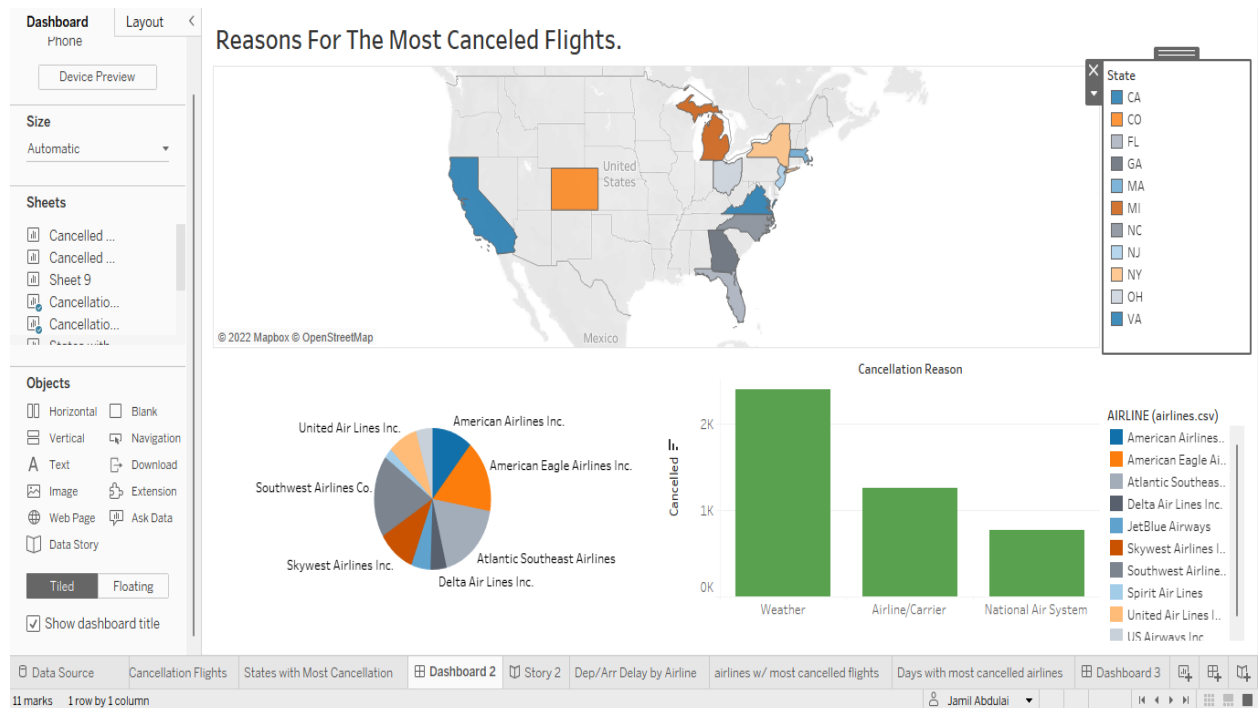**JAMIL ABDULAI**

**PROJECT 4**

**BUILD A DATA VISUALIZATION**

**FLIGHTS DELAY**

**JULY 26, 2022**

# INSIGHT 1: WHAT ARE THE REASONS FOR THE MOST CANCELLATIONS OF AIRLINES BY STATES?



1. **Links to dashboard and story**:
   https://public.tableau.com/app/profile/jamil.abdulai/viz/AirlinesandReasonsforCancellationsbyState/Dashboard2?publish=yes

   https://public.tableau.com/app/profile/jamil.abdulai/viz/TheStoryofAirlinesandReasonsforCancellationsbyState_/Story2?publish=yes

2. **Summary**:
   - The above visualization dashboard depicts reasons for cancellations of flights by States in the U.S. The main data, fights.csv, was collected from Kaggle and inner joined with both airlines.csv and airports.csv data. A couple of

manipulations and cleaning were incorporated before visualization.

