

Comp 156 Web Page creation Part 1

You must complete the html tutorials assigned before starting this lab assignment.

Please read this first section carefully and **ask** if there is something that you do not understand!

You will be creating two Web Pages, these two files and any image files that you use are all saved into a new folder on your M; drive. When you have completed the pages and checked for errors you will be ready to move all these files to a Web server. After completing that task anyone with an Internet connection will be able to access your pages. For that reason you are not required (and I do not recommend) using your real contact information. Use fake contact information for the purpose of this exercise.

Please be careful with file names. Windows file names are not case sensitive and blanks or spaces in file names are accepted. The Internet follows UNIX rules and what works on your Windows computer may not work once you move your work to a Web server!

You may use either .htm or .html as a file extension. Graphic files might be .jpg or jpeg. The key is to be consistent. If you stick to one standard, always use simple lower case with no spaces for file names or only use upper case letters deliberately to avoid problems. Photo.jpg and photo.JPG are the same file in windows but not on a web server! Same goes for file.htm and file.html.

To do this lab you need to understand some basics on html tags. You will be creating 2 web pages into a new folder on your M: drive. You will be testing your progress in a Windows O/S environment. Nobody except you can access your M: drive.

Once you are happy with your pages you will be copying all files in your local folder into a folder on a Linux Web Server. It is important that you check your work (all links) again once your site is copied to the Web server! I recommend checking your pages with both Firefox and IE.

Helpful Links for this assignment:

HTML Tutorial: <http://www.htmlprimer.com/htmlprimer/html-beginners>

List of HTML Tags and tag attributes: <http://www.w3schools.com/tags/default.asp>

256 "Safe color codes for web pages: <http://hal.cs.camosun.bc.ca/~deid/comp140/lectures/websafe.php> (hint scroll down to 2nd table - until you see the 256 color chart!

Assignment Part One - Using a Text Editor to create a Personal Web Page (60 points)

1. Open your Lab10 Folder create a new folder in Lab10 called "Web".
2. Open notepad and create the basic html markup tags as follows. You will use this template as a starting point for both html files that you create this week.

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
<html>
<head>    <title> Type in the text to display (perhaps your name?)</title> </head>

<body> You will be adding text into the body section of the document.

