‾		‾	overline, = spacing overscore
←		←	leftward arrow
↑		↑	upward arrow
→		→	rightward arrow
↓		↓	downward arrow
™		™	trademark sign
			horizontal tab
	line feed
	&#11;		unused
			space
	!	!	exclamation mark
"	"	"	double quotation mark
	#	#	number sign
	$	$	dollar sign
	%	%	percent sign
&	&	&	ampersand
	'	'	apostrophe
	(	(	left parenthesis
	)	)	right parenthesis
	*	*	asterisk
	+	+	plus sign
	,	,	comma
	-	-	hyphen
	.	.	period
⁄	/	/	slash
	0-9		digits 0-9
	:	:	colon
	;	;	semicolon
<	<	<	less-than sign
	=	=	equals sign
>	>	>	greater-than sign
	?	?	question mark
	@	@	at sign
	A-Z		uppercase letters A-Z
	[	[	left square bracket
	\	\	backslash
	]	]	right square bracket
	^	^	caret
	_	_	horizontal bar (underscore)
	`	`	grave accent
	a-z		lowercase letters a-z
	{	{	left curly brace
			|	vertical bar
	}	}	right curly brace
	~	~	tilde
–	–	–	en dash
—	—	—	em dash
			nonbreaking space
¡	¡	¡	inverted exclamation
¢	¢	¢	cent sign
£	£	£	pound sterling
¤	¤	¤	general currency sign
¥	¥	¥	yen sign
¦ or &brkbar;	¦	¦	broken vertical bar
§	§	§	section sign
¨ or ¨	¨	¨	umlaut
©	©	©	copyright
ª	ª	ª	feminine ordinal
«	«	«	left angle quote
¬	¬	¬	not sign
			soft hyphen
®	®	®	registered trademark
¯ or &hibar;	¯	¯	macron accent
°	°	°	degree sign
±	±	±	plus or minus
²	²	²	superscript two
³	³	³	superscript three
´	´	´	acute accent
µ	µ	µ	micro sign
¶	¶	¶	paragraph sign
·	·	·	middle dot
¸	¸	¸	cedilla
¹	¹	¹	superscript one
º	º	º	masculine ordinal
»	»	»	right angle quote
¼	¼	¼	one-fourth
½	½	½	one-half
¾	¾	¾	three-fourths
¿	¿	¿	inverted question mark
À	À	À	uppercase A, grave accent
Á	Á	Á	uppercase A, acute accent
Â	Â	Â	uppercase A, circumflex accent

