

HTML (Hypertext Markup Language)

History

- 1980 – Tim Berners-Lee
 - _____ for CERN
 - Created a prototype so researchers could _____ documents
- 1989 – Proposed an _____-based hypertext system
- Late 1990 – specified HTML and wrote the _____ and server software

HTML

- _____ Language used to create Web pages
- Written using tags enclosed in _____ brackets (like <html>)
- Used in pairs like <h1> to _____ and </h1> to end
- Web browsers purpose is to _____ HTML documents and output them in a _____ you recognize
- _____ are used to interpret the content
- It is a markup language _____ a programming language

HTML form building block of all websites

- Allows _____ and objects to be embedded
- Can be used to _____ interactive forms
- _____ structure to forms
 - Headings
 - Paragraphs
 - List
 - Links
 - Quote
 - Can embed scripts written in programming languages

Creating and Understanding HTML code

- Create in text-editor _____ such as Notepad
- Document must be _____ with .htm or html file extension.
Preference .htm
- Example:
 - Save file as intro.htm

**In _____, before you save the HTML document, you must _____

the **Save as type:** drop-down list box from **Text documents (*.txt)** to **All Files**.

- HTML tags are **NOT** _____-sensitive, meaning that you do not have to type all HTML tags in one specific case, such as _____ or lowercase.
- It is recommended that you type all HTML tags in _____ letters to differentiate information in code development.

Elements

- HTML tags are made up of _____ and closing angle brackets (<>) with text that represents an element of HTML _____ them.
- In order for the Internet to _____ a document as an HTML document, the Web designer **MUST** type the following tag first at the _____ of the document screen: **<HTML>**

Opening and Closing

- Tags are characterized as opening and closing. The symbol used to differentiate a closing tag from an opening tag is the _____ slash (/).
- The forward slash goes in front of the text within the _____ brackets. The closing tag for the <HTML> tag is **</HTML>**.

Examples of HTML Tags

- As previously stated, the <HTML> tag should be typed _____ in creating a Web document.
- Here is a list of commonly-used HTML tags.
- Their purpose in _____ HTML code will be explained on the next **2** slides.

<HEAD>		<H1>
<TITLE>		<H2>
<BODY>		<H3>
<P>		<H4>

 		<H5>
<CENTER>		<H6>
<MARQUEE>	<A>	

Description of HTML Tags

- The **<HEAD>** tag refers to the section that provides _____ information, such as the title.

- The **<TITLE>** tag refers to the section where the _____ of the HTML document is entered. After the title of the HTML document is typed, the title section must be _____ with the **</TITLE>** tag. After the title section is closed, the _____ section must be closed with the **</HEAD>** tag
- The **<BODY>** tag refers to the _____ of the page, where the _____ of the document is noted. The tags that will be explained next are usually located within the BODY section of the HTML document.

Tag	Description	Tag	Description
<P>	Paragraph (put a double space between text on page)	...	Emphasis (emphasized text, usually displayed as <i>italic</i>)

	Line break (provides a single carriage return)	...	Strongly emphasized text (usually displayed as bold)
<CENTER>...</CENTER>	Centers text and images	<A>...	Anchor tag (used to link text and graphics)
...	Ordered list (list with numbered items)	<HR>	Horizontal Rule (provides a horizontal line)
...	Unordered list (list with bulleted items)	...	Font tag (allows you to change the size, color, or style of text)
	List item (indicates an item on the list)	<MARQUEE>...</MARQUEE>	scrolling text (IE only)

Assignment: HTML Activity #1 Hello World

Work together as a class

HTML Heading Tags

- Headings are displayed using a _____ size of the default font. There are _____ levels of heading, each using a slightly smaller font size.
- Heading 1, or **<H1>**, is the _____ heading tag, while Heading 6, or **<H6>**, is

the _____ heading tag. As the heading number increases by 1, such as <H1> to <H2>, the font size of text becomes _____.

