**Course Project Task 1: Dashboard**

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DSC 640: Data Presentation & Visualization

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June 20, 2022

For this internal dashboard, I utilized 2 data sources. The main data source was from <https://github.com/fivethirtyeight/data/tree/master/airline-safety> and encapsulated the total number of fatal accidents, incidents, and fatalities between two periods of time. The supplemental dataset I used was a summary of total car crashes from <https://cdan.dot.gov/>

The first set of visualizations I wanted to use to convey the stark difference in crashes (or incidents) between vehicles and airplanes. For this, I used a box & whisker plot with vehicle crashes colored red and airplane incidents by airline colored green. I wanted these two views side by side so the audience can see how some of the airlines would be considered an outlier based on the distribution of incidents whereas the vehicle crashes by year are all somewhat evenly distributed.

The next visualization is a bubble chart by airline of a calculated field comparing the number of fatalities per fatal accident. This is to show to our internal team that many of the airlines with the larger bubbles are international airlines and not “us”.

I also included 2 horizontal bar graphs; one graph shows the difference in the number of incidents per airline and the other shows the total seat kilometers available per week. The delta in incident is important because it shows how most of the airlines have either improved or remained somewhat static between the two periods. Also, wanting to show that the few airlines that did have an increase in incidents were still rather small. The kilometers per week bar is to show the vast distances traveled by airplane each week with still so relatively few incidents.

The final visualization added is a scatterplot comparing the number of fatalities with the number of fatal accidents for the same time period. The size of the bubble is dependent on the number of available seat kilometers. The intention here is to show again how relatively few accidents there were, and the odds of being involved in one are rather low due to the number of kilometers.