## Assignment #1: Introduction to HTML

Now that you know what HTML is, let's start using it.

### What are HTML tags?

When a web browser displays a page such as the one you are reading now, it reads from a plain text file, and looks for special codes or "tags" that are marked by the < and > signs. The general format for a HTML tag is:

 <tag\_name>string of text</tag\_name>

As an example, the title for this section uses a **header** tag:

 <h3>What are HTML tags?</h3>

This tag tells a web browser to display the text **What are HTML tags?** in the style of header level 3 (We'll learn more about these tags later). HTML tags may tell a web browser to bold the text, italicize it, make it into a header, or make it be a hypertext link to another web page. It is important to note that the ending tag,

 </tag\_name>

contains the "/" slash character. This "/" slash tells a web browser to stop tagging the text. Many HTML tags are paired this way. If you forget the slash, a web browser will continue the tag for the rest of the text in your document, producing undesirable results (as an experiment you may want to try this later).

**NOTE: A web browser does not care if you use upper or lower case. For example, <h3>...</h3> is no different from <H3>...</H3>**

Unlike computer programming, if you make a typographical error in HTML you will not get a "bomb" or "crash" the system; your web page will simply look, well... wrong. It is quick and easy to go inside the HTML and make the changes.

Your browser has a small but open vocabulary! An interesting aspect of HTML is that if the browser does not know what to do with a given tag, it will ignore it! For example, in this document you are viewing, the header tag for this section *really* looks like this:

 <wiggle><h3>What are HTML tags?</h3></wiggle>

but since your browser probably does not support a **<wiggle>** tag (I made it up, perhaps in the future it could cause the text to wave across the screen?), it proceeds with what it knows how to do. If I were programming a new web browser, I might decide to add the functionality for the **<wiggle>** tag into my software.

### Opening Up Your Workspace

To complete the lessons in this assignment, you should create a second web window (this allows you to keep this window with the lesson instructions and one window as your "workspace"), plus open your text editor application in a third window.

**NOTE: This is a good place to remind you that we will provide directions that are somewhat general as the menu names and file names can differ depending on which web browser you are using. If our instructions say, "Select Open Location... from the File Menu" and your web browser does not have that *exact* choice, try to find the closest equivalent option in your own web browser.

In some web browsers (notable Internet Explorer), a new browser window opens with either a copy of the page you are viewing or your home page. Just ignore that for now, we will load new content in it below.**

So you will want to be pretty comfortable jumping between different applications and windows on your computer. Another option is to print out the lesson instructions (but we really do not want to promote that kind of excessive tree carnage, this is a large document after all).

Here are the steps for setting up your "workspace":

1. From the **File** menu of your web browser, select **New Window** or **New Web Browser** (The exact name of the menu command can be different depending on what browser you are using). A second web window should appear. Think of the first window as your "textbook" and the second clone window as your "workspace" for completing the HTML lessons.

**NOTE: The only reason to have two windows here is so that you can read the instructions for the lessons and also view your working document. It is *not* mandatory to have two windows open; it just makes your work easier. You could also bookmark this web page or jump back here via your Go or History menu.**

1. Next, you need to jump out of the web browser, go to your desktop and open your text editor program.

**NOTE: You will need to move back and forth between the different windows to complete these lessons. This can be a challenge depending on the size of your monitor. You may choose to resize the three windows so that they all fit on your screen or layer your windows so you can click on any of them to bring it to the front.

If you are using a word processor program to create your HTML, be sure to save in plain text (or ASCII) format.**

If you are just starting out, we most STRONGLY recommend that you use the simplest text editor available --Windows users can use *NotePad* or if you want highlighted text download[*Notepad++*](http://notepad-plus-plus.org/)*.* If you’re a Mac OSX user, use the included *TextEdit* (but you need to know how to save files as Plain Text). Another option is [*TextWrangler*](http://www.barebones.com/products/textwrangler/)if you would like highlighted test similar to NotePad++ on Windows. Why not use those nifty HTML editors? It is sound instructional design that you first learn the concepts and THEN look for shortcuts or helpers that make the work less tedious. When you have got a few lessons under your belt, then check out something like Dreamweaver which will make your work easier.

Also, it will help you if you first create a new directory/folder on your computer that will be your work area. You can call it **workarea** or **myspace** or whatever you like; just make sure that you keep all of the files you create in this one area. It will make your life simpler... well, at least while working on this assignment! (you may want to bring in and use a flash drive, it will make your life easier)

### Creating Your HTML Document

An HTML document contains two distinct parts, the head and the body. The **head** contains information about the document that is not displayed on the screen. The **body** then contains everything else that is displayed as part of the web page.