Name Code	# Code	Glyph	Description
Ã	Ã	Ã	uppercase A, tilde
Ä	Ä	Ä	uppercase A, umlaut
Å	Å	Å	uppercase A, ring
Æ	Æ	Æ	uppercase AE
Ç	Ç	Ç	uppercase C, cedilla
È	È	È	uppercase E, grave accent
É	É	É	uppercase E, acute accent
Ê	Ê	Ê	uppercase E, circumflex accent
Ë	Ë	Ë	uppercase E, umlaut
Ì	Ì	Ì	uppercase I, grave accent
Í	Í	Í	uppercase I, acute accent
Î	Î	Î	uppercase I, circumflex accent
Ï	Ï	Ï	uppercase I, umlaut
Ð	Ð	Ð	uppercase Eth, Icelandic
Ñ	Ñ	Ñ	uppercase N, tilde
Ò	Ò	Ò	uppercase O, grave accent
Ó	Ó	Ó	uppercase O, acute accent
Ô	Ô	Ô	uppercase O, circumflex accent
Õ	Õ	Õ	uppercase O, tilde
Ö	Ö	Ö	uppercase O, umlaut
×	×	×	multiplication sign
Ø	Ø	Ø	uppercase O, slash
Ù	Ù	Ù	uppercase U, grave accent
Ú	Ú	Ú	uppercase U, acute accent
Û	Û	Û	uppercase U, circumflex accent
Ü	Ü	Ü	uppercase U, umlaut
Ý	Ý	Ý	uppercase Y, acute accent
Þ	Þ	Þ	uppercase THORN, Icelandic
ß	ß	ß	lowercase sharps, German
à	à	à	lowercase a, grave accent
á	á	á	lowercase a, acute accent
â	â	â	lowercase a, circumflex accent
ã	ã	ã	lowercase a, tilde
ä	ä	ä	lowercase a, umlaut
å	å	å	lowercase a, ring
æ	æ	æ	lowercase ae
ç	ç	ç	lowercase c, cedilla
è	è	è	lowercase e, grave accent
é	é	é	lowercase e, acute accent
ê	ê	ê	lowercase e, circumflex accent
ë	ë	ë	lowercase e, umlaut
ì	ì	ì	lowercase i, grave accent
í	í	í	lowercase i, acute accent
î	î	î	lowercase i, circumflex accent
ï	ï	ï	lowercase i, umlaut
ð	ð	ð	lowercase eth, Icelandic
ñ	ñ	ñ	lowercase n, tilde
ò	ò	ò	lowercase o, grave accent
ó	ó	ó	lowercase o, acute accent
ô	ô	ô	lowercase o, circumflex accent
õ	õ	õ	lowercase o, tilde
ö	ö	ö	lowercase o, umlaut
÷	÷	÷	division sign
ø	ø	ø	lowercase o, slash
ù	ù	ù	lowercase u, grave accent
ú	ú	ú	lowercase u, acute accent
û	û	û	lowercase u, circumflex accent
ü	ü	ü	lowercase u, umlaut
ý	ý	ý	lowercase y, acute accent
þ	þ	þ	lowercase thorn, Icelandic
ÿ	ÿ	ÿ	lowercase y, umlaut

Introduction to CSS

What You Should Already Know
Before you continue you should have some basic understanding of the following:

- WWW, HTML and the basics of building Web pages

If you want to study these subjects first, before you start reading about CSS, you can find the tutorials you need at W3Schools' Home Page.
http://www.w3schools.com/default.asp

What is CSS?

- **CSS** stands for **C**ascading **S**tyle **S**heets
- Styles define **how to display** HTML elements
- Styles are normally stored in **Style Sheets**
- Styles were added to HTML 4.0 **to solve a problem**
- **External Style Sheets** can save you a lot of work
- External Style Sheets are stored in **CSS files**
- Multiple style definitions will **cascade** into one

CSS Demo
With CSS, your HTML documents can be displayed using different output styles:
See how it works: http://www.w3schools.com/css/demo_default.htm

Styles Solve a Common Problem
HTML tags were originally designed to define the content of a document. They were supposed to say "This is a header", "This is a paragraph", "This is a table", by using tags like <h1>, <p>, <table>, and so on. The layout of the document was supposed to be taken care of by the browser, without using any formatting tags.
As the two major browsers - Netscape and Internet Explorer - continued to add new HTML tags and attributes (like the <font> tag and the color attribute) to the original HTML specification, it became more and more difficult to create Web sites where the content of HTML documents was clearly separated from the document's presentation layout.
To solve this problem, the World Wide Web Consortium (W3C) - the nonprofit, standard setting consortium responsible for standardizing HTML - created STYLES in addition to HTML 4.0.
Both Netscape 4.0 and Internet Explorer 4.0 support Cascading Style Sheets.

Style Sheets Can Save a Lot of Work
Styles in HTML 4.0 define how HTML elements are displayed, just like the font tag and the color attribute in HTML 3.2. Styles are normally saved in files external to your HTML documents. External style sheets enable you to change the appearance and layout of all the pages in your Web, just by editing a single CSS document. If you have ever tried to change the font or color of all the headings in all your Web pages, you will understand how CSS can save you a lot of work.
CSS is a breakthrough in Web design because it allows developers to control the style and layout of multiple Web pages all at once. As a Web developer you can define a style for each HTML element and apply it to as many Web pages as you want. To make a global change, simply change the style, and all elements in the Web are updated automatically.

Multiple Styles Will Cascade into One
Style Sheets allow style information to be specified in many ways. Styles can be specified inside a single HTML element, inside the <head> element of an HTML page, or in an external CSS file. Even multiple external Style Sheets can be referenced inside a single HTML document.

