

Data Foundations Nano-Degree

Data Visualization Project

Fatima Al Salman

Top 5 Airlines Based on Number of Flights

Airlines flights are represented using a **bar chart**, as Airline Name is a categorical data.

The visual shows the highest **airlines** based on the count of records in which that airline appeared. The **top** one is **Southwest Airlines Co.** with total number of **59,437** flights.

Design encodings are met by maintaining the data-ink ratio high, no additional colors added, and keeping the visual as simple as possible.

Further, user can manipulate the visual using the **filter** added to create **another selective top 5**.

[See Visual](#)

The Most Common Cancellation Reason for All States

Cancellation reasons and states are represented using a **shaded map**. As it is easier to locate the states and differentiate them on the map.

The visual shows the highest **cancellation reason** based on the count of records in which that reason appeared. **The top cancellation reason is weather** with total number of 422 times in the state of **Texas**.

Design encodings are met by maintaining the data-ink ratio high. Colors added to help identify the answer quickly.

Further, user can manipulate the visual using the **filters** added to look into the specific airports cancellation reasons etc.

[See Visual](#)

The Worst Airlines in Flight Delays

Cancellation reasons and states are represented using a **dashboard of two area charts**. As it is easier to differentiate airlines delays over time.

The visual shows the highest airline on delays based on the sum of arrival/departure delay time. **The worst airline in departure delays** in June is **Southwest Airlines Co.** with total delay time of 1534 hours.

Design encodings are met by maintaining the data-ink ratio high. Colors added to help identify the answer quickly.

Further, user can manipulate the visual using the **filters** added to look into the specific airlines delays and compare how delays vary in different months.

[See Visual](#)