

WEB PAGE DESIGN USING HTML

THE BASICS

HTML stands for HyperText Markup Language. HTML is a basic language for creating web pages. HyperText refers to words that can take you to other places via links. Markup refers to the fact that the document in which you create your web page with HTML is "marked up" with tags enclosed in angle brackets.

There are two kinds of tags used in HTML, open and close. Both open and close tags use a pair of angle brackets, but close tags have a forward slash after the first bracket. Tags most often appear in pairs, with the information between the tags being effected by them.

Web pages can be created using HTML in a simple text editor, like NotePad. After entering the information that will make up your web page, save the document with a .html extension. After entering Internet Explorer, choose to open your document and the web page will be displayed. As you make additions or changes to your document in NotePad, simply save it and then click the refresh button on the Internet Explorer toolbar to see the changes take effect.

Following is a sample of an HTML document showing a basic set of starting tags:

```
<html>
<head>
<title>This text appears on the title bar.</title>
</head>
<body>
This text appears on the web page.
</body>
</html>
```

The open and close HTML tags tell the web browser when to start and stop processing your web page.

The open and close HEAD tags offer a place to put notes and information about your web page. Information located here is typically not displayed on your web page.

The pair of TITLE tags allow you to place a title in the title bar at the top of the web page. Title tags are located between the head tags.

The BODY tags enclose all information that will be seen on your web page. The open body tag can include attributes for the entire page such as the background and the color of links.

It is important to note that when entering information in NotePad, pressing the enter key has no effect on the appearance of the page in the web browser, so the tags can be arranged in a way that will best help you keep track of what you are working on. Special tags are needed to start new lines on the web page.

Many tags have attributes, additional formatting information placed within the open tag, that will enhance the appearance of the web page. Most attributes are completely optional; the tag will function with or without them.

CENTERING TEXT

Text in HTML is automatically left justified unless you provide other instructions.

```
<center>Text written here will be centered on the screen.</center>
```

BREAKS

The web browser typically ignores any hard returns in your document. In order to start a new line on your web page, you must use a break tag. The break tag does not have a matching close tag.

```
This text appears on one line.  
<br>  
Text written here appears on the next line.
```

PARAGRAPHS

The paragraph tag is a break tag. It tells the web browser to start a new line after leaving a blank line. It does not have a matching close tag. (Note: Two br tags in a row will have the same effect.)

```
This text appears on one line.  
<p>  
Text written here appears after a blank line.
```

UNORDERED LISTS

Unordered lists are marked by bullets. The unordered list tag has a close tag, with each item in the list set off by a list tag. Lists can contain as many items as you wish. (Note: If the li tags are left out, items on this list will simply be indented without the bullets.)

```
<ul>  
<li>Apples  
<li>Oranges  
<li>Bananas  
</ul>
```

Following is the output from the previous example.

- Apples
- Oranges
- Bananas

MULTILEVEL LISTS

Unordered lists may be nested inside one another in order to create the appearance of an outline. Each "level" will be marked by a different type of bullet.

```
<ul>
<li>Printers
  <ul>
    <li> Impact
      <ul>
        <li> Benefits
        <li> Drawbacks
      </ul>
    <li> InkJet
    <li> Laser
  </ul>
<li> Monitors
  <ul>
    <li> TouchScreen
    <li> Standard
  </ul>
</ul>
```

Following is the output from the previous example.

- Printers
 - Impact
 - Benefits
 - Drawbacks
 - InkJet
 - Laser
- Monitors
 - TouchScreen
 - Standard

ORDERED LISTS

Ordered lists are numbered lists. The same rules apply as for unordered lists.

```
<ol>
<li> Wash Dishes
<li> Do Laundry
<li> Take Out Garbage
<li> Clean Bathroom
</ol>
```

Following is the output from the previous example.

1. Wash Dishes
2. Do Laundry
3. Take Out Garbage
4. Clean Bathroom

ANCHORS

HyperText links are words (or graphics) that you can click that will take you to another page of your own, somewhere within the same page, or to an entirely different web site. Text between the tags will appear underlined and in a different color. HREF stands for HyperText Reference. The attribute `target="_top"` is optional and will allow you to jump out of the frames and view the new page using the full screen. (Note: Creating a link to a place within the same document requires another anchor tag at the destination point with a matching name.)

```
<a href="http://www.disney.com" target="_top">Visit Mickey</a>
<br>
<a href="#beginning">Go To the Top of This Page</a>
<br>
<a href="pagetwo.html">Visit Another Page on This Same Site</a>
```

Following is the output from the previous example.

[Visit Mickey](#)

[Go To The Top of This Page](#)
[Visit Another Page on This Same Site](#)

SENDING EMAIL

A HyperText reference can include an e-mail address so that when the link is activated, an e-mail message can be created and sent.

```
<a href="mailto:swills@randomlake.k12.wi.us"> E-Mail Me</a>
```

Following is the output from the previous example.