Cascading Order

What style will be used when there is more than one style specified for an HTML element?

Generally speaking we can say that all the styles will "cascade" into a new "virtual" Style Sheet by the following rules, where number four has the highest priority:

1. Browser default
2. External Style Sheet
3. Internal Style Sheet (inside the <head> tag)
4. Inline Style (inside HTML element)

So, an inline style (inside an HTML element) has the highest priority, which means that it will override every style declared inside the <head> tag, in an external style sheet, and in a browser (a default value).

Syntax

The CSS syntax is made up of three parts: a selector, a property and a value:

```
selector {property: value}
```

The selector is normally the HTML element/tag you wish to define, the property is the attribute you wish to change, and each property can take a value. The property and value are separated by a colon and surrounded by curly braces:

```
body {color: black}
```

If the value is multiple words, put quotes around the value:

```
p {font-family: "sans serif"}
```

Note: If you wish to specify more than one property, you must separate each property with a semi-colon. The example below shows how to define a center aligned paragraph, with a red text color:

```
p {text-align:center;color:red}
```

To make the style definitions more readable, you can describe one property on each line, like this:

```
p
{
text-align: center;
color: black;
font-family: arial
}
```

Grouping

You can group selectors. Separate each selector with a comma. In the example below we have grouped all the header elements. All header elements will be green:

```
h1,h2,h3,h4,h5,h6
{
color: green
}
```

The class Selector

With the class selector you can define different styles for the same type of HTML element. Say that you would like to have two types of paragraphs in your document: one right-aligned paragraph, and one center-aligned paragraph. Here is how you can do it with styles:

```
p.right {text-align: right}
p.center {text-align: center}
```

You have to use the class attribute in your HTML document:

```
<p class="right">
```

```
This paragraph will be right-aligned.
</p>
<p class="center">
This paragraph will be center-aligned.
</p>
```

Note: Only one class attribute can be specified per HTML element! The example below is wrong:

```
<p class="right" class="center">
This is a paragraph.
</p>
```

You can also omit the tag name in the selector to define a style that will be used by all HTML elements that have a certain class. In the example below, all HTML elements with class="center" will be center-aligned:

```
.center {text-align: center}
```

In the code below both the h1 element and the p element have class="center". This means that both elements will follow the rules in the ".center" selector:

```
<h1 class="center">
This heading will be center-aligned
</h1>
<p class="center">
This paragraph will also be center-aligned.
</p>
```

The id Selector

With the id selector you can define the same style for different HTML elements.
The style rule below will match any element that has an id attribute with a value of "green":

```
#green {color: green}
```

The rule above will match both the h1 and the p element:

```
<h1 id="green">Some text</h1>
<p id="green">Some text</p>
```

The style rule below will match a p element that has an id with a value of "para1":

```
p#para1
{
text-align: center;
color: red
}
```

The style rule below will match any p element that has an id attribute with a value of "green":

```
p#green {color: green}
```

The rule above will not match an h1 element:

```
<h1 id="green">Some text</h1>
```

CSS Comments

You can insert comments into CSS to explain your code, which can help you when you edit the source code at a later date. A comment will be ignored by the browser. A CSS comment begins with "/*", and ends with "*/", like this:

```
/* This is a comment */
p
{
text-align: center;
/* This is another comment */
color: black;
```

```
font-family: arial
}
```

CSS How To...

Examples

- Look at Example 1: http://www.w3schools.com/css/showit.asp?filename=ex1
- Look at Example 2: http://www.w3schools.com/css/showit.asp?filename=ex2

How to Insert a Style Sheet

When a browser reads a style sheet, it will format the document according to it. There are three ways of inserting a style sheet:

External Style Sheet

An external style sheet is ideal when the style is applied to many pages. With an external style sheet, you can change the look of an entire Web site by changing one file. Each page must link to the style sheet using the <link> tag. The <link> tag goes inside the head section:

```
<head>
<link rel="stylesheet" type="text/css"
href="mystyle.css" />
</head>
```

The browser will read the style definitions from the file mystyle.css, and format the document according to it.

