## Week 11 Diary Entry

Describe the data of your project and the visualizations you plan to use. Attribute anything you plan to use from somewhere else.

The data that I plan to use for my website would range from statistics gathered by research institutions (Statista), news channels (Channels News Asia) and other reputable sources (Forbes). Other sources include companies in the industry that have gathered market data. Apart from statistics, I also utilised 2 extensive datasets from Kaggle.com and NYC Open Data respectively. These datasets require me to thoroughly filter through to ensure that the data used is appropriate.

Given that my data story is focused on a rather broad and extensive issue; that starts off with pet ownership before flowing into pet abuse and pet abandonment and lastly, finishing it off with measures pertaining to the issues, I had to consider that kind of visualisations will help present my information in a more digestible way.

- for data pertaining to demographics, I plan to use a variety of pie charts or bar charts that can help clearly show the different proportions. This will mainly be used for data like Pet Ownership in US and SG, Pet Ownership between Genders and Generations. For data of similar demographics (for eg: Pet Ownership in SG and US), I would add a button for users to toggle between the two datasets to add an element of interactivity as well.
- for data that shows trends across time (years/months), I would mainly use line charts that can help show the trendline accurately. This applies to data like Number of Pets Entering Shelters and Number of Pets Abandoned Across the Years. Similarly, for data that follow the same timeline (for eg: Number of Pets Rehomed and Number of Pets Euthanized), I would add a button for users to toggle between the two datasets

- for data that are more region-centric, I aim to use chloropeth maps to not only show data in a visually appealing and sensible way, it also helps to add a variation to my website. This can be used for my dataset from NYC Open Data which shows Pet Abuse Cases in NYC by streets in New York. I plan to learn how to create interactive chloropeth maps from https://leafletjs.com/examples/choropleth/, an open source Javascript library available online with tutorials.
- I would also be exploring using other events (other than buttons) to make my website more interactive and to help with visualisation. For example, a slider to show the different reasons (accompanied by the appropriate statistics) as to why pets are abandoned or a slider that shows different statistics for different animals

## Report the errors and challenges you are facing.

The errors and challenges that I faced were primarily CSS issues. For matters like creating the charts and creating the appropriate event listeners, it was easier as 1. I have a rough understanding of the codes from classes 2. There are many resources online that can teach you, even Youtube can help provide a comprehensive step by step guide. All I needed to do to fix these errors would be to conduct simple research with what kind of chart and events I wanted. Hence, I feel like creating the charts itself were not that big of an issue. For me, the bulk of my problems had to do with the website design and CSS itself. Whilst there were many readily available CSS templates online that I did like, I did not understand it as they were too complicated and struggled when I wanted to change aspects of it to fit my data story. After many hours of fiddling around, I eventually gave up and decided to build the CSS up myself.

Obviously, I ran into many other problems as I did not really have an understanding of CSS. Even with online resources and video tutorials, it was still relatively difficult to grasp the code and utilise it the way I wanted to. Basically, even though I had an idea of how I wanted my website to look like, it was hard to execute it. After watching many videos and reading some resources, I gained a small working understanding of CSS and eventually decided to group my content by equally-sized containers and fit my charts into these containers. It also took me awhile to organise my CSS and HTML code so that it would be easy for me to identify each portion and make whatever changes I needed to. I am quite sure there are probably more efficient ways to do this but this is the easiest way for me as of right now.

After roughly figuring out how to create containers and my content, I wanted to make my website more visually appealing, rather than just containers of a colored background. I thought of using images from Canva of layouts I designed and overlaying the content over the image. This was another struggle I faced as it was pretty hard to ensure everything aligned the way I wanted it to and I had to pick up CSS coding terms like padding, text-align, or margin-top.

I enjoyed coming up with the design elements and even added pictures of my dog. Even for the color scheme, brighter and more vibrant colors are used at the start while I use more muted colors toward the end.

Right now, I am currently working on how to make my website more interactive and add more data to make it a more cohesive "story". For example, previously I only included data on pet abandonment but I realized that another issue would be pet abuse, and by adding this in, my "story" would be more well-covered and extensive. I also plan to make my data more clear by adding appropriate headers and text/design elements to help make my website more readable and easier to understand.