- This analysis concludes that inclement weather had the most effects on flight cancellations with 2,397 cancels within the timeframe. Airlines/Carrier reasons accumulated 1,260 cancellations followed by National Air System summing up 776 cancellations in total.
- Southwest Airlines Co had the most cancellations with 818, followed by Atlantic Southeast Airlines accumulating 800 cancellations, and American Eagles Airlines Inc having 723 cancellations.
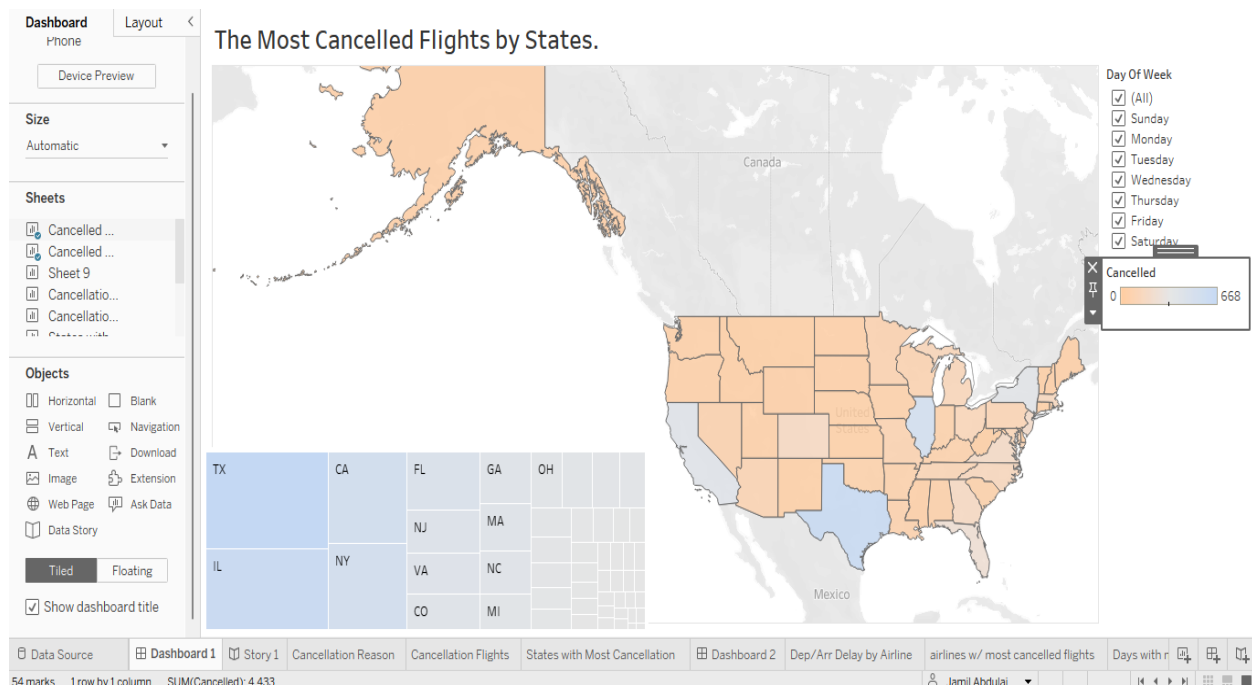
3. **Design**:
   - A map of the United States was created to pinpoint all the States affected by the cancellations.
   - A pie chart was utilized to visualize the airlines with the most to the least cancellations.
   - Lastly, a bar graph was implemented to illustrate the main reasons for the cancellations.

4. **Resources:**
   - https://www.tableau.com/resource/data-visualization
   - https://www.tableau.com/learn/articles/data-visualization-tips

INSIGHT 2: WHICH STATES HAVE THE MOST FLIGHTS CANCELLED?

The Most Cancelled Flights by States.