An external style sheet can be written in any text editor. The file should not contain any html tags. Your style sheet should be saved with a .css extension. An example of a style sheet file is shown below:

```
hr {color: sienna}
p {margin-left: 20px}
body {background-image: url("images/back40.gif")}
```

Do **NOT** leave spaces between the property value and the units! If you use "margin-left: 20 px" instead of "margin-left: 20px" it will only work properly in IE6 but it will not work in Mozilla or Netscape.

Internal Style Sheet

An internal style sheet should be used when a single document has a unique style. You define internal styles in the head section by using the <style> tag, like this:

```
<head>
<style type="text/css">
hr {color: sienna}
p {margin-left: 20px}
body {background-image: url("images/back40.gif")}
</style>
</head>
```

The browser will now read the style definitions, and format the document according to it.

Note: A browser normally ignores unknown tags. This means that an old browser that does not support styles, will ignore the <style> tag, but the content of the <style> tag will be displayed on the page. It is possible to prevent an old browser from displaying the content by hiding it in the HTML comment element:

```
<head>
<style type="text/css">
```

```
<!--
hr {color: sienna}
p {margin-left: 20px}
body {background-image: url("images/back40.gif")}
-->
</style>
</head>
```

Inline Styles

An inline style loses many of the advantages of style sheets by mixing content with presentation. Use this method sparingly, such as when a style is to be applied to a single occurrence of an element.
To use inline styles you use the style attribute in the relevant tag. The style attribute can contain any CSS property. The example shows how to change the color and the left margin of a paragraph:

```
<p style="color: sienna; margin-left: 20px">
This is a paragraph
</p>
```

Multiple Style Sheets

If some properties have been set for the same selector in different style sheets, the values will be inherited from the more specific style sheet.
For example, an external style sheet has these properties for the h3 selector:

```
h3
{
color: red;
text-align: left;
font-size: 8pt
}
```

And an internal style sheet has these properties for the h3 selector:

```
h3
{
text-align: right;
font-size: 20pt
}
```

If the page with the internal style sheet also links to the external style sheet the properties for h3 will be:

```
color: red;
text-align: right;
font-size: 20pt
```

The color is inherited from the external style sheet and the text-alignment and the font-size is replaced by the internal style sheet.

CSS Background Properties

Previous Next

CSS Background properties define the background effects of an element.

Examples

Set the background color

http://www.w3schools.com/css/tryit.asp?filename=trycss_background-color
This example demonstrates how to set the background color for an element.

Set an image as the background
http://www.w3schools.com/css/tryit.asp?filename=trycss_background-image
This example demonstrates how to set an image as the background.
How to repeat a background image
This example demonstrates how to repeat a background image only vertically.
How to place the background image
This example demonstrates how to place the image on the page.
How to set a fixed background image
This example demonstrates how to set a fixed background image. The image will not scroll with the rest of the page.
All the background properties in one declaration
This example demonstrates how to use the shorthand property for setting all of the background properties in one declaration.

CSS Background
The Background properties allow you to control the background color of an element, set an image as the background, repeat a background image vertically or horizontally, and position an image on a page.

Background Properties:
NN: Netscape, **IE**: Internet Explorer, **W3C**: Web Standard

Property	Description	Values	NN	IE	W3C
background	A shorthand property for setting all background properties in one declaration	*background-color* *background-image* *background-repeat* *background-attachment* *background-position*	6.0	4.0	CSS1
background-attachment	Sets whether a background image is fixed or scrolls with the rest of the page	scroll fixed	6.0	4.0	CSS1
background-color	Sets the background color of an element	*color-rgb* *color-hex* *color-name* transparent	4.0	4.0	CSS1
background-image	Sets an image as the background	*url* none	4.0	4.0	CSS1
background-position	Sets the starting position of a background image	top left top center top right center left center center center right bottom left bottom center bottom right *x-% y-%* *x-pos y-pos*	6.0	4.0	CSS1
background-repeat	Sets if/how a background image will be repeated	repeat repeat-x repeat-y no-repeat	4.0	4.0	CSS1

CSS Text Properties

CSS Text properties define the appearance of text.