Tag	Description
<H1>...</H1>	Largest heading tag.
<H2>...</H2>	Smaller than Heading 1, but larger than Headings 3, 4, 5, and 6.
<H3>...</H3>	Smaller than Headings 1 and 2, but larger than Headings 4, 5, and 6.
<H4>...</H4>	Smaller than Headings 1, 2, and 3, but larger than Headings 5 and 6.
<H5>...</H5>	Smaller than Headings 1, 2, 3, and 4, but larger than Heading 6
<H6>...</H6>	Smallest heading tag.

Common HTML Mistakes/Errors

- As a beginner Web designer, _____ and errors will occur. Such errors include:
 - Typing the _____ tag incorrectly. For example, you typed <HMTL> instead of <HTML>.
 - Accidentally _____ a bracket (<) or a (>).
 - Saving your HTML document file as a _____ document instead of following the steps on how to save an HTML document in Notepad or Textpad.
 - Forgetting to apply the forward _____ (/) in an HTML tag to close a specific section of code.

Important Web Terms

- **Web page** – also called a Web document, is _____ page created in HTML that can be _____ on the World Wide Web.
- **Home page** – the main of _____ Web page for a corporation, organization, or for an individual. The home page is the _____ page you see as you start up your Web browser.
- **Welcome page** – a page _____ especially for new visitors to a Web site.

- **HTML page** – also called an HTML document, is any document created in HTML that can be _____ on the World Wide Web.
- **Web site** – a collection of many _____ Web pages organized by a specific company, organization, college, or university, government agency, or by an individual. Web sites are stored on Web _____. There may be many Web sites and thousands of HTML pages on each Web site.

Assignment: HTML Activity #2 Using Headings

Try on your own

List

- _____ List – random list
- _____ List – Numbered
- Bulleted

Tag	Description
	Defines an ordered list
	Defines an unordered list
	Defines a list item
<dl>	Defines a description list
<dt>	Defines a term/name in a description list
<dd>	Defines a description of a term/name in a description list

HTML Unordered List

- An unordered _____ starts with the tag. Each list item starts with the tag.
- The list items are marked with _____ (typically small black circles).


```

      <ul>
      <li>Coffee</li>
      <li>Milk</li>
      </ul>
      
```

How the HTML code above looks in a browser:

- Coffee

- Milk

HTML Ordered List

- An _____ list starts with the tag. Each list item starts with the tag.
- The list items are _____ with numbers.

```
<ol>
<li>Coffee</li>
<li>Milk</li>
</ol>
```

How the HTML code above looks in a browser:

1. Coffee
2. Milk

HTML Description Lists

- A _____ list is a list of terms/names, with a description of each term/name.
- The <dl> tag _____ a description list.
- The <dl> tag is used in conjunction with <dt> (defines terms/names) and <dd> (describes each term/name):

```
<dl>
<dt>Coffee</dt>
<dd>- black hot drink</dd>
<dt>Milk</dt>
<dd>- white cold drink</dd>
</dl>
```

How the HTML code above looks in a browser:

Coffee

- black hot drink

Milk

- white cold drink

Assignment: HTML Activity #3 Bulleted List & #4 Numbered List

Try on your own

DO NOT type Morning routine #1 tell me what is your routine

What are Attributes and Values?

- HTML _____ can be enhanced by giving them **attributes** and **values**.
- Take the <BODY> tag, for example. You can add _____ to the body tag that will dramatically change the look of your Web page.
- For example, to change the _____ color of your Web page, you can add the background attribute command and give the tag a color value.

- Look at the example below:

`<BODY BGCOLOR=YELLOW>`

- **BGCOLOR** is an attribute (characteristic) of the `<BODY>` tag, and **YELLOW** is the value given to the BGCOLOR attribute. When the HTML document is _____ in a Web browser, the background color of the document will be **yellow**.
- **Values** are entered _____ the equal sign, which is entered after the tag and attribute in a line of HTML code. They can be entered with or without quotation marks (“”) around them, depending on the value entered. Look at the color below:

``

- The value arial,helvetica,sans serif is the font face that will be applied to the _____ entered between the opening and closing `` tags.