</body>
</html>
```

3. Save the notepad file as "index.html" (we will use it later) into the Web folder.
4. Save the same file a second time as "BasicWeb.Firstname.Lastname.html" into the Web folder.
5. Open the Word Document "Personal" at S:\courses\comp\c156\hartman\LabProjects\lab10
6. Copy all the text from "Personal.doc" and paste it into your "BasicWeb" file between the <body> and </body> tags.
7. At the end of the pasted text, leave one blank line then enter "Last Updated *today's date* by *your name*", entering today's date and your name. Ensure that your text is before the </body> tag!
8. Save the document then view it in a browser to see what you have so far.

You now have the beginning of your first web page. Please make sure that all the text you pasted is between the <body> and the </body> tags! If you go to your Web folder and open the file, it will display in a browser (because of the .html file extension). From this point on make only one or two changes to notepad, then save, then refresh the browser view to see the changes.

Adding Formatting Tags:

If you look at the formatting in the Word document "Personal" and compare it to your "BasicWeb" html file you will see that we must use formatting markup tags. In HTML, to make the headings and subheadings stand out from other text we need to use header tags. You can use h1 to h6, - h1 will create the largest font and h6 will be just larger than the main text. For this document you should use h1 for the 1st line (your name) use h2 for each of the three Personal Information sections "College Courses", "Hobbies and Interests", and "Favorite Links". Finally use h3 tags for the subheadings "Address", "Phone" and "email". Add the header tags around the text like this - <h2>Personal Information</h2>

Heading tags automatically create a new paragraph for following text. If you want to create a new paragraph or a new line for normal text use the paragraph tag <p> or the break tag
. The first line (heading 1) needs to be edited to use your name and formatted using the <h1> and </h1> tags. Save the file, refresh the browser to check your work as you go

If you look at your file you will notice some hints inside [square brackets]. This text is meant to help you understand where you will be placing various elements in this document. Eventually all text inside the square brackets will be deleted and replaced with your information. Leave the hints there until you get to that section and then make sure the text inside the brackets is gone!

You now need to add some personal text to each of the sections wherever you see [add some text here] and add
 or <p> tags as needed to get lines to space as you desire. There is no spell check in notepad so check your work! Save and check your changes in a browser occasionally as you add data!

Adding an attribute to the body tag:

9. We want to add a background color to this page. We do this by adding a "bgcolor" attribute into our body tag. First you need to go to one of the sites I gave you on creating Web pages and find the hexadecimal code for the color you want. Select a light color so that you do not have to change the text color. In the body tag <body> change it to <body bgcolor="colorcode">
 1. Scroll down at <http://hal.cs.camosun.bc.ca/~deid/comp140/lectures/websafe.php>
 2. Copy the hexadecimal code e.g. #009999
 3. Save changes and refresh the browser view!

Inserting a Table and adding attributes to the table tag

10. Insert a 3 column by 3 row table under the "Hobbies and Interests" heading and type your hobbies and interests into the table cells. If you don't remember how to use table tags refresh your memory at http://www.web-source.net/html_codes_chart.htm scroll down for information on most html tags.
11. Save the changes, switch to your browser, click refresh, and view the changes, go back to notepad and make any changes needed.
12. Add (or change) the following attributes to your table tag... border="4" cellpadding="2" cellspacing="2" width="60%"
13. Add a complementary background color as a table attribute, (Use a different but complementary color).
14. Save the file, refresh the browser to see the changes!

Adding Links

You are going to be working with four different types of links. You must understand the difference between a local path link and a full URL link! When referencing an image file (later in assignment) or another local file in my website I use a path statement. Linking to existing pages on the Internet – I use the full URL!

- External to your web site (you must use full URL)
- Another page in your web site (use local path and filename only)
- Email link (<mailto:user@domain>) Note you will not be able to test in GP Labs!
- A different place in the same page (use anchor and link tags explained below)

External and email Links (link to another web page or send an email)

15. In your file find the "Favorite Links" section. You are going to make the text link to a web page. An external link tag has the structure Display text. For example, if the text to the link is "Canadian News", the link tag would be Canadian News followed by <p>
16. After creating 3 links go to the "Contact" section and find where you want to create a mailto: link.
17. The mail to link is very similar, where you have the "URL" in the tag above pointing to a web page you use "mailto:emailaddress". So if the email address you want to link to was info@camosun.bc.ca the link tag would be written as For Information contact me here

Internal Links (moving around in the same page!)

18. Next you are going to create 4 internal page links. Go to the beginning of the body section, just AFTER the H1 text.
19. You will create 4 paragraphs after the 1st H1 line and then make the text links that move you down to the 4 subheadings (h2 lines). A page link href tag is the same as linking to another web page, but instead of

referencing an external URL we are referencing an anchor (or name tag) in this document. So **before we create the reference** we need to create the name tags and text.

20. For the first link we place an anchor tag in front of the first heading "Current Studies and Work Activities". It looks like...`<h2>Current studies and Work Activities</h2>`
21. Next we need a matching link tag around the appropriate text at the top of the page (just under the <H1> Page heading.
It looks like - `Current studies and Work Activities`
We need to use the # to tell the tag that we are linking to another place in this page.
22. Save your changes then go look at progress by refreshing the browser.
23. Repeat the process for the other three links "Hobbies...", "Three Favorite Web Sites", and "Contact Information", save your work and check updated page in browser occasionally.
24. Now you will create a "back to top" link. Add the name tag at the beginning of the <body> section just **after** the <body> tag.
``
Notice we have done something different here – there is no text to display on the page for the top tag! So there is no text between `` and ``! When you view the finished link in the browser no text displays at top of page!
25. Now go to the **end** of the body section (just before </body>) and add the href tag as follows
`Back to Top`
The #top indicates that we are looking for a name="top" tag in this document somewhere. We need to use the # to tell the tag that we are linking to another place in this page.
26. Save your work, switch to the browser and click refresh as you work to see if your back to top link works

Adding Graphics

The image source tag is another type of link. We need to save a photo or other type of graphic file to the Web folder before creating the link.

27. You will need to place a copy of a photo into the Web folder. **Copy/Paste** the image and rename the file to whatever simple filename you like and save in the **same folder** as your html file (in the Web folder). Making your filename simple and all lowercase will make you life easier!
28. Now back in notepad, at the beginning of the body section add an image tag.
29. The basic tag is ``, but we are going to add some attributes to control the size and the location of the image. If the image you selected had a 4 by 3 aspect ratio, the tag will be something like ``
*The height and width refer to the number of pixels. If your image is too large or too small when you view it in the browser change the numbers to something larger or smaller make sure you **maintain the aspect ratio**.*
30. Save the file, refresh the browser and check your image and all your links. Then close the file.

Assignment Part 2 Create an HTML index Page (10 points)

You will now create a simple web page that links to your Web page and to two additional pages. **It is important** that this file is named index.htm or index.html. All lower case!

Be consistent in your file names. Always use lower case letters for the index.html file. Both htm and html work.

When people go to your website folder and do not specify a specific file name, there must be a file named index.html or index.htm. This is the default page that is opened.

You have already started this index page. Open the file with notepad and add the following.

- Some personal descriptive text between the <title> and </title> tags
- Some descriptive text as the first line in the body section

- 3 hyperlinks on 3 lines (see below)

Note that the link to your page is a link to a local file (in this case in the same folder!), while the links to the other two pages are full URL's