Examples

Set the color of the text
This example demonstrates how to set the color of the text.
Set the background-color of the text
This example demonstrates how to set the background-color of a part of the text.
Specify the space between characters
This example demonstrates how to increase or decrease the space between characters.
Align the text
This example demonstrates how to align the text.
Decorate the text
This example demonstrates how to add decoration to text.
Indent text
This example demonstrates how to indent the first line of a paragraph.
Control the letters in a text
This example demonstrates how to control the letters in a text.

CSS Text

Text properties allow you to control the appearance of text. It is possible to change the color of a text, increase or decrease the space between characters in a text, align a text, decorate a text, indent the first line in a text, and more.

Text Properties:

NN: Netscape, **IE**: Internet Explorer, **W3C**: Web Standard

Property	Description	Possible Values	NN	IE	W3C
color	Sets the color of a text	*color*	4.0	3.0	CSS1
direction	Sets the text direction	ltr rtl			CSS2
letter-spacing	Increase or decrease the space between characters	normal *length*	6.0	4.0	CSS1
text-align	Aligns the text in an element	left right center justify	4.0	4.0	CSS1
text-decoration	Adds decoration to text	none underline overline line-through blink	4.0	4.0	CSS1
text-indent	Indents the first line of text in an element	*length* *%*	4.0	4.0	CSS1
text-shadow		none *color* *length*			

text-transform	Controls the letters in an element	none capitalize uppercase lowercase	4.0	4.0	CSS1
unicode-bidi		normal embed bidi-override		5.0	CSS2
white-space	Sets how white space inside an element is handled	normal pre nowrap	4.0	5.5	CSS1
word-spacing	Increase or decrease the space between words	normal *length*	6.0	6.0	CSS1

CSS Font Properties

CSS Font properties define the font in text.

Examples
Set the font of a text
This example demonstrates how to set a font of a text.
Set the size of the font
This example demonstrates how to set the size of a font.
Set the style of the font
This example demonstrates how to set the style of a font.
Set the variant of the font
This example demonstrates how to set the variant of a font.
Set the boldness of the font
This example demonstrates how to set the boldness of a font.
All the font properties in one declaration
This example demonstrates how to use the shorthand property for setting all of the font properties in one declaration.

CSS Fonts
The Font properties allow you to change the font family, boldness, size, and the style of a text.

Notes - Useful Tips
Fonts are identified by their name in CSS1. Note that if a browser does not support the font that is specified, it will use a default font.

Font Properties:
NN: Netscape, **IE**: Internet Explorer, **W3C**: Web Standard

Property	Description	Values	NN	IE	W3C
font	A shorthand property for setting all of the properties for a font in one declaration	*font-style* *font-variant* *font-weight* *font-size/line-height* *font-family*	4.0	4.0	CSS1

		caption icon menu message-box small-caption status-bar			
font-family	A prioritized list of font family names and/or generic family names for an element	*family-name* *generic-family*	4.0	3.0	CSS1
font-size	Sets the size of a font	xx-small x-small small medium large x-large xx-large smaller larger *length* *%*	4.0	3.0	CSS1
font-size-adjust	Specifies an aspect value for an element that will preserve the x-height of the first-choice font	none *number*			CSS2
font-stretch	Condenses or expands the current font-family	normal wider narrower ultra-condensed extra-condensed condensed semi-condensed semi-expanded expanded extra-expanded ultra-expanded			CSS2
font-style	Sets the style of the font	normal italic oblique	4.0	4.0	CSS1
font-variant	Displays text in a small-caps font or a normal font	normal small-caps	6.0	4.0	CSS1
font-weight	Sets the weight of a font	normal bold bolder lighter 100 200 300 400 500 600 700 800	4.0	4.0	CSS1

		900			

CSS Border Properties

CSS Border properties define the borders around an element.