Hexadecimal Color Values & Color Names

- Computers speak _____ in numbers.
- _____ are expressed as numbers that the computer understands.
- **Color values** can be carefully controlled and _____ to match virtually every color in the rainbow by using the hexadecimal values for certain colors.
- Hexadecimal _____ operate on a **base-16** number system rather than the base-10 number system we humans normally use.
- Hexadecimal numbers use the letters **A, B, C, D, E,** and **F** along with the numbers **0** to **9** to create their _____ digits.
- Look at the hexadecimal color setup table to the right:

ND – Numeric Digit

HV – Hexadecimal value

ND	HV
0	1
1	2
2	3
3	4
4	5
5	6
6	7

7	8
8	9
9	10
11	A
12	B
13	C
14	D
15	E

- Hexadecimal color values use the **RGB** color setup, where **R** stand for **red**, **G** stands for **green**, and **B** stands for **blue**. Look at the following color values expressed as numbers:

		<u>Red</u>	<u>Green</u>	<u>Blue</u>	
White	=	# FF	FF	FF	= #FFFFFF
Black	=	# 00	00	00	= #000000
Red	=	# FF	00	00	= #FF0000
Green	=	# 00	FF	00	= #00FF00
Blue	=	# 00	00	FF	= #0000FF
Yellow	=	# FF	FF	00	= #FFFF00

- To apply a hexadecimal _____ value to the background of a Web page, add the BGCOLOR attribute to the BODY tag and type the code below:

`<BODY BGCOLOR = "0000FF">`

- This code applies the color **blue** to the background of the Web page. To apply a hexadecimal color value to specific _____ in the body of a Web page, apply the COLOR attribute to the FONT tag, type the text that you want changed by its color, and apply the closing `` tag. Refer to the code below:

`King George HS`

- This code applies the color **green** to the text "King George HS" in the body of the Web page.

List of HTML Tags with Attributes

Tag	Attribute(s)	Tag	Attribute(s)
<code><BODY></code>	bgcolor, text, link, alink, vlink, background	<code><P></code>	align
<code></code>	color, face, size	<code><TABLE></code>	align, bgcolor, border, width
<code><FORM></code>	Action, name	<code><A></code>	href, target
<code><HR></code>	align, size, width	<code><INPUT></code>	name, size, type, value
<code></code>	alt, src	<code><MAP></code>	id, name

Assignment: HTML Activity #5 Colors
Try on your own

Hyperlinks in HTML

- Web pages became popular because they could _____ easily to other pages, or to various sections inside a document. Hyperlinks are easy to use, but a little more difficult to understand at first.
- To use a hyperlink, you just _____ on the link. Links may be pictures or words that are underlined and appear in a different color.
- Hyperlinks are created with _____ tags called **anchor tags**. The tag has several parts. The opening and closing tags are called the anchor or link tags and look like this:

/A>

- Link or anchor tags are fairly useless unless you define a _____ to which you are linking. There are several ways to use link tags. You can:
 - Link to another spot within your own document.
 - Link to a URL or Web page anywhere on the WWW.
 - Link to another Web page on your own computer.
- Before learning how to use hyperlinks to _____ from one page to another, you must know about **URLs**. URLs are **Uniform Resource Locators**. They allow a Web browser to pinpoint an exact file on the Web.
- When you enter a URL into your HTML Web page, you are identifying a _____ to a specific HTML file located somewhere on your computer or on the Web.
- **HTTP** _____ for **HyperText Transfer Protocol**.
- A **protocol** is a communications system that is used to _____ data over networks. It is like a _____ digital language that Web servers use to communicate with Web browsers.
- Check out the following Web address below:
http://www.myspace.com
The **http://** tells your network how to transfer or move the file you are requesting.
- The _____ part of the address (**www.myspace.com**) is the actual name of the server that hosts the Web page for which you are looking.
 - The **.myspace** part is the name of the company that maintains the Web server.
 - The **.** part says this is a commercial or business site.