```
<html>
<head><title>insert informative title bar text here</title></head>
<body bgcolor=(use same as your basic page)>
Add a bit of text description and 3 links on separate lines pointing to
My Personal Page
Camosun College Main Page
Ken Anderson Home Page
</body>
</html>
```

Because you have saved all files in the "Web" folder, you may reference the file as a local file rather than as a URL. You should now have 2 .htm or html files and perhaps some associated graphics and folders in your "Web" folder. Open the index.htm file and ensure that all pages are linked and look finished.

Assignment Part Three– Map a drive and move Web Pages to Server (10 points)

Please note that this process must be done from GP Labs. You will not be able to map this drive from off campus! We are working with a Unix server so all instructions are case sensitive! Use upper or lower case as indicated by the instructions!

Read the instructions at <http://hal.cs.camosun.bc.ca/c156ka/howto.html> to map the drive.

Once drive is mapped students must create an initial directory (folder) using their First.Lastname.

- Do not include spaces in the folder name
- Use a period "." between first and last names.
- As an example John Smith would create a folder named John.Smith

Students may now use Windows explorer to copy all the **contents** of your Web folder into your First.Lastname folder. If there is a file named index.htm or index.html anyone may now access your web pages. Assuming student John Smith wants to see his new website, he would point his browser to:

<http://hal.cs.camosun.bc.ca/c156ka/John.Smith>

Use the URL above to connect to your new web site using both the IE and Firefox browsers (obviously you use your firstname.lastname folder in the URL) and make sure that all links work. When you are satisfied send me your URL as a part of this week's Lab submission.

Assignment Part four: Submit email for Marking (5 points)

1. Send me an email giving me the correct URL for your new web Site.
The Subject line Lab10 section # and Name as usual.
2. In the email message send me a list of 5 things you learned in this week's lab.(5 points)

Please note: there is a text editor installed on college computers called notepad++. It has some nice editing features that notepad does not offer. You may use notepad++ for this part of the assignment if you wish.