Examples

Set the style of the four borders
This example demonstrates how to set the style of the four borders.
Set different borders on each side
This example demonstrates how to set different borders on each side of the element.
Set the color of the four borders
This example demonstrates how to set the color of the four borders. It can have from one to four colors.
Set the width of the bottom border
This example demonstrates how to set the width of the bottom border.
Set the width of the left border
This example demonstrates how to set the width of the left border.
Set the width of the right border
This example demonstrates how to set the width of the right border.
Set the width of the top border
This example demonstrates how to set the width of the top border.
All the bottom border properties in one declaration
This example demonstrates a shorthand property for setting all of the properties for the bottom border in one declaration.
All the left border properties in one declaration
This example demonstrates a shorthand property for setting all of the properties for the left border in one declaration.
All the right border properties in one declaration
This example demonstrates a shorthand property for setting all of the properties for the right border in one declaration.
All the top border properties in one declaration
This example demonstrates a shorthand property for setting all of the properties for the top border in one declaration.
All the width of the border properties in one declaration
This example demonstrates a shorthand property for setting the width of the four borders in one declaration, can have from one to four values.
All the border properties in one declaration
This example demonstrates a shorthand property for setting all of the properties for the four borders in one declaration, can have from one to three values.

CSS Borders

The Border properties allow you to specify the style, color, and width of an element's border. In HTML we use tables to create borders around a text, but with the CSS Border properties we can create borders with nice effects, and it can be applied to any element.

Border Properties:

NN: Netscape, **IE**: Internet Explorer, **W3C**: Web Standard

Property	Description	Values	NN	IE	W3C
border	A shorthand property for setting all of the properties for the four borders in one	*border-width* *border-style* *border-color*	4.0	4.0	CSS1

	declaration				
border-bottom	A shorthand property for setting all of the properties for the bottom border in one declaration	*border-bottom-width* *border-style* *border-color*	6.0	4.0	CSS1
border-bottom-color	Sets the color of the bottom border	*border-color*	6.0	4.0	CSS2
border-bottom-style	Sets the style of the bottom border	*border-style*	6.0	4.0	CSS2
border-bottom-width	Sets the width of the bottom border	thin medium thick *length*	4.0	4.0	CSS1
border-color	Sets the color of the four borders, can have from one to four colors	*color*	6.0	4.0	CSS1
border-left	A shorthand property for setting all of the properties for the left border in one declaration	*border-left-width* *border-style* *border-color*	6.0	4.0	CSS1
border-left-color	Sets the color of the left border	*border-color*	6.0	4.0	CSS2
border-left-style	Sets the style of the left border	*border-style*	6.0	4.0	CSS2
border-left-width	Sets the width of the left border	thin medium thick *length*	4.0	4.0	CSS1
border-right	A shorthand property for setting all of the properties for the right border in one declaration	*border-right-width* *border-style* *border-color*	6.0	4.0	CSS1
border-right-color	Sets the color of the right border	*border-color*	6.0	4.0	CSS2
border-right-style	Sets the style of the right border	*border-style*	6.0	4.0	CSS2
border-right-width	Sets the width of the right border	thin medium thick *length*	4.0	4.0	CSS1
border-style	Sets the style of the four borders, can have from one to four styles	none hidden dotted dashed solid double groove ridge inset	6.0	4.0	CSS1

		outset			
border-top	A shorthand property for setting all of the properties for the top border in one declaration	*border-top-width* *border-style* *border-color*	6.0	4.0	CSS1
border-top-color	Sets the color of the top border	*border-color*	6.0	4.0	CSS2
border-top-style	Sets the style of the top border	*border-style*	6.0	4.0	CSS2
border-top-width	Sets the width of the top border	thin medium thick *length*	4.0	4.0	CSS1
border-width	A shorthand property for setting the width of the four borders in one declaration, can have from one to four values	thin medium thick *length*	4.0	4.0	CSS1

CSS Margin Properties

CSS Margin properties define the space around elements.

Examples
Set the left margin of a text
This example demonstrates how to set the left margin of a text.
Set the right margin of a text
This example demonstrates how to set the right margin of a text.
Set the top margin of a text
This example demonstrates how to set the top margin of a text.
Set the bottom margin of a text
This example demonstrates how to set the bottom margin of a text.
All the margin properties in one declaration
This example demonstrates how to set a shorthand property for setting all of the margin properties in one declaration.

