

## Background

In Lab 1 you covered:

- Basics of HTML and HTML syntax

In Lab 2 you will cover more HTML syntax and features:

- HTML Tables and Forms

## Introduction

At this point you should have finished lab 1 and have a simple website up and running with basic HTML! We have already provided you with some starter code for Lab 2 that is basically the finished version of Lab 1, except for a couple of additional images. You have the option to continue working off of your Lab 1 code (recommended) in this lab, or work off of the provided starter code for Lab 2. **If you decide to work off of your Lab 1 code, make sure you copy all the images in the images folder of the starter code into your existing folder.**

This lab is designed to familiarize students with more advanced HTML elements including tables and forms. This lab will also help students learn how to organize HTML code to later be complemented with CSS. We will not be using any styling in today's lab. You are going to continue to build a professional website that showcases your background and resume.

Note: Please make use of <http://www.w3schools.com> and your "Beginning HTML and CSS" book by Larsen.

## Directions

1. Download the starter code from Canvas. Unzip the starter code in a directory on your computer. Navigate to the folder and review the materials. The directory contains 'index.html', 'projects.html', several images, and a pdf resume. **Note: remember to copy all the images from the starter code to your existing images folder if you are working off your Lab 1 code and not the full starter code!**
2. Go back to your index.html file, or Lab 1 to find out which HTML file you are missing. (Hint: Look at the `<nav>` tag and see which `<a>` tag links to a missing HTML page.) Now create the missing file with the correct name.

**(Note:** Since most of you are using Sublime or other text editors, a cool trick is to just drag

your project folder to the editor, and you will have access to all the folders. Make sure you do not change the locations of your files. If you do close sublime, just reopen it.)

3. Now open up the new HTML file in your favorite editor and copy paste everything from "index.html" besides what is inside the **<div id="content">** tags. (Note: This is exactly the same thing you did for the 'projects.html' page from Lab 1.)
4. Open 'index.html' on your browser and verify that all the links work and direct to the right pages.

Note: You should have 3 pages now: index.html, projects.html, and contact.html that all have the same header/footer and navbar, but with different content.

5. Now add a new sidebar to each of the pages with some special information about yourself. First go to 'index.html' and make a **<div>** with **id="sidebar"** between the content div and the footer inside the body. It should look something like the screenshot below.

For the section labeled **A** (in the white out box in the code example below), we blanked out two image link tags that you need to write yourself. Look at the email image link as an example. (Note: All the necessary images can be found in the images folder).

- a. The first element should be the LinkedIn image that links to your LinkedIn profile.
- b. The second element should be the Facebook image that links to your Facebook profile.

After you create the sidebar for 'index.html', copy and paste the sidebar into the other two pages since you want to have the same layout for each page.

When you are done make sure that the images are present, and that they link to the correct place. If you run into trouble there are several things you can do. For example, you can google the tags or the problem like "How do I make an image a link?"

```

<div id="sidebar">
  <h3>Find Me</h3>
  Jane Doe <br/>
  <a href="http://www.cmu.edu" target="_blank">Carnegie Mellon University</a><br/>
  5000 Forbes Avenue<br/>
  Pittsburgh, PA 15213<br/>
  412-268-0000 (h)<br/>
  412-555-5555 (c)<br/><br/>
  <a href="mailto:jquesenberry@cmu.edu"></a>
  [Redacted]
</div> <!--Close sidebar -->

```

*Extra Information: There are many front-end frameworks that help make and organize websites. You may have heard some of these names like Foundation, or Bootstrap. These libraries help you organize the layout, but before learning them it is important to understand how layouts in a website work. It is essentially like stacking boxes until they don't fit and putting them in the next row. These boxes are the divs, and other attributes. As you build your website it is important to see how this structure works. We will learn more on this as the labs move forward.*

6. Next you should add a heading **<h3>** tag within the content div with each page's name. So for "projects.html", the header should be "Projects" and for "contact.html", the header should be "Contact."

```

35  <div id="content"> <!-- Use div tag with an attribute of an id = content (i.e., this div's unique name) -->
36    <h3>Projects</h3>
37
38
39    <!-- LAB 2 WORK GOES HERE -->
40
41  </div> <!-- Close content -->

```

7. Save all the files and open up the index.html, projects.html and contact.html files in your browser and your editor. You may wish to keep your website with the placeholder images, content and links provided in Lab 2. Or, you may replace the placeholder content provided in Lab 2 with the custom HTML content you developed in Lab 1. Either way is fine, but, note the following characteristics of the website:
  - a. The relative links between the three pages: about, projects and contact.
  - b. The placeholder content in the index.html page (image, text and link to a resume in a new window).

- c. The new Find Me content on the bottom of each page of the website.
  - d. Under the Find Me section, the mailto link with an image rather than text.
  - e. Under the Find Me section, the absolute links to Facebook and LinkedIn with images rather than text.
8. Now you are finished with the basic page layout and setup for all 3 pages. (Check with a TA if you have questions.)
9. Navigate to the projects.html file. You are going to build a table in the content to display the various projects you are working on in this class as shown below (you may include other projects if you wish):

Course Projects		
Title	Course	Semester
Case Analysis Project	67-250	Spring 2016
Web Development Project	67-250	Spring 2016
Database Project	67-250	Spring 2016

The table should contain at least three columns and five rows. The table element should be used with the **<table>** tag. **<tr>** represents a row. **<th>** for table heading and **<td>** for columns. Include a **border attribute** and set it to **4** to verify your table is properly organized. Use the **colspan attribute** to make the text 'Course Projects' appear across the columns in the first row.

