

# Lab: More HTML

***Course Listing:***      **CS1**

In Labs 1 and 2, you created formatted Web pages using HTML code. This lab builds on that knowledge to show you how to insert pictures, organized text into tables, and create hyperlinks—one of the big features that made HTML the language of the World Wide Web.

***This lab assumes you have done all previous labs.***

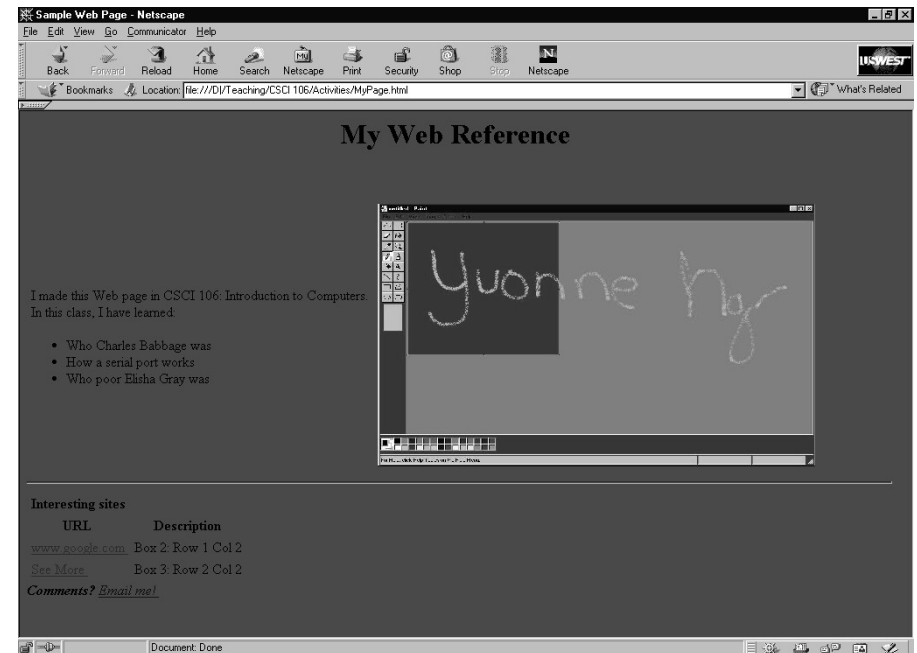
## The first of two pages

This lab will step you through making two web pages and then show you how to link them together. The actual pages will include the other formatting features such as inserting pictures and using tables.

The first page will look similar to (but not exactly like) the picture on the right. The features included are a table with two columns. The left column has a bulleted list, while the right column has a graphical image.

The first page also includes hypertext link, email to yourself, and a link to a second page.

## The first page (or something like it)



Notice that this has two tables. One with two columns and one row. You will be inserting your own picture in the right hand column.

The second table has two columns and two rows.

The last line contains an email link that says "Email me!"

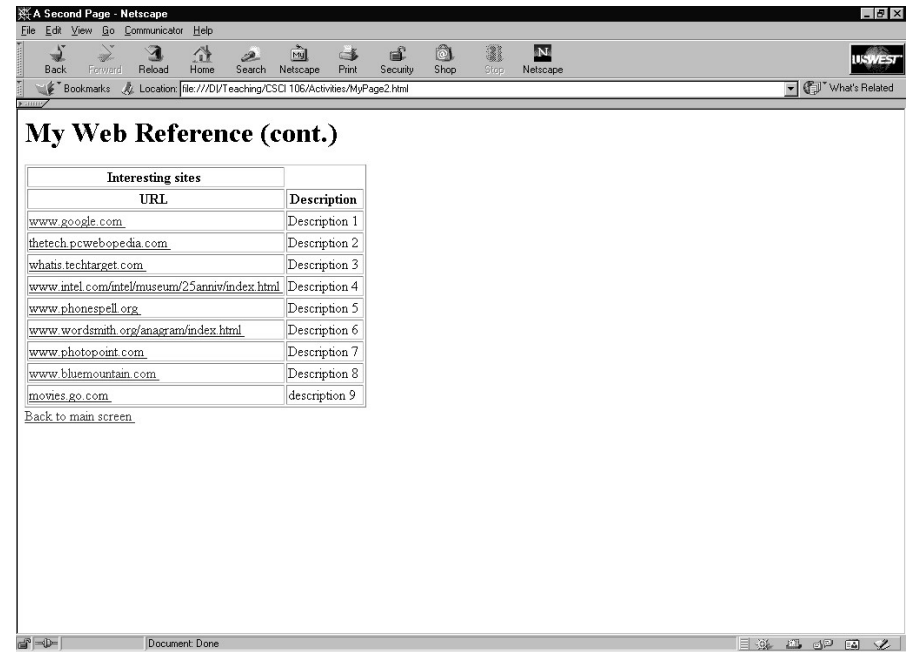
Be very careful when you are doing the tables. You are translating a two dimensional concept to one dimension (the HTML code). You need to be sure to open and close items at the right time or you will not get what you expect. Try building code up one row at a time to be sure that you are on track.