CSS Margins
The Margin properties define the space around elements. It is possible to use negative values to overlap content. The top, right, bottom, and left margin can be changed independently using separate properties. A shorthand margin property can also be used to change all of the margins at once.
Browser Note: Netscape and IE give the body tag a default margin of 8px. Opera does not! Instead, Opera applies a default padding of 8px, so if one wants to adjust the margin for an entire page and have it display correctly in Opera, the body padding must be set as well!

Margin Properties:
NN: Netscape, **IE**: Internet Explorer, **W3C**: Web Standard

Property	Description	Values	NN	IE	W3C
margin	A shorthand property for	*margin-top*	4.0	4.0	CSS1

	setting the margin properties in one declaration	*margin-right* *margin-bottom* *margin-left*			
margin-bottom	Sets the bottom margin of an element	auto *length* *%*	4.0	4.0	CSS1
margin-left	Sets the left margin of an element	auto *length* *%*	4.0	3.0	CSS1
margin-right	Sets the right margin of an element	auto *length* *%*	4.0	3.0	CSS1
margin-top	Sets the top margin of an element	auto *length* *%*	4.0	3.0	CSS1

CSS Padding Properties

CSS Padding properties define the space between the element border and the element content.

Examples
Set the left padding
This example demonstrates how to set the left padding of a tablecell.
Set the right padding
This example demonstrates how to set the right padding of a tablecell.
Set the top padding
This example demonstrates how to set the top padding of a tablecell.
Set the bottom padding
This example demonstrates how to set the bottom padding of a tablecell.
All the padding properties in one declaration
This example demonstrates a shorthand property for setting all of the padding properties in one declaration, can have from one to four values.

CSS Padding
The Padding properties define the space between the element border and the element content. Negative values are not allowed. The top, right, bottom, and left padding can be changed independently using separate properties. A shorthand padding property is also created to control multiple sides at once.

Padding Properties:
NN: Netscape, **IE**: Internet Explorer, **W3C**: Web Standard

Property	Description	Values	NN	IE	W3C
padding	A shorthand property for setting all of the padding properties in one declaration	*padding-top* *padding-right* *padding-bottom* *padding-left*	4.0	4.0	CSS1
padding-bottom	Sets the bottom padding of an	*length*	4.0	4.0	CSS1

	element	*%*			
padding-left	Sets the left padding of an element	*length* *%*	4.0	4.0	CSS1
padding-right	Sets the right padding of an element	*length* *%*	4.0	4.0	CSS1
padding-top	Sets the top padding of an element	*length* *%*	4.0	4.0	CSS1

CSS List Properties

The List properties allow you to change between different list-item markers, set an image as a list-item marker, and set where to place a list-item marker.

Examples
The different list-item markers in unordered lists
This example demonstrates the different list-item markers in CSS.
The different list-item markers in ordered lists
This example demonstrates the different list-item markers in CSS.
Set an image as the list-item marker
This example demonstrates how to set an image as the list-item marker.
Place the list-item marker
This example demonstrates where to place the list-item marker.
All list properties in one declaration
This example demonstrates a shorthand property for setting all of the properties for a list in one declaration.

List Properties:
NN: Netscape, **IE**: Internet Explorer, **W3C**: Web Standard

Property	Description	Values	NN	IE	W3C
list-style	A shorthand property for setting all of the properties for a list in one declaration	*list-style-type* *list-style-position* *list-style-image*	6.0	4.0	CSS1
list-style-image	Sets an image as the list-item marker	none *url*	6.0	4.0	CSS1
list-style-position	Places the list-item marker in the list	inside outside	6.0	4.0	CSS1
list-style-type	Sets the type of the list-item marker	none disc circle square decimal decimal-leading-zero lower-roman upper-roman lower-alpha upper-alpha lower-greek	4.0	4.0	CSS1

		lower-latin upper-latin hebrew armenian georgian cjk-ideographic hiragana katakana hiragana-iroha katakana-iroha			
marker-offset		auto *length*			CSS2