

Web Design & Publishing

Responsive Design

You are now developing Web sites to work on many different types of devices, desktops and laptops with different monitor resolutions, tablets like iPads and a variety of mobile phones. This becomes challenging when trying to provide a consistent experience for all your users. Some have developed mobile apps in languages native to the device. These tend to work well on certain devices, but have to be maintained separately from the main website. There are times when this is appropriate, when apps need to use advanced GPS or accelerometer features. However, if you just want to recreate your Web site experience on a variety of screen sizes, using responsive design is often the best way to go.

Responsive design combines techniques in HTML and CSS (and sometimes JavaScript) to allow you to detect the screen size and adjust the layout. Your content remains the same.

You have two different layouts from which you can begin. See the Course Outline. One has navigation across the top and one on the side. If you size the browser window so that it is smaller, like cellphone size, you can see the changes that the CSS makes to the layout. Navigation adjusts and the sidebar moves to the bottom. You can do any number of changes to your layout at the smaller size.

1. **Fluid layout.** Use percentages to size your main divs, so that they change with the screen size. You can allow a max-width to prevent your site from showing at a larger format.
2. Use **media queries** to provide additional, special styles at certain sizes. See the media queries section of the CSS. Depending on the items in your navigation, you may need to do additional tweaking of these items.
3. For **iPhone viewing**, you have to add this line of code to the `<head>`, so that it overrides the default to simply shrink the content to fit the iPhone screen. You will see this in the HTML.

```
<meta name="viewport" content="initial-scale=1.0, width=device-width" />
```

We have introduced some new divs in this layout, including `aside` for your sidebar and `article` to differentiate from the `section`. Both `article` and `aside` go in `section`. `.figure` and `.figcaption` are special classes you can use any time you want to have an image with a caption.

You will need to play around with the stylesheet to become familiar with exactly how it works. Take your time to understand how the CSS works with the HTML as you add your content and images to your site.

» Saving and Fetching

Work on this project in a brand new folder. When you Fetch, make sure you make a new folder under `public_html` to upload your project. Make sure you are in that folder when you Fetch. Then, you will make a link on your assignment page like this:

```
<p>Project 3: <a href="foldername/index.html" target="_blank" title="Title of your project">Title of Your Project</a>
```

where "foldername" is the name you gave the folder, and "Title of Your Project" is the title of your project.