## Page 2

The second page that you will create will look like something on the right. Notice that it has a table as well, but the lines delineating the rows and columns are visible.

The table has links as well to other web sites and back to Page 1.

## Page two (or something like it)



When you make this page, you can make it more colorful and interesting.

## Creating an HTML document

In Activity 1, you created a base HTML document. We will use this as our starting point for the new HTML document.

1. Open Notepad (refer to Lab 1 if you don't remember how to do this)
2. Open the previous HTML document (we named it "OSSample.html". It was saved in your U:\CSCI111 directory).
3. Save this file under a different name (so that we don't replace our original).
  - a. Select "File" from the top menu bar, then select "Save As".
  - b. When presented with the mini-Explorer, change to the U: drive and then the CSCI111 directory.
  - c. Select the "Save as type" value to be "All files".
  - d. Type in the name "MyPage.html"
  - e. Then click the "Save" button.
4. Modify your HTML code so it looks like that listed to the right. The background color can be of your own choosing.
5. Save the file so you can view the changes on Netscape Navigator
6. Open Netscape Navigator and open this HTML file and see what the Web page looks like.

## Modified HTML code

```
<html>
<head>
  <title> Sample Web Page </title>
  <!-- Activity for CSCI 111 -->
</head>
<body bgcolor="#ff00ff">
  <center>
    <h1> My Web Reference </h1>
  </center>
  <br><br>

</body>
</html>
```

You can change the hexadecimal code to a color that you prefer.

## Adding the first table

We will now divide the screen into two columns, the left column contains the text information; the right column contains a graphic (See example page at the beginning of this lab).

First, we will make a table. Tables are defined by rows. The “table row” tag, `<tr>`, marks the beginning of a row, and the tag, `</tr>`, marks the end of the row. Within the row, you can define the number of columns for the row. A column is started by the “table division” tag `<td>` and ended by the `</td>` tag.

Insert the HTML code listed on the right just before the `</body>` tag. Change the italicized text to three of your favorite things. Some examples have been provided.

## Code for a table with one row, two columns

```
<table>
  <tr>
    <td>
      Life is too stressful.
      <br>
      These are my favorite de-stress things:
      <ul>
        <li> Watch a movie
        <li> Eat ice cream
        <li> Exercise
      </ul>
    </td>
    <td>
      Second column for the graphic
    </td>
  </tr>
</table>
```

Notice that I have formatted the HTML code so that it is easy to see where the table starts and ends, where the row starts and ends, and that the columns are opened and closed within the row. You are not required to do this, but if you experience problems, you may find that strict formatting will help you find the problem.

If you ever have me look at your code, you must have it clearly formatted. I will return any messy code for reformatting before looking at it for errors.

## Adding the graphic

We will now add the image that you prepared in Lab 3.

1. Change the text "Second column for the graphic" to the `img` tag  
``. Note that there are **no commas** between the values.
2. Save the file and reload it to your Netscape Navigator. What happened?

