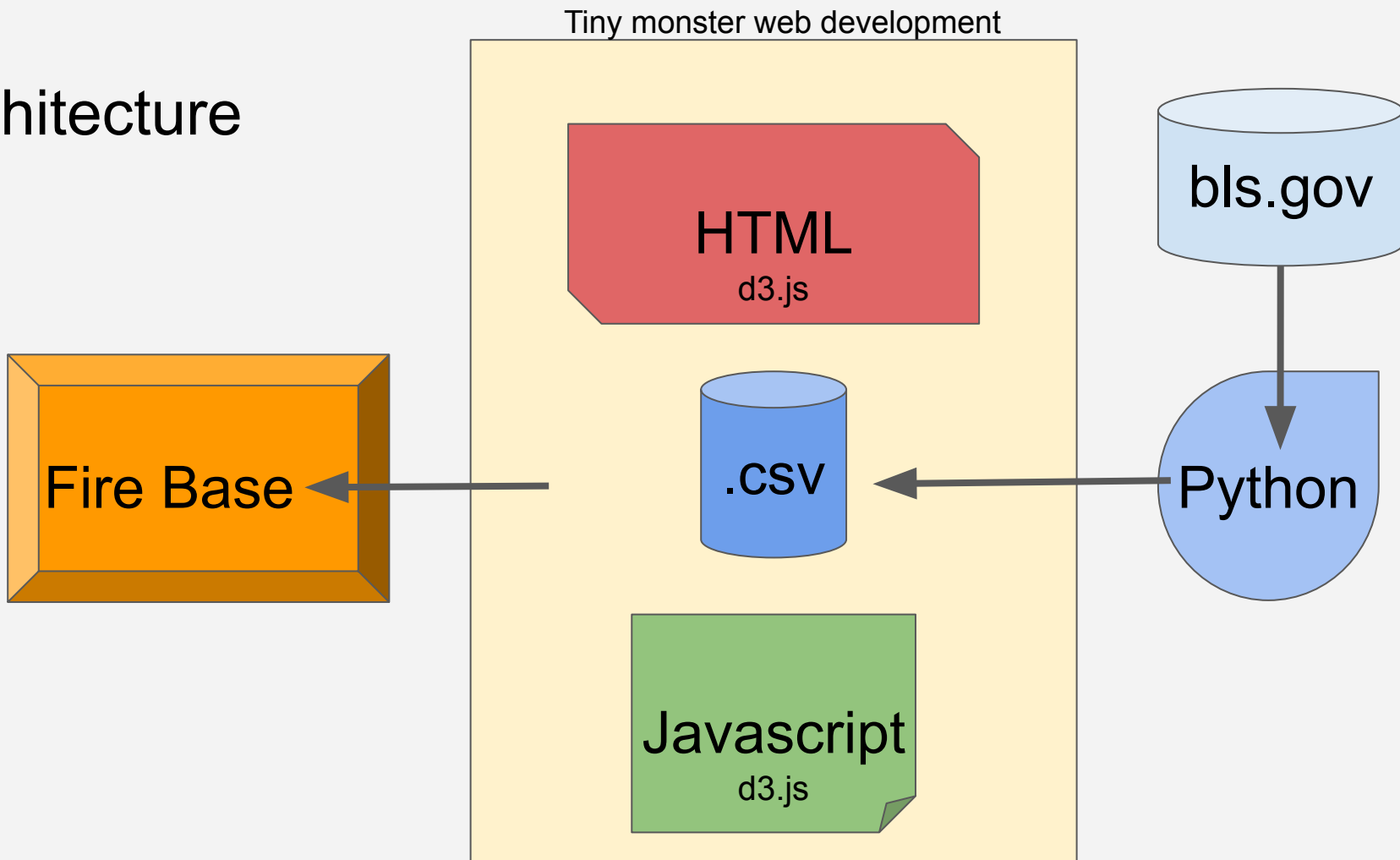# IT Related Pay Visualization

By: Hailee Kiesecker

Problem

- New graduates do not know what their degree is worth outside of college

- Job offers that students are getting could sound amazing!

- However, what if they are being dramatically underpaid?

- General students should know what to expect from their salary after obtaining their degree depending on their location.