[E-Mail Me](#)

ADDING COLOR

Attributes for color can be added to tags such as body. Colors can be referred to by name or by six digit hexadecimal number. In the following example, only the opening body tag is shown. The bgcolor attribute controls the background color of the entire page. The text attribute controls the color of text not already specified through other tags. The link attribute will affect the initial color of the anchor tags, the alink attribute will affect the anchor tags when the mouse pointer is on top of them, and the vlink attribute will affect the color of visited links. The three link attributes do not work with all web browsers.

```
<body bgcolor=blue text=white link=green alink="0000FF" vlink=pink>
```

[Click Here to See Hexadecimal Values for Selected Colors](#)

HORIZONTAL LINES

The horizontal rule tag, which does not have a close tag, displays a horizontal line on your web page. The hr tag has several attributes including width (number of pixels long or percent of the screen width), size (thickness in pixels), align (left, right, center), and color.

```
<hr width=400 align=left>  
<hr width=50% size=8 align=center color=red>
```

Following is the output from the previous example.

CHANGING FONTS

The font size, face, and color can be changed throughout a web page using the font tags. The face selected should be something typically available on most computers, although a list of fonts can be specified as back-up choices. The size can range from one through seven, where seven is the largest. Pairs of open and close tags should be used.

```
<font face=arial,times color=red size=7>Red Arial Text Size 7</font>
```

Following is the output from the previous example.

Red Arial Text Size 7

CREATING HEADINGS

HTML uses six basic heading tags. Each uses the letter H followed by a number one through six. The larger the number, the smaller the text.

```
<h1>Text written here will be in the largest heading size.</h1>
```

This heading is written using size one.

This heading is written using size two.

This heading is written using size three.

This heading is written using size four.

This heading is written using size five.

This heading is written using size six.

PROVIDING EMPHASIS

Text in HTML can be italicized, bolded, or underlined.

```
<u>Text Written Here Will Be Underlined</u>  
<b>Text Written Here Will Be Bolded</b>  
<i>Text Written Here Will Be Italicized</i>
```

Following is the output from the previous example.

Text Written Here Will Be Underlined

Text Written Here Will Be Bolded

Text Written Here Will Be Italicized

SPECIAL CHARACTERS

Certain characters that are not available on the standard keyboard or are a part of HTML tags may require special codes in order to display them on a web page. These codes begin with an & and have a ; at the end. For example in order to print a less than sign, you must type an &, then the letters lt, and then put a ; at the end.

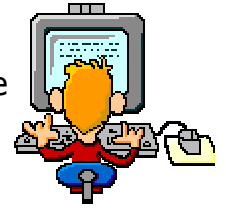
CODE (remove spaces)	CHARACTER DISPLAYED
& lt ;	<
& gt ;	>
& nbsp ;	(blank space)
& cent ;	¢
& copy ;	©
& deg ;	°
& frac14 ;	¼

Consult an HTML reference book for a full list of codes including codes used for foreign languages.

ADDING GRAPHICS

Graphics or images with a .jpg or .gif extension can easily be included in your web page using the image source tag. There is no close tag associated with the image source tag. Height, width, alignment, and border for the image can be set within the tag. Only

include the path for the location of the graphic if it is in a different folder than the html code. The hspace attribute (not shown in the example) allows you to specify the number of pixels of space that should be left on either side of the graphic. A graphic can be used as a link to another location by placing the image source tag where the text would normally go between the anchor tags.



```

```

Following is the output from the previous example.

CREATING A BACKGROUND

A graphic image can be used as the background for your web page by including the background attribute in the body tag. Only the opening body tag is shown in this example.

```
<body background="bluecrumpledpaper.jpg">
```

SCROLLING MARQUEES

Text (or graphics) can be forced to move across the screen in one of three ways: slide, scroll, or alternate. Slide forces the text to stop when it hits the edge of the marquee. Scroll forces the text to continually move in a "circle." Alternate forces the text to bounce from side to side within the marquee. The height, width, and background color of the area in which the text is moving can be controlled. The length of the time for which the text moves can be controlled (seconds), as can the speed at which it moves (milliseconds). Font tags will have an effect on the text in the marquee. Center tags will have an effect on the placement of the marquee.

```
<center>  
<font face=arial size=7 color=white>  
<marquee behavior=scroll height=50 width=70%  
bgcolor=purple loop=infinite scrolldelay=50>  
Text written here will be in the marquee.  
</marquee>  
</font>  
</center>
```

Following is the output from the previous example.

TABLES

A table can be used to arrange text and graphics in rows and columns. A table can be created with or without borders around the cells and with or without a separate background from the rest of the page. Tables are made up of pairs of table row tags. Each table row is made up of pairs of table data tags. Attributes used in the table data tags can include align (left, center, right), valign (top, middle, bottom), colspan, rowspan, width, bgcolor, and background. Center tags around the table can have an effect on the position of the table. Font tags inside the table data tags can have an effect on the font for the text in each cell.

```
<table border=1 bgcolor=white bordercolor=red width=90%>
<tr>
<td width=30%>Row 1, Column 1</td>
<td width=30%>Row 1, Column 2</td>
<td width=30% bgcolor=blue>Row 1, Column 3</td>
</tr>
<tr>
<td colspan=2 align=center>Centered Across Columns</td>
<td><font size=1>Font Change</td>
</tr>
</table>
```

Following is the output from the previous example.

Row 1, Column 1	Row 1, Column 2	Row 1, Column 3
Centered Across Columns		Font Change