**Note:** The Capture.jpg file must be in the same directory as this HTML file.

**Question:** What happens if you change the height and width numbers? You should adjust them so that your picture looks proper.

## Modified HTML code to include an image

```
<table>
  <tr>
    <td>
      Life is too stressful.
      <br>
      These are my favorite de-stress things:
      <ul>
        <li> Watch a movie
        <li> Eat ice cream
        <li> Exercise
      </ul>
    </td>
    <td>
      
    </td>
  </tr>
</table>
```

I have bold-faced the modified text.

## Adding a Horizontal Line

If you look carefully at the web page (page 1), you will see a horizontal line across the entire width of the page. This is easy to add.

1. After the `</table>` tag, insert the tag `<hr>`.
2. Save the file and reload. What happened?

## HTML with horizontal line

```
<table>
  <tr>
    <td>
      Life is too stressful.
      <br>
      These are my favorite de-stress things:
      <ul>
        <li> Watch a movie
        <li> Eat ice cream
        <li> Exercise
      </ul>
    </td>
    <td>
      
    </td>
  </tr>
</table>

<hr>
```

Again, I bold-faced the new code.

## Adding another table

Now we need to add a table of URL information (web sites)

1. Add the text on the right after the `<hr>` tag.
  - a. Notice that the “table header” tags `<th>` `</th>` start and end the header for the table.
  - b. Notice that each row is defined between the `<tr>` `</tr>` tags.
2. Save the file and reload it. What do you see? Take the time now to see how each box is defined in the HTML code.

**Question:** Now use your previous knowledge about formatting to bold face the “Comments?”

**Question:** Use your knowledge to also italicize the “Comments?”

## Code to add

```
<table>
  <th> Interesting sites </th>
  <tr>
    <th> URL </th>
    <th> Description </th>
  </tr>
  <tr>
    <td> Box 1: Row 1 Col 1
    </td>
    <td> Box 2: Row 1 Col 2
    </td>
  </tr>
  <tr>
    <td> Box 3: Row 2 Col 1
    </td>
    <td>
      Box 4: Row 2 Col 2
    </td>
  </tr>
</table>
```

Comments? Email me!

Four boxes are defined by this code.



## Adding an email anchor

What if you want someone to be able to email you? This shows you how to create an anchor for your email address. However, if the browser does not have an email application associated with it, this will not work.

For example, at school, you probably use Lotus Notes for emailing but use Internet Explorer for web browsing. If the link is not made, you may not be able to use this anchor to email.

1. Replace the "Email me!" text with the anchor tag  
`<a href="mailto:jdoe@stkate.edu">Email me!</a>`
2. Replace the "jdoe" with your own email address.
3. Save the file and reload it. What do you see? What happens when you click the "Email me!" text?

**Question:** How would you italicize the text, "Email me!"? Try it and see if it works.

## Modified HTML code with email anchor

```
<table>
  <th> Interesting sites </th>
  <tr>
    <th> URL </th>
    <th> Description </th>
  </tr>
  <tr>
    <td> Box 1: Row 1 Col 1
    </td>
    <td> Box 2: Row 1 Col 2
    </td>
  </tr>
  <tr>
    <td> Box 3: Row 2 Col 1
    </td>
    <td>
      Box 4: Row 2 Col 2
    </td>
  </tr>
</table>
```

Comments? **`<a href="mailto:jdoe@stkate.edu">Email me!</a>`**

The modified text has been bolded. Notice that my display has wrapped the text around. You can keep it all on one line. Since formatting is ignored by the HTML code (remember, it needs tags to know how to format), you could type it in just like this and still see the same thing.

Try it to prove it to yourself.

## Adding URL anchors

URL anchors take you to other web sites on the World Wide Web. You can add them to your web page as well.

1. Replace the text "Box 1: Row 1 Col 1" with the anchor tag `<a href="http://www.google.com"> www.google.com </a>`. Remember to save your changes.
2. What happens when you view it? What happens when you click `www.google.com`?
3. Now put in a description of this link in the column next to the anchor.

