# W2 Lab 2: Web Development Tools & Responsive Design

In the first part, learn about web development tools, including page inspection, using browser tools and plugins such as Firebug and Responsive Design View. In the second part, take a basic non-responsive website and make it responsive at two breakpoints with media queries. **This tutorial is conducted in pairs.**
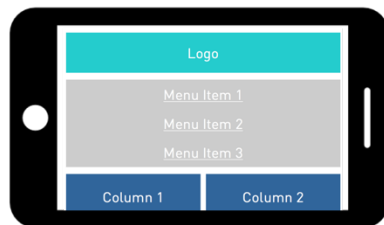
## Instructions: Responsive Design

1)  Clone/download the example provided in the W2 Lab repository:
    `git clone git@github.com:CSC309summer2016/w2-lab.git`
2)  Open up the index.html and style.css files in your text editor. Note that we're using badly-formed `<div>` tags instead of semantic elements to get comfortable with classes and element types in CSS; this is **NOT allowed** in Assignment 1.
3)  Using a **mobile-first** approach, style from the smallest screen to the largest according to the mockup images below. Check how your styles render on different screen sizes with Responsive Design View (Firefox: Menu > Developer).
    a.  Breakpoints: **480px** (mhoriz), **1280px** (desktop); yes, we're skipping a lot!
4)  Ensure that the layout and positioning roughly match the mockup images below:



Vertical Orientation: 320 x 480 px

Horizontal Orientation: 480 x 320 px

Desktop: 1280 x 600 px

## ⭐ **Advanced**

Many responsive websites hide the main menu and provide a menu button to show/close the menu for smaller screen sizes. There are a couple of hacky, non-semantic ways to do this in CSS, but the easiest and most semantic approach is to use a little bit of **JavaScript**, such as:

```
<button id="menu-button">Menu</button>
…
<script type="text/javascript">
   document.getElementById('menu-button')
      .addEventListener('click', function() {
         document.getElementById('menu').classList.toggle('open');
      });
</script>
```

Note that the `<script>` snippet should be inserted just before the `</body>` tag.

What this does is add or remove an 'open' class applied to an element with ID 'menu' when a button with ID 'menu-button' is clicked. Can you style the menu so that it shows and hides based on whether or not the 'open' class is applied to it?

Tables are notoriously hard to make responsive, especially on very small screen sizes (phablets and smartphones). Create a four-column table with multiple rows (and even add some `<th>` header elements if you're brave). Using CSS, can you make your table responsive on screens that are 320 pixels in width?

## ⬆ **Deliverable:**

All of your website files (even if you're not done) submitted as a single zip named YOUR_LAST_NAMES-l2.zip to MarkUs. At the least, you should include the following files: index.html, style.css, and a readme.pdf file that includes your names, CDF IDs, and emails.

## ❗ **Due:**

Tutorial day by 9:30pm; pass/fail, 1.5%.