Project 4
Building Data Dashboards
Flights and Cancellations

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The data used for this visualization, comes from the Kaggle dataset. It tracks the performance of the domestic flights flown across the US for the year 2015. My target audience are the people who want a better understanding of which airlines they should be using and how likely are they to delay/cancel. Also to find out which state and months are the business for the that airlines.

Kaggle Link: https://www.kaggle.com/usdot/flight-delays/data

First of all, the entire data source was filtered to avoid any extremes in numbers. I then joined flights.csv file with airports.csv file to get more data for visualisation.

Visualization 1: Average departure delay per month, airlines and state?

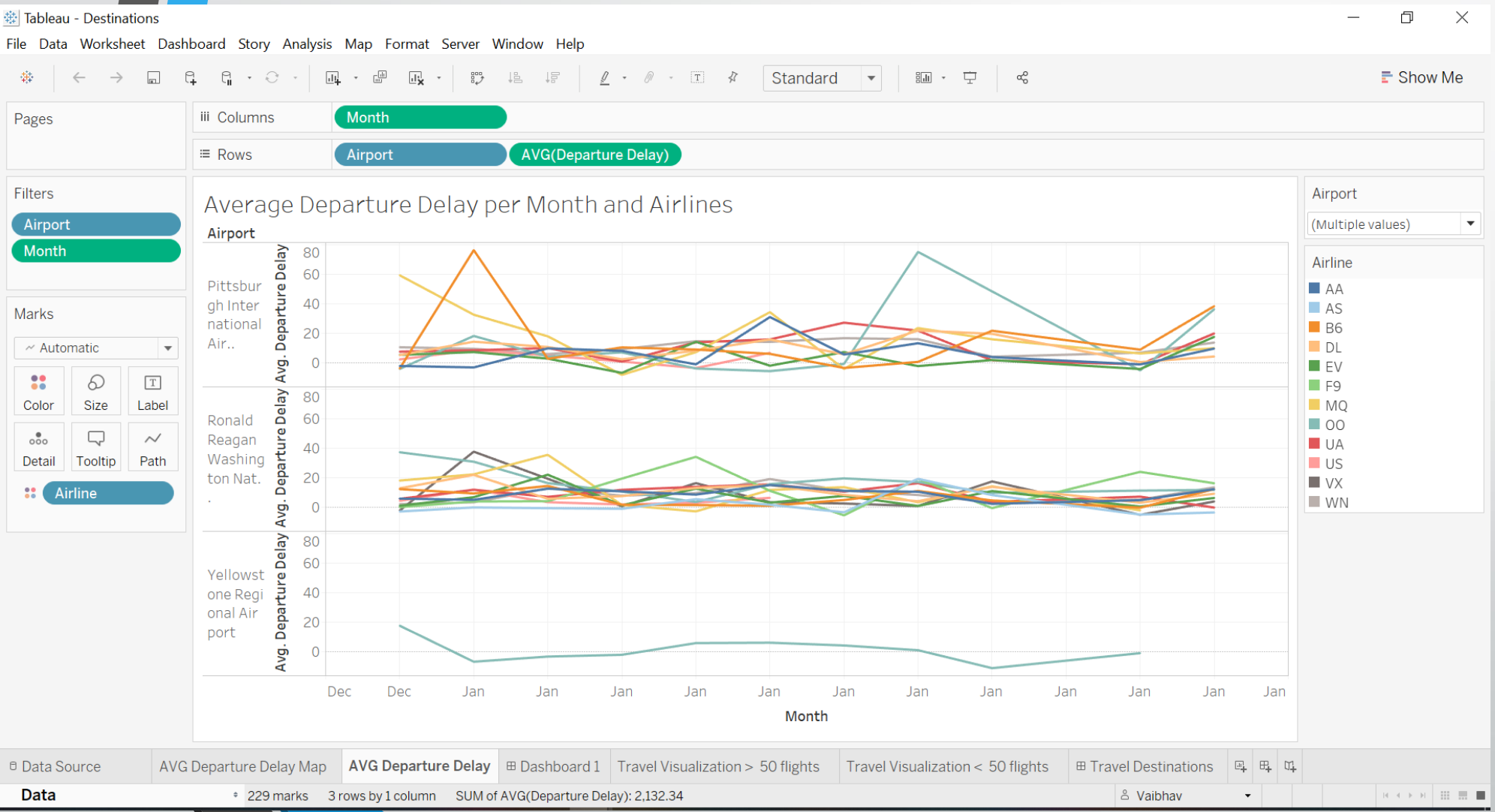
Tableau link:

https://public.tableau.com/profile/vaibhav7677#!/vizhome/AverageDepartureDelays_16107306182380/AVGDepartureDelayMap

Summary and Design:

In this visualisation, we can see that the map shows us an average departure delay in every state. When we move over a state, it displays the important information like state name, airline name and average delayed departures. We can observe that Aberdeen Regional Airport has the highest average departure time delays at 90.1 minutes.

I have also used a line graph to visualise the average departure delays based on months and airlines. For reference, I have also filtered the airports to Pittsburgh International Airport, Ronald Reagan Washington National Airport to see the trends in the average departure delays.



From the line chart, we can see that Pittsburgh Airport is the busiest during September and the average delay is with the DL airlines at 246.3 min. Washington Airport is the busiest in March and has an average departure delay of 200 minutes.

Visualization 2: Travel destination per state?

Tableau Link:

https://public.tableau.com/profile/vaibhav7677#!/vizhome/Destinations_16107308469240/TravelDestinations

For the best visibility, I have filtered the data to four airports. The airports with less than 50 flights are DEN and HNL airports. Whereas JFK and SEA have over 50 flights flying through them.

From the dashboards, we can have a look at the map and see that Boston as an origin airport has 64 records of destination airports and Seattle has 54.

Visualisation 3: What is an average arrival and airlines delay from San Francisco International Airport?

Tableau Link:

https://public.tableau.com/profile/vaibhav7677#!/vizhome/AverageArrivalAirlineDelaySFOAirport/StoryAVGarrivalairlinesdelaySFO

From this story, we can see an average arrival delay and average airline delay for San Francisco Airport. From the charts, we can say that the worst average arrival delay is caused by B6 Airlines at 25.18 minutes and the worst arrival delay destination airport is PSC at 127 min.

Resources: N/A