**Question:** Do you know which text to change? What happens if your text is too wide for the box?

## Code modified to include URL anchor

```
<table>
  <th> Interesting sites </th>
  <tr>
    <th> URL </th>
    <th> Description </th>
  </tr>
  <tr>
    <td> <a href="http://www.google.com">
www.google.com </a>
    </td>
    <td> Box 2: Row 1 Col 2
    </td>
  </tr>
  <tr>
    <td> Box 3: Row 2 Col 1
    </td>
    <td>
      Box 4: Row 2 Col 2
    </td>
  </tr>
</table>
```

I have highlighted the text that I changed. Again, because this page is narrower than your screen, I had to split the code into two lines. You can keep it as one line if you like.

## Adding a second page

Our second page is an entirely different separate HTML file. We will need to create another file that is also a web page.

1. Now create a different HTML file in the same manner you created MyPage.html, except this time, name the file MyPage2.html. (See Creating an HTML document if you don't remember how)
2. Modify the HTML code so it looks like the code on the left. It already has two rows added (one for google and the other for howstuffworks).
3. Visit these two sites and change Description 1 and Description 2 so that they describe the appropriate site (what's there, what it can be used for, etc).
4. Add 3 of the following anchors to the table. The link address should be in the first column and a generic description should be in the second column as a placeholder. Each site should be in its own row.
  - a. java.sun.com
  - b. www.htmlgoodies.com
  - c. www.stkate.edu/~yng
  - d. www.phonespell.org
  - e. www.wordsmith.org/anagram/index.html
  - f. www.photopoint.com
  - g. movies.go.com
5. Save and load the file (remember, you changed HTML files, so you will need to actually open this file).
6. Now visit each site you listed and fill in your description of what the site contains in the table.

## Code for the second page

```
<html>
<head>
  <title> A Second Page </title>
</head>

<body>
  <h1> My Web Reference (cont.) </h1>

  <table border="1">
    <th> Interesting sites </th>
    <tr>
      <th> URL </th>
      <th> Description </th>
    </tr>
    <tr>
      <td>
        <a href="http://www.google.com"> www.google.com
      </a>
      </td>
      <td>
        Description 1
      </td>
    </tr>
    <tr>
      <td>
        <a href="http://www.howstuffworks.com">
          www.howstuffworks.com </a>
      </td>
      <td>
        Description 2
      </td>
    </tr>
  </table>

</body>
</html>
```

Take the time to make sure you understand this code. It will be important part of an organized web page.

## Adding an internal link

Now that you have both pages defined (files MyPage.html and MyPage2.html), you need to be able to link them together so they look related to each other.

So how do we get from page 1 to page 2 and back again? We were able to get from page 1 to an external web page (one that is outside of our little computer). We can use a similar format to get to an internal web page (one that is on our computer).

1. Open the MyPage.html file back into Notepad.
2. Change Box 3: Row 2 Col 1 to the anchor tag  
`<a href="MyPage2.html"> See more </a>`
3. Save the file and load this page back again.

**Question:** What happens when you run the page in the browser? What happens when you click the text “See more”?

**Question:** Now that you have switched to the 2<sup>nd</sup> page, how can you get back to the first?

4. Add the appropriate anchor to MyPage2.html so it will take the user back to the first page.

## Using Test Code

If you want to challenge yourself, download there posted test codes for music and video and see if you can get them to work with your own movie or audio clip.

As with more sophisticated capabilities, some of the code is hardware or software dependent. You have to decide how generic or specialized your want your web site to be.

## Code modified to include internal link

```
<table>
  <th> Interesting sites </th>
  <tr>
    <th> URL </th>
    <th> Description </th>
  </tr>
  <tr>
    <td> <a href="http://www.google.com">
      www.google.com </a>
    </td>
    <td> Box 2: Row 1 Col 2
    </td>
  </tr>
  <tr>
    <td> <a href="MyPage2.html"> See more </a>
    </td>
    <td>
      Box 4: Row 2 Col 2
    </td>
  </tr>
</table>
```

I have highlighted the text that I changed. Recall that this box is in the second row, first column

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