- We need to let recent graduates know how much they are worth within each state and if that state is a good match for them

Architecture

Tiny monster web development

HTML
d3.js

bls.gov

Fire Base

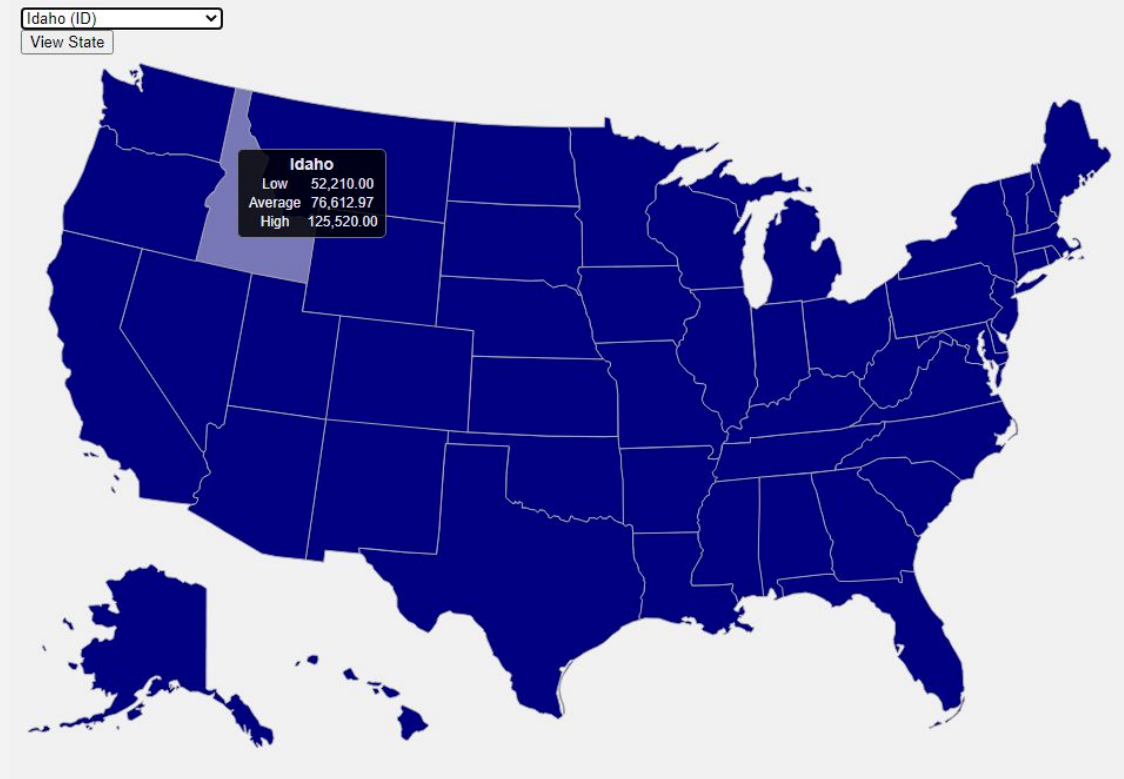.csv

Python

Javascript
d3.js

US States Map

Showing the US State map you can see by state:

- Minimum
- Maximum
- Average

of pay salary for full time persons in the computer and mathematics fields.

