**Link:** https://zixuanli88.github.io/zixuan88/

**Part 1**

My website is a tool that can help people find the type of data visualization graph they need. The website provides a long list of data visualization graphs (now the website has listed 10 types of graph non-extensively for prototyping purpose) for users to choose from, and also a set of filters such to help users more quickly identify the specific graph that can best represent their data.

I wish to convey through my website that different kind of visualization graphs can have different pros and cons and tells their own story, for example there’s graph that can best help compare different data sets, and others are best for show trends of the data over time. It’s important to choose the right graph that can assist the visualization designers to tell a story.

To make it more engaging I separated the page into two columns, with the left side of page static, and right side scrollable. User can interact with the filters to set parameters for the kind of graph they are looking for, and see animations as the graphs are filtered out.

The target users are people who are new to data visualization. First they don’t have means to see all different kinds of graph listed in a single place, then it’s hard to understand how different graphs can be best used to emphasize what type of information, lastly going through all different kind of graphs is time consuming, so a filter could help they to narrow down to the right ones.

**Part 2**

1. The interaction type I implemented are:
2. Scroll
3. Interact with filter buttons
4. Reproducing the interactions:
5. Click “explore” button on the homepage
6. Scroll on the right side of page to see all visualizations graphs, read through the information details as needed.
7. Then interact with a list of filter buttons on the left side of page, multiple buttons can be used together to add more filters.

**Part 3**

1. Two JavaScript libraries: Handlebars, and Isotope.
2. I choose handlebars because it provides template to populate a long list of items with the same format, it also supports dynamitic generate and eliminate content. I used Isotope to apply multiple filters to the content, and also to create animation-like effect when doing so.
3. With handlebars, I first inputted an array of the graph information into JavaScript, then designed the template with html and CSS, lastly used {{each}} function to populate the list of items. For Isotope, I have assigned different class that coordinates with the filter value to each object in the array, retrieve value of filter buttons each time user hit the button, lastly concatenate the filters to allow user select multiple filter buttons.

**Part 4**

Comparing to assignment 7, I designed the mobile version of the site, where the left side screen and right side screen both takes up 100 percent of widths, and left side moves to the top of screen. This is because the original layout on the portrait version of a mobile phone would be too cramped and won’t allow proper interaction with user.

**Part 5**

I experienced challenges when trying to find the right library to implement the filter function, and to learn how to work with that library. One mistake I made was using a library for templating that couldn't facilitate the filtering feature because I didn’t think through how I will apply later functions.