Top-Level Domains

- **Top-level domains** are used to identify type of Web sites on the Internet

.com	Commercial or business	.net	Network provider
.org	Non-profit organization	.mil	Military organization
.edu	College or university	.gov	Government agency

- When creating your Web pages, consider these guidelines:

R = Responsibility
E = Everybody
S = Simplicity
P = Purpose
E = Ethical
C = Correct
T = Totally worth visiting

- **Responsibility:** Assume personal responsibility, and create only _____ & appropriate pages.
- **Everybody:** Try to create Web pages that everybody will _____, appreciate, and consider of value.
- **Simplicity:** Make your Web pages _____ to navigate. Make information simple to find.
- **Ethical:** Make sure all the _____ on every Web page you post corresponds to your values and has a beneficial purpose.
- **Correct:** Make sure all the words on your page are _____ correctly, all the sentences are written correctly, and that all the hyperlinks work.
- **Totally worth visiting:** Try to create pages that others will think are totally _____ someone's time to visit.

Assignment: HTML Activity #6 Links

Try on your own

Incorporating Graphics in

- The Web is full of _____, sounds, and movies that add interest to Web pages. Generally, there are two kinds of pictures (called **graphics** or **images**) on the WWW.
- Below are the different types of graphics/image files available on the World Wide Web:

.gif	Graphics Interchang e Format
.jpg or .jpeg	Joint Photograp hic Expert Group

.bmp	Bitmap
.png	Portable Network Graphics

- The file extensions **.gif**, **.jpg**, and **.png** help tell your browser that these _____ are pictures, not **.html** text files, and require special handling.

Downloading & Inserting Graphics

- The first type of _____ or image format, **.gif**, was originally created by ComServe to provide a compressed graphics format that could transfer easily over low-speed modems.
- The second commonly-used image format is **.jpg** or **.jpeg**. It is pronounced J-Peg by Webmasters in the know. This format adheres to an international set of graphics standards. JPEG graphics, like GIF pictures, are compact enough for _____ use.
- The third type of image format, **.bmp**, is an image file format used to store bitmap _____ images, especially on Microsoft Windows and OS/2 operating systems.
- The last used image format, **.png**, is a bitmap image format that employs lossless data _____.

The Tag & SRC Attribute

- IMG SRC is short for **IMaGe SourRCe**.
- The **** tag is used to _____ images into a Web page. This tag requires a closing **** tag at the end of the HTML code.
- The **SRC** attribute is an attribute of the **** tag that is used to define the location of the image file on your computer. Here is an example of how the **** tag and SRC attribute work together:

```
<IMG SRC = "graphics/ITFund.jpg">
```

NET TIPS

- **A Common Error in the Tag**
One common error is misusing the ****. tag. Many people _____ this tag by transposing the **R** and the **C**, and they enter **IMG SCR**. If you forget the tag, just spell out the words "ImaGe" and "SouRCe" to get the letters in the correct order.
- **Inserting a Background**
To have a picture become your background, insert the **BACKGROUND** attribute in the **<BODY>** tag

like this:

```
<BODY BACKGROUND="graphics/ITFund.jpg">
```

Pictures of All Sizes

- Pictures can be _____ in a variety of ways by changing a tag's values. Pictures can be used as wallpaper that cover the entire background of a Web page.
- You can also change the _____ of the picture by using the HEIGHT and WIDTH attributes.

NET ETHICS: Picture Piracy

- One of the big problems on the Web is **picture piracy**. Since it is so easy to pull pictures off the Web, many people do so without permission. Many pictures are **copyrighted**; that is, someone owns them. To use them, you need to _____ permission or pay a fee to the artist.

Pictures as Hyperlinks

- Use the same _____ structure you used to create hypertext links, but use the IMG SRC tag to replace the words you normally enter. Check out the code below:

```
<P><A HREF="One.html">  
<IMG SRC="graphics/ITFund.gif">  
HEIGHT=50  
WIDTH=50</A>
```

Downloading Too Many Pictures

- It is considered _____ to download pictures to the school network that you don't intend to use. Graphics take up a great deal of space on a computer. Downloading hundreds and hundreds of pictures and not using them is a _____ of network server drive space. Consider deleting any pictures you are not actually using.

HTML Activity #7 Inserting Graphics

Try on your own

Final Project

My Favorites