

Webpage Layout with HTML + CSS

CA 155 – Personal Website Project

In this lab exercise, we will be taking some pre-existing HTML code and editing it to customize the display and layout of the page. We'll do this by adding several HTML container elements and then using an external CSS stylesheet to control how each of those containers should be displayed.

Part Zero: Download the Example Files

To get started with this exercise, download a copy of the example files from: <https://go.wisc.edu/04wy35>

1. Click the Download button in the top right of the page. This will save a .zip file to your computer's download folder.
2. Open this .zip file to get a copy of the website directory
If you're on a Mac, you can just double click the .zip file
If you're using Windows, you should right click (or Control + Click on a laptop) the .zip file and select "Extract Here..."
3. (optional) Move this folder into your Sites directory to help you stay organized. If you're not planning on using this example after today, it's okay to just delete it once you're finished.

Part One: Decide what boxes the page will need to have

1. Find the file "index.html" and open it in Dreamweaver.
If the page opens in your web browser instead, try right clicking on the file (or Control + Click if you're on a laptop) and using the "Open With..." option
2. Look through the HTML code to understand how the page is structured.

Imagine that we want to have the header ("My Meme Page") span across the entire width of the page, but we'd like the navigation menu to be placed to the left of the main page content. Additionally, we'd like to somehow separate each part of the main page content from one another.

Think about how you are going to group the various parts of the page. It may help to use a blank piece of paper and sketch out a basic layout of the page and label the different boxes.

Part Two: Place your page content into those boxes

1. In the "index.html" file, edit the code to add HTML 5 container elements to organize the page content. For example, you might choose to use:
<main>, <header>, <footer>, <nav>, <section>, <article>, <aside>

** See pg 432-440 of the Duckett book for more information on each of these tags

2. When you add one of these container elements, don't forget to also include the closing tag *after* the content. If you add <nav> be sure to also add the </nav>
3. Make sure that as you edit the page, everything is still contained within the body of the page. *All content that you want to be visible* should be between <body> and </body> in order for your code to be valid HTML.

Part Three: Use CSS selectors to target each box

1. Go back to the folder that you downloaded and find the CSS folder. Open "style.css" in Dreamweaver
To set up the page layout, we'll need to write CSS rules that apply to each of the container elements that we added in Step Two.

2. In the style.css file, add selectors for each of the container elements that you are using on the page. We'll add the rules later in Step Three, so for now you can leave the space between the curly braces blank. For example:

```
body {  
  
}
```

See pg 238 of the Duckett book if you need a review of the syntax for CSS selectors

Part Four: Use CSS to manipulate and style the boxes

(As you work through this section, remember to regularly save your work and preview the styling in a browser to test how it's looking)

1. Start by setting the width of the top-level container (the <body> element) to 960px. You can also edit the margin to "center" the page on the screen. For example:

```
body {  
  width: 960px;  
  margin: auto;  
}
```

2. Set the width of each container element using CSS rules. Think about how wide each container should be in relation to the 960px wide body.
3. Add background-color declarations to customize the display of each container
4. Use floats to control how different containers should exist alongside another. For example:

```
nav {  
  float: left;  
}  
main {  
  float: right;  
}
```

5. Use margin and/or padding attributes on each element to fine-tune the spacing between different parts of the page

Hint: if you don't want to control the margin on *all* sides of a container, you can use margin-top or margin-bottom (or margin-left / margin-right)

Part Five... and Beyond! Some Extra Challenges:

If you finish early, take a few minutes to try out some of these additional challenges:

We used absolute units (pixels) for our design. How would you design this page using relative units, such as %, instead?

Can you make it so the menu items change color when you hover over them?

Can you change the text size for just the menu?

Can you change the text color for only one section?

Can you make the <nav> display horizontally under the <header>? What new CSS rules will be needed?

You can access a copy of the demo files at various stages of the process here: <https://go.wisc.edu/1m181r>

For more information, don't forget to review our assigned reading:

Duckett, Jon. *HTML & CSS: Design and Build Websites*. Indianapolis, Indiana: John Wiley & Sons Inc, 2014.



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