1. **Links to dashboard and story**:

2. **Summary**:
   - The above visualization dashboard and story depict States with the most flights canceled in the U.S. The main data, fights.csv, was collected from Kaggle and inner joined with both airlines.csv and airports.csv data. A couple of manipulations and cleaning were incorporated before visualization.
   - The visualization depicts the flight cancellations by State. The most canceled flights by States were Texas with 668 canceled flights, Illinois with 563 canceled flights, California with 408 flights canceled, and lastly, New York accumulating 386 canceled flights.
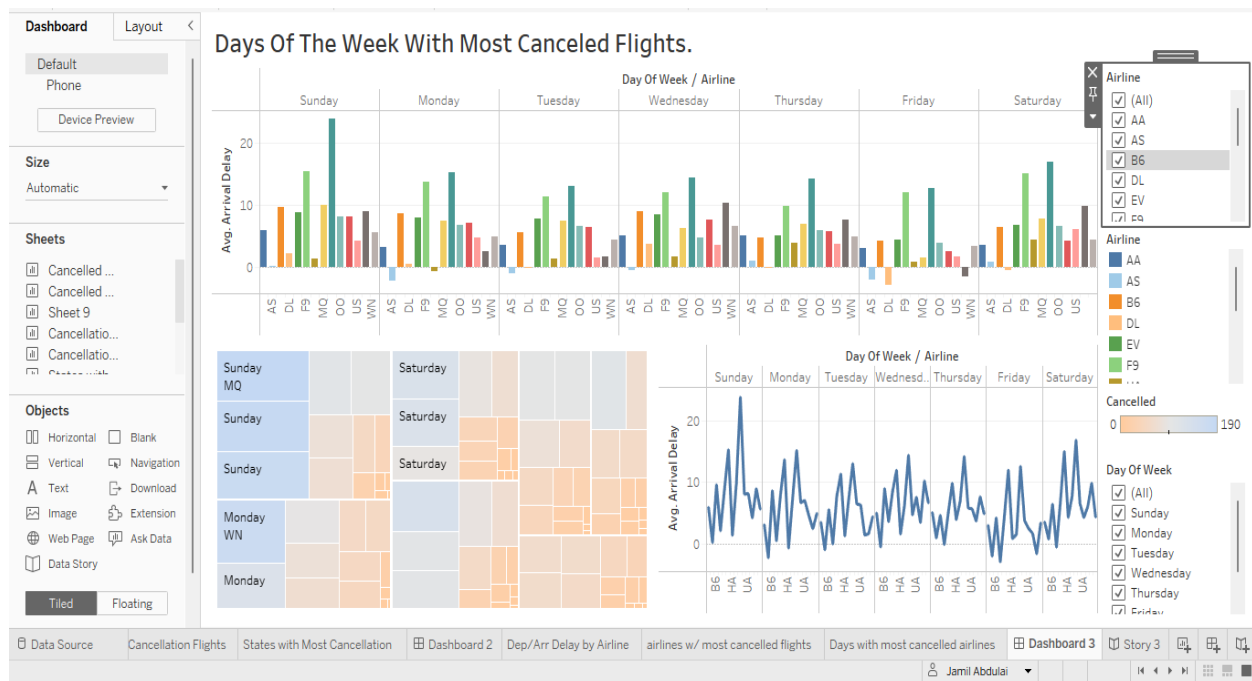
3. **Design:**
   - A map was utilized to depict the States per cancellations.

- Also, tree maps were incorporated to visualize the number of canceled flights per State.

4. **Resources:**
   - https://help.tableau.com/current/pro/desktop/en-us/buildexamples_treemap.htm

# INSIGHT 3: WHAT DAYS OF THE WEEK HAVE THE MOST FLIGHT CANCELLATIONS?



1. **Links to dashboard and story**:
   https://public.tableau.com/app/profile/jamil.abdulai/viz/DaysoftheWeekwithMostCancellationsbyAirlines/Dashboard3?publish=yes

2. **Summary:**
   - The above visualization dashboard and story represent what days of the week with the most flights canceled in the U.S. The main data, fights.csv, was collected from Kaggle and inner joined with both airlines.csv and airports.csv data. A couple of manipulations and cleaning were incorporated before visualization.
   - The above dashboard concludes that Sundays are the most canceled flight days of the week followed by Monday and Saturday, all accumulating 1,100 flights canceled, 7,600 flights canceled, and 7,450 flights canceled respectively.

3. **Design:**
   - A tree map was used to showcase the airline, and the number of flights canceled per day of the week.
   - A bar graph was also implemented to visualize the day of the week with the most flight cancellations.

4. **Resources:**
   - https://help.tableau.com/current/pro/desktop/en-us/buildexamples_treemap.htm