Data Visualization Project
Task 1 – Dashboard

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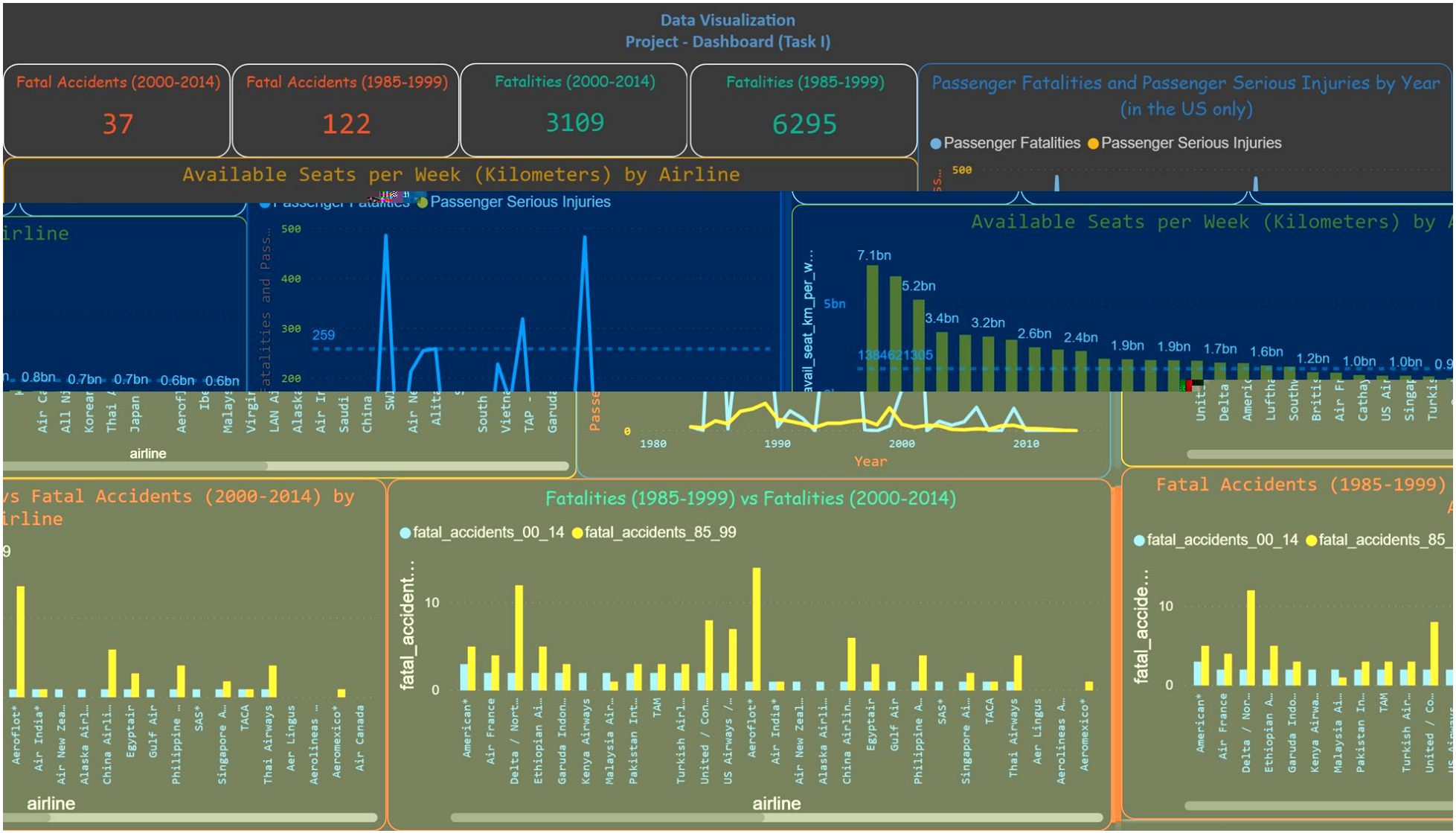

A 250-word paper summarizing what you did and why you made the decisions you did – why did you choose the visualizations you did? How do you plan to present to your internal team? What were your findings?

This project was very interesting because I had spent a lot of time understanding and learning more about Power BI, which is a program that I truly start to enjoy using. Besides learning Power BI, I had the opportunity to read so many articles about airline safety and airplanes crashes in the past few years. There are a few things that we need to clearly understand when it comes to airline safety. Last year, 11 of the 20 fatal accidents occurred in North America; however, a significant increase over past years. In 2018 one fatal accident was reported, while in 2017 there were three. Five of the accidents that occurred in North America last year took place in rugged or remote areas of Alaska or Canada. According to David Shepardson, a writer and editor for Reuters.com, the worst airline accident recorded in the U.S. last year followed the February crash of a cargo-carrying Boeing 767 while on approach to Houston's George Bush Intercontinental Airport. Outside North America, additional accidents occurred in Russia, Mexico, Indonesia, Tanzania, Ukraine, Columbia and the Democratic Republic of Congo.
For this project, I have used two datasets to complete my Dashboard. The first dataset is the one that was provided by the professor and the second dataset is the one that was required to be used as secondary.

1. Dataset 1 – Airline-safety was analyzed by using two comparisons. The first comparison was "Fatal Accidents (2000-2014)" and "Fatal Accidents (1985-1999)", and the second comparison was "Fatalities (2000-2014) and Fatalities (1985-1999)". I also provided a histogram that illustrated the available seats per week by airline. I have concluded that the airlines that have the most available seats per week do not truly have the most fatal accidents nor the most fatalities for both timeframes between 1985-1999 and 2000-2014. For example, Lufthansa has the fourth available seats. It had no fatal accidents nor fatalities between 2000 and 2019. Also, it had one fatal accidents and had two fatalities between 1985 and 1999. On the other hand, Alitalia Airlines has one of the lowest available seats. It had 37 fatal accidents and 3109 fatalities between 200-2014. It also had 122 fatal accidents and 6295 fatalities between 1985 and 1999.
2. Dataset 2 – US Airline Fatalities was used to analyze passenger fatalities and passenger serious injuries for US airlines between 1983 and 2014. By using this dataset, I concluded that the biggest passenger fatalities were 486 cases in 1985, 319 in 1996, and 483 in 2001.

In conclusion, although bar graphs display data in a way that is similar to line graphs. I use line graphs Dataset 2 – US Airline Fatalities because they are useful for displaying smaller changes in a trend over time. I used bar graphs Dataset 1 – Airline-safety because they are better for comparing larger changes or differences in data among groups.

References:

- https://www.sheffield.com/air-travel-safest-mode-transportation
- https://www.indiatoday.in/world/story/fatal-air-accidents-deaths-safest-years-for-air-travel-history-1632948-2020-01-01