

Journal

This project was a great introduction to flex and to bootstrap. It was insightful to get used to using frameworks and language features (in the case of flex) that are used all over the web. This journal will go over some of the trouble I encountered using the technologies:

- I was excited to use Bootstrap most of all for this project. I've seen how elegant and easy it can make web design. The first question I had was where to get it from: typically, I'll just download libraries like jQuery, or use a package manager like npm for React, but Bootstrap comes with more options. I ended up going with a CDN, so I didn't even have to download it! This is really cool. I downloaded a copy of Bootstrap anyway to bundle everything together in one place.
- Next, opening up the Chrome console, I encountered an Uncaught TypeError from minute 1 of including Bootstrap from the CDN. I haven't found how to get it to go away, and this does seem to be a bug with Bootstrap itself according to a couple online forum posts I've found.
- For some reason, organizing things horizontally in CSS is intuitive to me, but organizing things vertically isn't. This had always been my struggle back in the day – although my last web development class was in high school in 2009 – and I hated having to resort to ugly solutions that were common back then, like using `<table>`s to organize entire websites. I wanted to take a minute in my journal to write about how awesome Bootstrap is. Still, its drawback seems to be inflexibility. While Bootstrap can do a lot of things, it doesn't seem to bode well for easily resizing windows or for developers who want to reorganize things.
- One thing Bootstrap helped me with quite a bit was with organizing the `` element on `index.html`. I wanted to center some parts of the div but keep others left-aligned. It turned out that Bootstrap has a handy class "text-left" that does exactly that, so I could add that to the `` element without needing to do anything else. While Bootstrap was a bit clunky for my first time using it, I can tell that with practice it will be very smooth.
- I struggled for a while with Flex organization, which I used on my main page. It was important for me to remember that before elements can be flexible, their parent needs to have the "display: flex;" CSS attribute. With that in place, my next struggle was getting everything to "stretch" downward. It took me a while to realize that flex doesn't do deal with arbitrary spaces and that I needed to be more explicit with my heights on `index.html`. (Incidentally, this led me to my next discovery, which was that I had been programming on a monitor which was much too big to be representative.)
- Making flex not look *too* strict: most flex tutorials on the Internet will have a horde of boxes and squares pushed up right against one another. While this isn't a bad approach, I wanted my site to appear a bit more fluid (and probably too early-2000sish when all

was said and done...). I wanted to design my site around negative space. I did this with several invisible flex containers that simply let the light shine through.

- Potentially overdoing it on the CSS classes: I wanted to have the flexibility to make CSS classes that had a general purpose but also were useable for more specific operations. Unfortunately, this led to a lot of things like “#main-content-about” and “#main-content-projects.” I’m sure there is a more efficient way for me to go about organizing this.
- The thing this assignment made most exceedingly clear to me is that web development and web *design* are two entirely, completely, different things. I’ve worked for several months at a web development company, but we just make various API calls and present information on a grid. It’s hard to make a good looking site with this approach. After working on this project, I think I’m going to study a bit of web design on my own. This is something that I didn’t really resolve while working on it.
- Most other things, I would say, were fairly straightforward.
- Outside libraries and code used:
 - Bootstrap (obviously)
 - I used a tutorial on the Bootstrap site to inspire my navbar setup.
 - I used <http://crop-circle.imageonline.co/#circlecropresult> to crop all my images into circles. Pretty handy tool.