

# CS101 Lab Assignment 2

## Creating a simple web page with HTML

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In this lab, you will create a simple web page using HTML. You will be using a text editor to create the web page, NOT Microsoft Frontpage or Macromedia Dreamweaver. You will also place your web page on the Internet, at [http://studentweb.cs.wvu.edu/~your\\_username/lab2.html](http://studentweb.cs.wvu.edu/~your_username/lab2.html).

### Your space on the Internet

In order to make a web page available on the Internet, you need to be able to place it on a web server. Such a server is located at <http://studentweb.cs.wvu.edu>. This web server provides web pages for students in the Computer Science department. If you go to <http://studentweb.cs.wvu.edu> in your web browser, you will see a list of users who have web pages on that server. Your space is at [http://studentweb.cs.wvu.edu/~your\\_username](http://studentweb.cs.wvu.edu/~your_username). To put files into this place:

If you are using Linux create a directory called `public_html` in your home directory. Do not capitalize anything in `public_html`!

If you are using Windows you may have to stop and use Linux. Currently access to the CS department web server from Windows is not working. If this has been fixed by the time you do this lab (ask your TA if this is so), create a directory called `public_html` in your drive M. This should not be inside any other directory. Do not capitalize anything in `public_html`!

As you may have noticed from the following, drive M in Windows (in the CS labs) is the same as your home directory in Linux. You can use this to transfer files between the systems. This also means you can edit your web page from either Windows or Linux. This drive is also available for remote access via SCP and SFTP.

The CS department web server automatically assumes any files in your newly-created `public_html` directory are to be available on the Internet. Try it: Move any file into your `public_html` directory, and then go to [http://studentweb.cs.wvu.edu/~your\\_username](http://studentweb.cs.wvu.edu/~your_username) in a web browser, substituting your username. My username is “longs2”, so I would go to <http://studentweb.cs.wvu.edu/~longs2>. You should see a listing of all the files in your `public_html` directory.

## Creating a web page

You will be using a text editor, rather than a more “automatic” program such as Macromedia Dreamweaver or Quanta. If you are using Windows, you can use notepad, but I would recommend using notepad++, which you can find in the start menu. On Linux, gedit and kwrite are both good text editors. gvim is somewhat more complicated but can be faster to use once you are good at it. In the text editor of your choice, start your web page off with:

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
```

This is to indicate to the web browser what version of HTML you are using. After this, add the tag `<html>` on the next line. You must also close this tag. The closing tag is `</html>`. Place this tag a few lines farther down.

Inside the space between the `<html>` and the `</html>` tags, place the following HTML:

```
<head> <title> Lab 1 web page </title> </head>
<body>
  <b> This is a web page on the Internet! </b>
</body>
```

Save the document in your `public_html` folder, as `lab2.html`. Try your web page. I recommend using Firefox to test with.

## Improving your simple web page

Replace the line that said “This is a web page on the Internet!” with some more interesting content. Write a paragraph about an activity you enjoy, and use the following format tags:

Bold `<b>`  
Italic `<i>`  
A header `<h1>...<h8>`  
Font color `<font_color='some_color'>`

You may use the format tags for whatever you like, as long as they are used correctly. Remember that tags can be nested, like this:

```
<b><i>This text is both bold and italic!</i></b>
```

Always close tags in the order in which they were opened.

## Adding a link and a picture

Find a web page which relates to the content of your web page in some manner, and create a link to it. For example, if your web page was about bicycling, you could link to Harris Cyclery <http://www.harriscyclery.com>. A link to Harris Cyclery would look like this:

```
<a href="http://www.harriscyclery.com">Click here to visit  
Harris Cyclery!</a>
```

Note the similar structure to other tags. You can nest tags inside links if you like<sup>1</sup>:

```
<a href="http://www.harriscyclery.com"><b><blink>Click here to  
visit Harris Cyclery!</blink></b></a>
```

Similar to a link, you can add a picture. The general form for a link to a picture is this:

```

```

Try it: Put the example above into your web page, and it will result in a picture of a cute kitten on your web page. But, remember the image switching prank from class on Friday! You want to host the picture yourself. That is, you want to put the picture into your `public_html` directory and link to it there. To do this, download the picture (you can right-click on a picture and click “Save Image As...” to do this), and save it in your `public_html` directory. Then change the link so it looks like this:

```

```

Because your web page and the kitten picture are now on the same web server, you can omit much of the URL. The following will work:

```

```

This is now a relative link (rather than an absolute link).

Find a picture which relates to the activity your web page describes, and put it on your web page.

## Lists

Lists are done using the following tags:

- <ol> creates numbered lists. <li> tags are used for list items.
- <ul> creates bulleted lists. <li> tags are used for list items.
- <dl> creates definition lists. <dt> and <dd> tags are used for list items.

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<sup>1</sup>The blink tag does not work in Microsoft Internet Explorer, but does work in Firefox, Netscape, and others

Here is an example of an unordered list:

```
<ul>
  <li> Item one </li>
  <li> Item two </li>
  <li> Item three </li>
</ul>
```

Figure out a way to work a list into your (now not so simple) web page. For example, you could list reasons that other people should try the activity your page is describing.

## Tables

Create a new web page, being careful to include the version of HTML you are using. On this web page, make a table with your class schedule in it. Remember from class that tables are started with the `<table>` tag, and contain rows which use the `<tr>` tag. Rows contain either data `<td>` or headers `<th>`. Here is an example of a table:

```
<table border>
  <tr>
    <th>Items</th>
    <th>Cost</th>
  </tr>
  <tr>
    <td>5</td>
    <td>$85</td>
  </tr>
  <tr>
    <td>10</td>
    <td>$140</td>
  </tr>
</table>
```

Call this new web page “schedule.html”. Make a link to it from the first web page you created, using a relative link (not absolute).

## Test your web page

Open your web page in some web browser other than the one you have been using to test it. On Windows, both Mozilla Firefox and Internet Explorer are available. On Linux, Mozilla Firefox, Galeon, Konqueror, and a few others are available.

You do not need to turn this lab in on Blackboard. It is accessible to anyone with Internet access. For grading purposes, the URL of your web page will be assumed to be `http://studentweb.cs.wvu.edu/~your_username/lab2.html`. If it is somewhere else, it may not be found and graded, so make sure it is accessible at that location.