HTML Tutorial (adapted from w3schools)

What is HTML?

HTML (**H**yper **T**ext **M**arkup **L**anguage) is a language for describing web pages.

Terms

HTML tags are keywords surrounded by **angle brackets** like <html>. HTML tags normally come in pairs, with starting and ending tags, like and .

Everything from the start to the end tag is called **HTML element**. Empty elements like <br> do not have closing tags. Tags are not case sensitive, so <P> means the same as <p>.

HTML elements can have **attributes**, which provide additional information about the element. Attributes are always specified in the start tag, and come in name-value pairs like name=value. Values are always enclosed in quotes i.e. name = "Joe". Attribute names and values are case insensitive.

This tutorial will give you all the essential tags that you will need for your assignment. For additional tags, please refer the complete HTML reference, listed at http://www.w3schools.com/tags/default.asp. You can play around with HTML tags by using the HTML editor available on the w3schools website - http://www.w3schools.com/html/tryit.asp?filename=tryhtml_intro

HTML example

Open a text editor (for eg Notepad on Windows, Emacs/vi on MAC). Type the following example and save the file as hello.html (You could also save it using a .htm extension).

<html>
<head>
<title>
My first html page
</title>
</head>
<body>
<h1>Hello World</h1>
<p>Hello world, my name is Joe.</p>
</body>
</html>

In this example, the text between <html> and </html> describes the web page. Head elements, like title are included in between <head> and </head>. The title of the web page is specified between <title> and </title>. The text between <body> and </body> is the visible page content. The text between <h1> and </h1> is displayed as a heading. The text between <p> and </p> is displayed as a paragraph.

HTML Basic

Headings are defined with <h1> to <h6> tags.

<h1>This is a heading>/h1>

Paragraphs are defined with the <p> tags.

<p> This is a paragraph </p>

Links are defined with <a> tags

Dartmouth Computer Science

Images are defined with <img> tags

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**
Comments are defined between <!-- and -->. Please get into the habit of adding comments to make your html code readable.

<!-- This is a comment -->
A **line break** is defined as
A **horizontal rule** is introduced using a <hr/>

Tags

Formatting
<b> - Bold
<i> - Italic
<big> - Big
<small> - Small
<strong> - Strong
<em> - Emphasized

Fonts
**
This sentence is in Arial, size 5 and text color is red.
**

You can also specify the size relative to the current size i.e. size= "+1"

Styles
CSS is used to style HTML elements. CSS can be added to HTML as a separate style sheet file (css file), in the style element in HTML head section or in the style attribute in HTML elements. **The preferred way to add CSS to HTML, is to put CSS syntax in separate CSS files.** Please refer to the CSS section of the tutorial to learn more about styles. Below is an example to add style to a HTML element.

<h2 style= "background-color:red;">This is a heading with red background</h2>
<p style="font-family:arial;color:white;font-size:20px;">This paragraph is in font arial, text color white and of text size 20px.</p>

Links
Links are specified using the <a> tag and can be used either to

- link to another document (using href)

*Open Dartmouth CS department web page in a new window *
target attribute specifies where to open the linked document.

- to create a bookmark inside the document (using name)

CS89 creates a named anchor

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UIDesign - CS89 creates a link to the CS89 section in the same document
* UIDesign - CS89 * creates a link to the CS89 section from another page. Please note that such a page doesn't exist!

It is possible to use an image as a link as well.
* </ a>*

You could also link to a mail message, if you have mail installed.
**
Send Mail

Images

**
url points to the location where the images is stored and alt specifies alternate text for an image, if the image cannot be displayed. **It is better to specify the height and width of an image. Please ensure that the image is in the location that you specify, else visitors will get a broken link.**

You can create image maps using <map> and <area> tags.

<p>Click on the sun or on one of the planets to watch it closer:</p>
**
<map name="planetmap">
<area shape="rect" coords="0,0,82,126" alt="Sun" href="sun.htm" />
<area shape="circle" coords="90,58,3" alt="Mercury" href="mercur.htm" />
<area shape="circle" coords="124,58,8" alt="Venus" href="venus.htm" />
</map>

<map> defines "clickable" areas on the image. <area> creates the clickable areas.

Tables
Tables are defined using <table> tag. Tables are divided into rows (<tr> tag); each row into data cells (<td> tags). The data cells can contain text, images, lists, forms, other tables etc. Table headers are specified using <th> tags. Cellpadding attribute creates more white space between the cell content and its borders. Cellspacing attribute increases distance between cells.

<table border="1" cellpadding= "10" cellspacing= "5">
<tr>
<th>Header 1</th>
<th>Header 2</th>
</tr>
<tr>
<td>row 1, cell 1</td>

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<td>row 1, cell 2</td>
</tr>
<tr>
<td>row 2, cell 1</td>
<td>row 2, cell 2</td>
</tr>
</table>

Lists

An unordered list starts with <ul> tag. Each item starts with <li> tag. List items are marked with bullets.

<ul>
*
Coffee
*
*
Milk
*
*
*

An ordered list starts with the <ol> tag. List items are marked with numbers.

<ol>
*
Coffee
*
*
Milk
*
*
*

A definition list is a list of terms, with a description of each item and is defined using <dl> tag. <dt> defines an item in the list and <dd> describes the item.

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

Escape characters

You might need to specify entity names to introduce certain symbols on your webpage. You can find a list of escape characters here - http:// www.theukwebdesigncompany.com/articles/entity-escape-characters.php