To build a table look at either [http://www.w3schools.com/html/html\\_tables.asp](http://www.w3schools.com/html/html_tables.asp) or in chapter 5 of the Larsen book.

Save your HTML document. Refresh your HTML document in the browser. Verify the content in the projects page looks similar to the below:

<b>Jane Doe</b>																	
<b>Carnegie Mellon University, Information Systems Program</b>																	
<a href="#">About</a>   <a href="#">Projects</a>   <a href="#">Contact</a>																	
<b>Projects</b>																	
<table> <tr> <th colspan="3">Course Projects</th></tr> <tr> <th>Title</th><th>Course</th><th>Semester</th></tr> <tr> <td>Case Analysis Project</td><td>67-250</td><td>Spring 2015</td></tr> <tr> <td>Web Development Project</td><td>67-250</td><td>Spring 2015</td></tr> <tr> <td>Database Project</td><td>67-250</td><td>Spring 2015</td></tr> </table>			Course Projects			Title	Course	Semester	Case Analysis Project	67-250	Spring 2015	Web Development Project	67-250	Spring 2015	Database Project	67-250	Spring 2015
Course Projects																	
Title	Course	Semester															
Case Analysis Project	67-250	Spring 2015															
Web Development Project	67-250	Spring 2015															
Database Project	67-250	Spring 2015															

10. Open the contact.html file in both your editor and your browser. You are going to create a contact form to allow others to get in touch with you.

Forms (**<form>** tags) allow users to input data (ex. checkboxes, text boxes, radio buttons, dropdowns, etc.) and send that data to the server. We have all used a form online at some point, from entering a comment on Facebook to signing up for account on some website. Each form is consisted of a mixture of labels (**<label>** tag) and fields (**<input>** or other equivalent tag).

More information about working with HTML forms can be found at:

[http://www.w3schools.com/html/html\\_forms.asp](http://www.w3schools.com/html/html_forms.asp) or in chapter 6 of the Larsen book.

- a. Start a new form by using the **<form>** element.
- b. Invite the user to enter his/her name. Include a textbox with label [Name] with a size of 20, max length of 250. The text box's default value should be "Your Name."
- c. Invite the user to enter his/her date of birth. Label text should be [Your date of birth]. Make sure you use the appropriate input so that the box shows mm/dd/yyyy as default.
- d. Include another input element to allow the user to choose their preferred flower colors. Label it [Your favorite flower color.] Test it: try and see if you can select the Orange color...
- e. Include another text area for label [Message] with 10 rows, 50 columns and a max length of 1000.
- f. Add a select box so that the user can inform you how they heard about you. Label text should be [How did you find out about me?]. Values of the select box should be: 'Google', 'News article', 'Friend' and 'Other.' The option 'Google' must appear by default.

- g. Add a check box [Yes, Please update me!] to indicate whether the user wants to sign up for email updates. The check box should be preceded by a label [Please indicate if you want to receive news updates via email].
- h. Add a way to ask for an email address. Make sure that the form cannot be submitted without an email. Make it so that there is a display of how the email format should be (abc@defg.com). The email box should be preceded by a label "Please provide your email address."
- i. Allow the customer to choose a password. Its maximum size should be 20. The password box should be preceded by a label "Choose a password."
- j. Add a submit button at the end using the image submit.png provided.
- k. Structure your form by grouping the information together. I grouped the elements into "Tell me more about yourself..." (parts b, c), "Tell me about your preferences..." (parts d, e), and "Let's stay in touch..." (parts f-i). (**hint:** use fieldsets and legends tags to separate into groups with headings)

11. Save your HTML document. Refresh your HTML document in the browser. Verify the form in the contact page looks like the below. Please note that your form will not submit to anywhere, but should include form validation where appropriate. For example, try entering an invalid email like "john@cmu" and pressing submit.

**Jane Doe**  
**Carnegie Mellon University, Information Systems Program**  
[About](#) | [Projects](#) | [Contact](#) |  
**Contact**  
Please use the below form to get in touch with me.  
Tell me more about yourself...  
Name:  
  
Your date of birth  
  
Tell me about your preferences...  
Your favorite flower color  
  
Message:  
  
Let's stay in touch...  
How did you find out about me?   
Please indicate if you want to receive updates via email  
☐ Yes, please update me!  
Please provide your email address  
  
Choose a password  
  
  
**Find Me**

12. Take a screen shot of each of your webpages displayed in the browser. Save these images to your directory. The TAs will use this (plus your code) to grade your lab.
13. **If you complete the lab during class – show your work to the TAs or Prof Q before you leave.**

Whether you finish in class or at home – please submit your completed lab (source code files and images) to the dropbox in Canvas before class begins on Tuesday, March 7, 2017.

Your submission must be titled andrewID-lab2.zip. Thus, my submission would be titled jquesenberry-lab2.zip. Late submissions will not be accepted.

**Congratulations – you have just built a website with a simple table and form!**