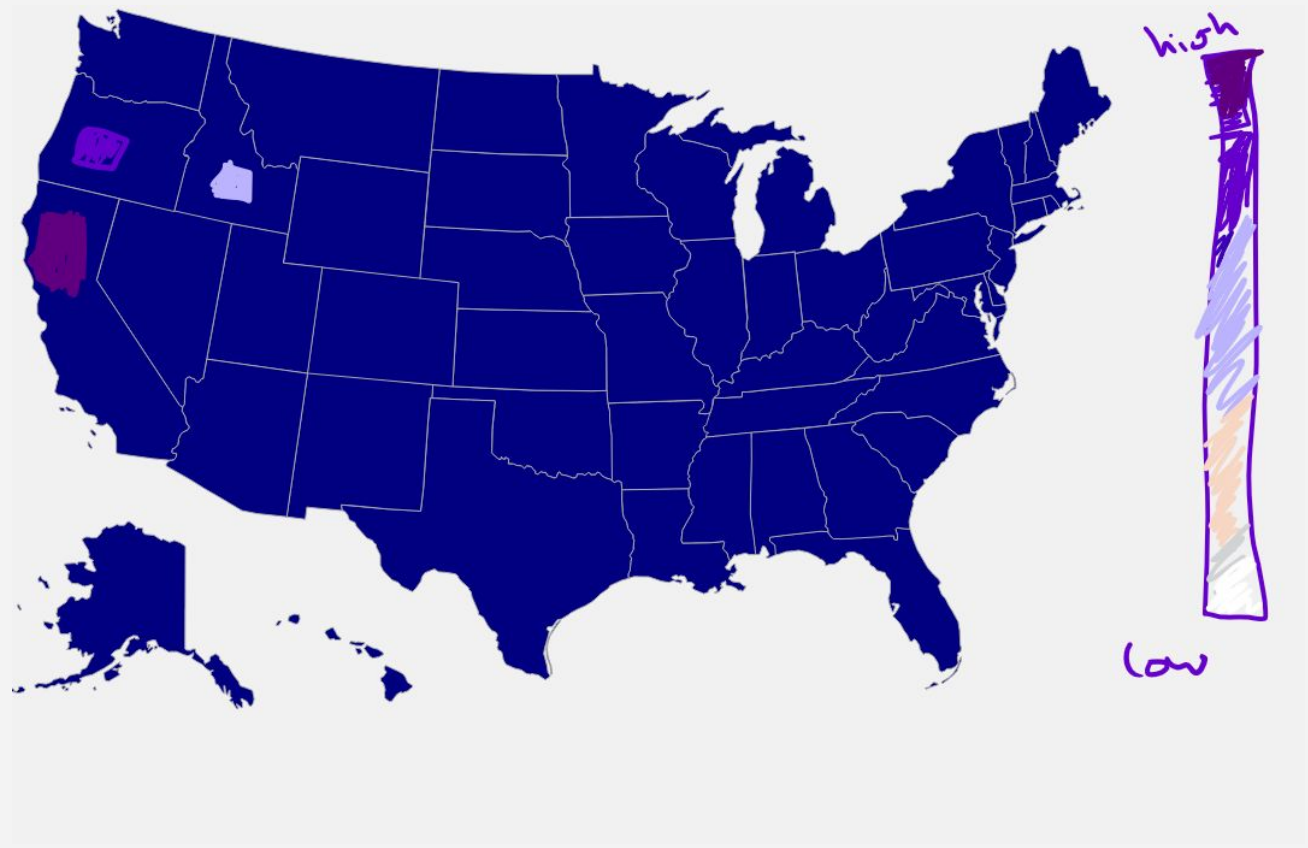This information was provided by US Bureau of Labor Statistics

Features to be Added

Adding a color scale to the US state map.

The scale will be from the highest average state's salary to the lowest.

This will allow a user to see at a glance which states have the best average pay for computer and mathematics fields.
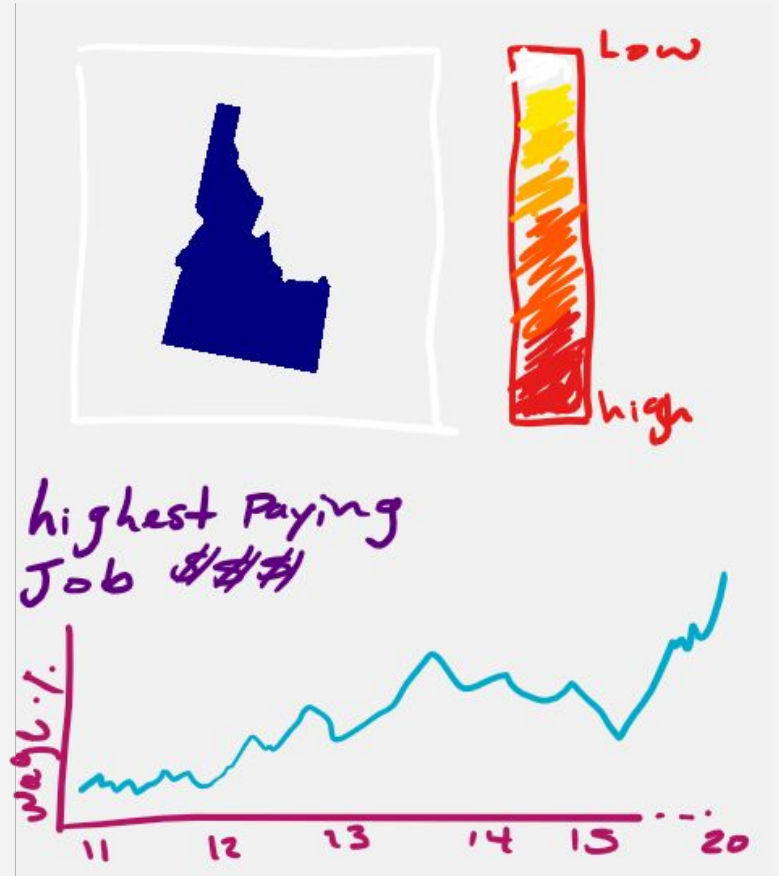
By State a Clearer Picture

