

CSC 170 Lab 02 – Basic HTML Webpage

In this assignment you will create a new HTML file and load it with “dummy” content. Then you will *markup* the content with HTML tags. And finally, you will upload the HTML file to your account on the web server.

You will need to know the following for this assignment:

- You will need to remember your FTP account information from the previous lab.
- You will have to use a code editor of your choice to create and edit your HTML file.
- You will have to look-up how to use certain HTML tags. **www.w3schools.com** is a great web site to use for researching different commands and how they work.

NOTE: For this and all labs in CSC170, it is assumed that you know how to use a PC or Mac, how to create and manage files and folders, and how to start Programs and save files to specific folders on your hard drive or thumb drive.

Step 1: Create a new HTML file

- ☐ On your desktop (or anywhere on your computer’s file system – including your thumb drive ...which might be a good idea) create a folder titled: **lab02** ...it must be exactly that; all lower case; no spaces
- ☐ Create a folder titled **images** inside **lab02**
- ☐ Inside the **lab02** folder (not the **images** folder) create a new HTML file: ¹
 - a. On a PC
 - i. Right mouse-click anywhere in the open **lab02** folder and select “New” and then “Text Document”
 - ii. Change the full name of the document from **New Text Document.txt** (including the file extension) to: **start.html**
 - iii. If you get a warning dialog pop-up, click: Yes (to go ahead and change the file extension).
 - iv. Using your code editor of choice, open the **start.html** file.
 - b. On a Mac
 - i. Open the code editor you plan to use for this assignment.
 - ii. Save the current (empty) file to the **lab02** folder using the file name: **start.html**

¹ Make sure your operating system (Windows or Mac OS) is set to View: *File name extensions*. (If you’re not sure about that, Google “windows view file name extensions” or “macos show filename extensions” and look up how to do it based on the operating system you’re using.)

- ❑ In your code editor, type the following exactly:

```
<!DOCTYPE html>

<html lang="en">

  <head>
    <meta charset="utf-8">
    <title>Lab 02</title>
  </head>

  <body>

  </body>

</html>
```

- Save your file – and generally speaking, save often!

Part 2: Add content to your web page

Marketing people use the term “*comp*” (short for *comprehensive layout*) to show their customers what their design will look like when it’s built. For web developers, we use a *comp* to see a picture of a website, usually drawn by graphic designers using a program like Adobe Illustrator or Photoshop.

For this assignment, you will use the *comp* provided (see last page of this document) as a guide to gather some placeholder text (“Lorem Ipsum”) and a “FPO” (For Position Only) image. **It really doesn’t really matter if your webpage looks exactly like the comp. You only need to use it as a guide.**

Prep: Gather some placeholder content.

- Get some *placeholder text* (a.k.a *dummy text* or *lorem ipsum*) and keep it handy.
Suggestion: go to a website like www.lipsum.com. About halfway down the page, you’ll see a paragraph of Greek text like this:

"Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum."

Keep that text, or any of the other Greek paragraphs handy. You’ll need it.

- Get a FPO (For Position Only) image. For our purposes, you need a small image, no wider than say 300 pixels, and the file type must be: *jpg*, *png* or *gif*. If you're not sure, then follow this suggestion:
 - Go to Google Images (www.google.com/images) and search for something (e.g. cats).
 - Click the "Search Tools" button and select the "Size" pull down menu.
 - Select "Icon" (because, for this assignment, we just want a small image).
 - Click on an image that interests you
 - In the window the stretches open, select the "View image" button.
 - On the image, right-mouse click and save the image to your **images** folder – the one that's in your **lab02** folder. (NOTE: instructions for exactly how to save an image from a web browser is different for each type of browser and each operating system. Sorry, and good luck!)
 - In the Save dialog box that opens, change the filename to something short, all lowercase letters, and no spaces. (E.g. **cat**)
 - Toggle over to your **images** folder and check your handiwork. If your file is there and it seems okay, you can close your web browser.

Start filling your HTML file with content.

Using the *comp* on the back of this document as a guide, you will write and paste text into your open HTML file (in your code editor) between the `<body>` tags, like this:

```
<body>

[all your text content will go here]

</body>
```

Your goal is to make it look like (but it doesn't have to be exactly) like the *comp*.

- Write or copy & paste plain text into your HTML document between the `<body>` tags. You can start by typing something like this between the `<body>` tags:

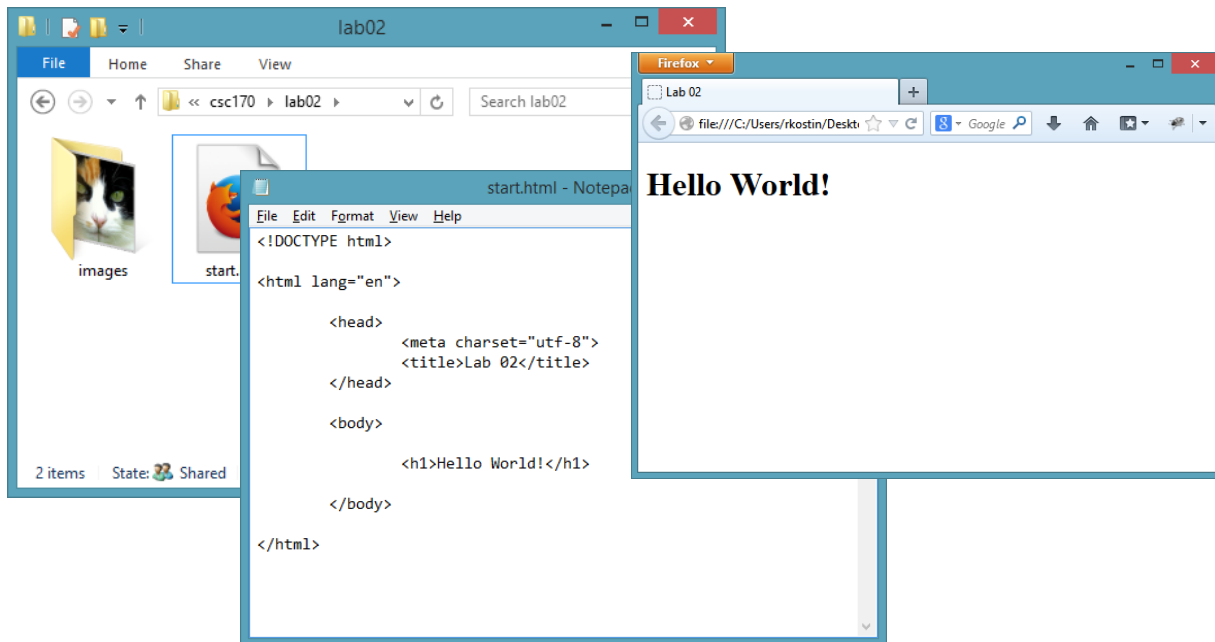
```
<body>

<h1>Hello World!</h1>

</body>
```

Note: the `<h1>` is the letter "h" and the number "1" (not a lower case l)

- Save your HTML file, toggle back to your **lab02** folder and double click your **start.html** file. The file will open in a web browser – whatever is the default web browser for your computer. There, you should see something like this:



For the rest of this section, you will continue to write or copy & paste text into your HTML document, always between the `<body>` tags. (You can use any bits and pieces of the placeholder text – the *lorem ipsum* stuff – where ever you want.) As you go, you will need to add “markup” (the tags) to identify the semantic meaning of the content.

- **WARNING: yes! – this is the hard part of this assignment...** Format the plain text in your document using HTML tags. Make sure you use at least one example of EACH of the following types of tags.
 - ☐ First level heading
 - ☐ Second level heading
 - ☐ Paragraph
 - ☐ Bold (strong)²
 - ☐ Italic (emphasis)³
 - ☐ Line break
 - ☐ A link to an inline image
(hint: your “src” will be something like "images/cat.jpg")
 - ☐ A hyperlink to another website
(hint: your “href” will be something like "http://www.google.com")
 - ☐ A horizontal line
 - ☐ An unordered list
 - ☐ An ordered list
 - ☐ A definition list
 - ☐ A comment

² Do NOT use the `` tag or the `<i>` ...ever! (This will be explained in the lecture portion of this course.)

To figure out how to use any of these tags, use Google like this:

HTML _____ ← insert the name of any html tag, example: "HTML unordered list"

The first link in Google will probably be to a page on the W3Cschools website. That'll help.

- ❑ As you write your code. Use lots of *white space*! Make sure you indent and space your HTML tags appropriately to make it easy to read the code.

In general, the process is to write some code in the code editor, save it, then toggle to your web browser and refresh the browser. You will see your edits in the web browser and you will figure out what you need to do next. Then, you then toggle back to your code editor and start the process over.

Burn this into your memory:

1. In your code editor: write code
2. Save the file
3. Toggle (alt-tab on a PC | command-tab on a Mac) to your web browser
4. Refresh the web browser (control-r on a PC | command-r on a Mac)
5. Toggle (alt-tab on a PC | command-tab on a Mac) back to your code editor
6. Repeat, repeat, repeat!

When you've completed building your HTML file and it looks like the *comp*, you can upload ALL the files and folders to your account on the web server...

Part 3: Upload your work

When you are done with your webpage, use an FTP tool (like *WinSCP*) to access your account on _____**.rochestercs.org** (remember your FTP login information?) and upload your files like this:

1. Open an FTP tool (like *WinSCP*) and login to your account using the login credentials you used in Lab 1.
2. Position your open **lab02** folder and your FTP tool side by side.
3. Drag your **lab02** folder into the file area in your FTP tool. The result will put all your files and folders on the server.
4. In a web browser (any), go to this address to check your handiwork:
***accountname*.rochestercs.org /lab02/start.html**
(where "*accountname*" is your account name)

Part 3: Report your work

1. In our Blackboard section, in Lab 02, post a link to your webpage to receive credit for this Lab.

Here is your *comp* to guide the design of your webpage.

Remember: it is **not** important to make your webpage look exactly like this. In fact, this is a good time to do some experimentation.

Hello World! (This is a first level heading)

This is a paragraph -- lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.

Here is a demonstration of inline elements such as **strong** and *emphasis*. Note: elements can be combined by "nesting": ***both strong and emphasised***.

A Second Level Heading

Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum

Special Inline elements with attributes

A picture and a
line break and another line break...



A hyperlink: [Professor Kostin](#).

A horizontal line...

An unordered list

- Apples
- Oranges
- Strawberries

An ordered list

1. Unlock door
2. Open door
3. Walk through

A definition list

Apples

The round fruit of a tree of the rose family, which typically has thin red or green skin and crisp flesh

Oranges

A round juicy citrus fruit with a tough bright reddish-yellow rind.

Strawberries

A sweet soft red fruit with a seed-studded surface.