The basic structure then of any HTML page is:

 <!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 3.2//EN">

 <html>

 <head>

 <!-- header info used to contain extra information about

 this document, not displayed on the page -->

 </head>

 <body>

 <!-- all the HTML for display -->

 : :

 : :

 : :

 </body>

 </html>

The very first line:

 <!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 3.2//EN">

is not technically required, but is a code that tells the browser what version of HTML the current page is written for. For more information, see the [W3C Reference Specification.](http://www.w3.org/pub/WWW/TR/WD-html32#html)

Enclose all HTML content within **<html>...</html>** tags. Inside is first your **<head>...</head>** and then the **<body>...</body>** sections.

Also note the **comment** tags enclosed by **<!-- blah blah blah -->**. The text between the tags is NOT displayed in the web page but is for information that might be of use to you or anyone else who might look at the HTML code behind the web page. When your web pages get complicated (like you will see when we get into tables, frames, and other fun stuff later on!), the comments will be very helpful when you need to update a page you may have created long ago.

Here are the steps for creating your first HTML file. Are you ready?

1. If it is not open already, launch your text editor program.
2. Go to the text editor window.
3. Enter the following text (you do not have to press RETURN at the end of each line; the web browser will word wrap all text):
4. <!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 3.2//EN">
5. <html>
6. <head>
7. <title>Volcano Web</title>
8. </head>
9. <!-- written for the Writing HTML Tutorial
10. by Lorrie Lava, February 31, 1999 -->
11. <body>
12. In this lesson you will use the Internet to research
13. information on volcanoes and then write a report on
14. your results.
15. </body>
16. </html>

**NOTE: Look where the <title>...</title> tag is located. It is in the <head>...</head> portion and thus will not be visible on the screen. What does it do? The <title> tag is used to uniquely identify each document and is also displayed in the title bar of the browser window.

In activity 3 you will learn how to add a string of text for a title that will appear directly on your web page.

Also note that we have inserted a comment tag that lists the name of the author and the date the document was created. You could write anything in between the comment tags but it is only visible when you look at the source HTML for a web page.**

1. Save the document as a file called **"volc.html"** and keep it in the "work area" folder/directory you set up for this tutorial. Also, if you are using a word processor program to create your HTML, be sure to save in plain text (or ASCII) format.

By using this file name extension, a web browser will know to read these text files as HTML and properly display the web page.

### Displaying Your Document in a Web Browser

1. Return to the web browser window you are using for your "work space". (If you do not have a second browser window open yet, select **New Window** or **New Browser** from the **File** window.)
2. Select **Open File...** from the **File** menu. (Note: For users of Internet Explorer, click the **Browse** button to select your file)
3. Use the dialog box to find and open the file you created, **"volc.html"**
4. You should now see in the title bar of the workspace window the text "Volcano Web" and in the web page below, the one sentence of **<body>** text you wrote, "In this lesson..."

## Check Your Work

Compare your document with a [sample](http://www.mcli.dist.maricopa.edu/tut/tut1_ex.html) of how this document should appear. After viewing the sample, use the **back** button on your web browser to return to this page.

If your document was different from the sample, review the text you entered in your text editor.

A common mistake we hear is, "I cannot see the title!" You shouldn't! The text within the **<title>...</title>** tag is **NOT** displayed on the web page; you should see it in the title bar of the web browser window.

The most common mistake that beginners make here is that they try using a word processing program to type HTML and then are unable to open it in their browser, or if it does, the page is full of odd garbage characters. **When you are starting out, we urge you to use the most basic text editor.** Look for shortcuts later!

ANSWER the following questions in a Word Document and print it and hand it in with the rest of your assignment when completed. All documents should be labelled in the following format: LastnameFirstnameAssignment#

What are HTML tags?

1. Where is the text of the title tag displayed?
2. What steps are involved in creating a simple HTML document?
3. How do you create a comment tag?
4. How can you display your HTML document in a web browser?

## Course Project Task

Think of a topic for your own web page. Now create your own HTML text file that includes a **<title>** tag and a few introductory sentences. Save the HTML file and reload it in your web browser. You might want to create a different folder/directory for this file so you do not get it mixed up with all of the volcano pages you will create for this tutorial.

Keep this file handy as you will add to it in later lessons.