The title of the job field that has the highest paying salary.

See how Professional & Business services wage/salary improving through the years.

View the unemployment rate in comparison to other states

- Downside, information xlsx files for individual states

Might include

Education levels National (not specific to CS majors) their unemployment rates
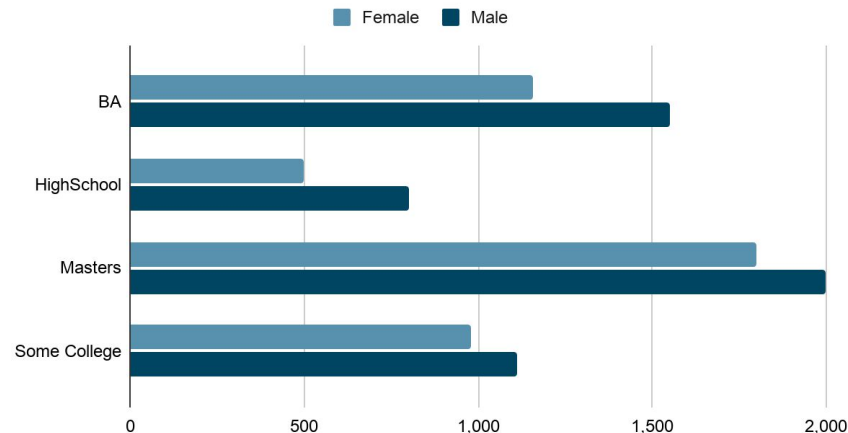
Male and female comparison of that pay level

Example:

Weekly Earnings

Female Bachelor's degree : avg weekly $: 1,159

Female Bachelor's degree #'s: 26,404 (in thousands)

Female Unemployment rate w Bachelor's degree : 2.2

Male Bachelor's degree: avg weekly $: 1,552

Male Bachelor's degree #'s: 23,646 (in thousands)

Male Unemployment rate w Bachelor's degree : 2.2

Results

CA and WA for the Win?

Using the interactive US state map It is my hope that students can make an informed decision in the future on where they would like to work and have a basic idea of what their salary should pay.

It should be a fun experience once everything is working properly.

California and Washington have the highest average salaries for Computer and Math related fields.

Not surprising, high cost of living.

Struggles

The U.S. Bureau of Labor Statistics is a great resource.

Multiple tables spread across a wide website is very hard to navigate. Sheets are not properly labeled when clicking links

Wanting to see the M/F ratios by state and occupation is non existent.

They do not consistently label their occupations with the same ID numbers through multiple tables.

Using FireBase as a web hosting platform was relatively easy to figure out and use

Setup time and understanding was about 1 hour initially.

Working more with it I could not understand how to get it to use multiple resources past its index.html

So even though I made a very pretty interactive website at first, I am now modifying it to all fit on one page.

Example of US Bureau of Labor Statics Confusion

		2019				
		Percent of total employed				
	Total employed	**Women**	**White**	**Black or African American**	**Asian**	**Hispanic or Latino**
	157,538	47.0	77.7	12.3	6.5	17.6
	64,218	51.8	79.0	9.6	8.7	10.1
	26,981	44.1	82.1	8.4	7.0	10.4
	18,985	40.0	83.6	7.8	6.1	10.7
	1,602	27.6	88.8	4.1	5.8	6.2

I wasn't aware that women are a type of race in the workfield