Data Dashboard Project

Flight Cancellations by State and Airport

Summary: The first dashboard is showing where the most flight cancellations took place. It's consisted by two graphs: one that is a map and we can see in what states the most cancellations happened in 2015 and the other which shows the number of cancellations based on the various Airlines. From the first graph, it's stated that California (33,331) and Texas (32,612) are the states with most cancellations, while American Samoa (2) and Delaware (6) are the ones with the least cancellations. Having this info in mind, if we go to the second graph, we can see in which airport of these states most cancellations happen. So, if we choose CA in the second graph, we see that Los Angeles (10,125) and San Francisco (7,582) are the airports where most cancellations take place. In order to calculate the number of cancellations I took the count of them, because if a cancellation happened the corresponding cell would be "1" and if not it would be "0".

Design: I chose to create a map to show cancellations by State, as it adds familiarity to the visualization and I chose treemap for cancellations by airport as it clearly shows in which airports most cancellations happen. I chose blue tones, because they are colorblind friendly.

Resources: N/A

Delays by State

Summary: The second dashboard is showing the reasons of delay for the various states. In order to calculate the total delay for each flight I took the difference between Departure Delay and Arrival Delay and I accepted only the positive values. In order to do that, I created a table calculation. All these values are in minutes of delay. California (85,118) and Texas (94,679) are still at the top, in terms of total delay minutes. Also, I added a tooltip on the map graph, where someone can hover over each state and see the main delay reasons (next graph).

Design: I chose to create a map to show delays by State, as it adds familiarity to the visualization. I chose blue tones, because they are colorblind friendly.

Resources: N/A

Delay Reason by State and Airline

Summary: This dashboard is about the delay reason across each state and airline. On the horizontal axis, it's the total of minutes of delay for each reason. It looks like Late Aircraft Delay (1,231,193) is the most

common reason and after it's Airline Delay (964,174) and Air System Delay (697,937), which means that airlines are responsible for the two most common reasons of delay in USA.

<u>Design</u>: I chose bar chart as it's simple and readable. I chose blue tones, because they are colorblind friendly.

Resources: N/A