HTML: the language of structure

Below is the basic, or *skeleton*, HTML document. All HTML documents need to include these tags. HTML files can be created in any text editor; they need the filename extension of .html. Each of the tags below may only appear once in an HTML document. The tag beginning !DOCTYPE declares what version of HTML is being used. We will be using HTML5 ; you can also use XHTML which uses a different doctype and syntax. You can copy and paste the DOCTYPE from the examples on the class web site.

doctype

```
<!DOCTYPE html>
```

head

```
<html>
<head>
<meta charset="utf-8">
<title>Title of document goes here</title>
</head>
```

body

```
<body>
The content of your document goes here.

</body>
</html>
```

Creating a Web Page

While there are many specialized web page editing programs, you can use any program capable of creating a plain text file, such as Notepad (on the PC) or TextWrangler (on the Mac.) Many users opt for more powerful text editors, such as BBEdit (Mac) or Notepad++ (PC). Graphical tools such as Dreamweaver allow you to build sites rapidly, but knowledge of HTML is still essential.

HTML files must end with the extension .html (or .htm) regardless of which platform the files are used on. Your home page (main page) should be called index.html or index.htm. This is so the server knows that is the site's home page.

To simplify the organization of your files, be sure to keep the HTML files and any graphics in the same folder. Graphics can only be GIF (.gif) PNG (.png) or JPEG-compressed (.jpeg or .jpg) files. Since the files are only to be displayed on screen, they don't really have any physical size. Most computers display at least 1024 pixels horizontally and 800 pixels vertically; the majority use 1024x768 or higher. Make sure your images are sized appropriately for the web. Measure your graphics only by their width and height in pixels. 960 pixels wide is a good starting point.

More HTML

Paragraphs should begin with the <p> tag and end with the </p>.

You can create headings by wrapping text in header tags:
<h1>This is a heading.</h1>
There are 6 levels of headings; <h1> is the most prominent, <h6> the least prominent.

Use the <hr> tag to insert a horizontal line. The <hr> does not need a closing tag. Use and for bold and and for italic.

To include an image, use the img tag. Make sure you put the name of your graphic file inside the quotation marks. "filename.gif" is just an example. Remember, GIF and JPEG files only.
<img src="filename.gif" alt="Description of image">

To create links to other files, use the `href` tag. Put the file you wish to link to in that same folder as the file you wish to link from. Remember, "filename.htm" is just the example.

`<a href="filename.htm">`Here is the text which will serve as a link.`</a>`

To create links to other web sites, use the `href` tag but include the address (URL) of the web site in quotation marks.

`<a href="http://www.nscad.ns.ca/">` Here is the text which will serve as a link.`</a>`

To use an image as a link (to make a button) simply put the `img` tag between the `<a href>` and `</a>` tags.

To create a list, use the `<li>` (list item) tags along with the `<ul>` or `<ol>` (unordered and ordered list) tags:

```
<ul>
<li> item 1 </li>
<li> item 2 </li>
<li> item 3 </li>
</ul>
```

To create comments, notes that are not displayed in your web browser, use the comment tags:

`<!-- comment text goes here -->`

To find out about more tags, go to:
http://www.w3schools.com/

Make sure you are using resources for HTML5 and not other versions. Once you have mastered the basics, you only need to learn new tags to accomplish new effects. Use the "View Source" command in your web browser's View menu to see how other pages are created.

You can check the syntax of your HTML online at http://validator.w3.org/ but you will find some of the error messages hard to understand at first.

Once complete, the last stage would be to upload your files to a Web server. Server space can be rented; some organizations provide it for free, but often with strings attached. Use an FTP (File Transfer Protocol) program to copy the files up the server. On Macs, I suggest Cyberduck; for PCs, Filezilla.

Formatting text and positioning elements

While tags exist for formatting text and positioning elements such as text and graphics, avoid using them. Modern web pages should use CSS, Cascading Style Sheets, instead.

Troubleshooting

- Are your HTML files and images in the same folder?
- Are your filenames free of punctuation and spaces?
- Are your images saved as GIF or JPEG files?
- Have you spelled filenames exactly the same way as you named the files?
- Have you saved and reloaded changes?
- **Test all links and images before submitting any work.**