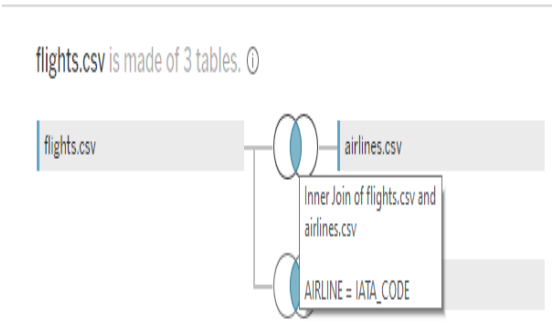
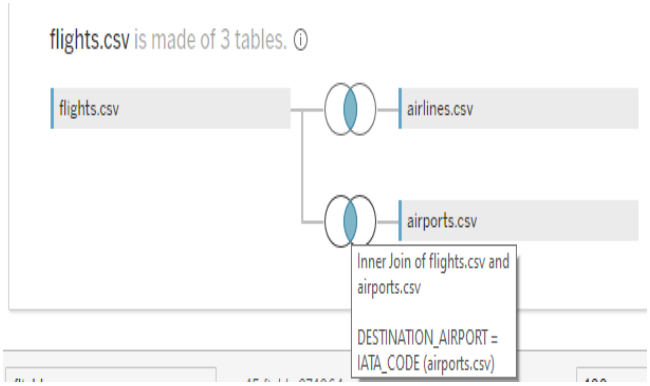
Data Visualization Project

Project Dataset: Flight Delays and Cancellations

This data comes from a Kaggle dataset, which tracks the on-time performance of US domestic flights operated by large air carriers in 2015.





The above pictures show the relationship between the ratio and how it was merged, where (flights.csv , airlines.csv) were merged by the two columns (Airline , Iata_code respectively)

As a merger of (flights.csv , airports.csv) by means of the columns (Distination_airport , Iata_code) respectively

Where the relationship was: Inner joine

Link: https://public.tableau.com/app/profile/mohamed1830/viz/flight-delays_dashboard_Mo-Taha-Eloleemi/StoryDashboard

The type of visuals in general: The dashboard consists of 3 visualizations showing airport and airline characteristics, departure delays and cancellations.

01- Worksheet (Airports)

Visuals type	✓ Bar chart
Resone type	✓ It is best to compare values with categorical data
Relations	✓ Airports , DEPARTURE_DELAY
Filter	✓ Monthe , State
Results	✓ The number of departure delays for each airport is descending, with the largest number of delays being Hartsfield-Jackson Atlanta International Airport with a total of 17,704 flights

02- Worksheet (Map)

Visuals type	✓ Geographical distribution.
Resone type	✓ It is very suitable for easy viewing of regions geographically.
Relations	✓ Longitude and latitude for each state by month and the number of
Filter	✓ Month ,State , Cancelled
Results	✓ Obtaining an illustration on the map showing the number of canceled flights for each state, knowing that the darker the color, the higher the number of canceled flights for that state

03- Worksheet (Airlines)

Visuals type	✓ liner form
Resone type	✓ It is very suitable for easy clarification of these values with the effect of
Relations	✓ AIRLINE_DELAY , Month , State , AIRLINE (airlines.csv)
Filter	✓ Month , State , AIRLINE (airlines.csv)
Results	✓ We can reach certain results that we want in a comprehensive and detailed manner about the relationship between the average airline delays (by month, state), where the highest average number of delays was observed in February 2015 (Hawaiian Airlines Inc)

There are two worksheat

The other two worksheat link: Build Data Flight Delays and Cancellations Mo-Taha-Eloleemi | Tableau Public

01-Worksheet (Air_Time&Arrival_Delay)

Visuals type	✓ Plot chart
Resone type	✓ which is really distinguished in comparing numerical statistics for a variable with more than one indication of color and size.
Relations	✓ Air System Delay , Air Time
Filter	✓ AIRLINE (airlines.csv) , % Arrival Delay
Results	✓ It turns out, for example, that Southwest Airlines achieved the largest flight time during the year ✓ more than 6 million flight minutes, with a delay of approximately 289,992 minutes

02-Worksheet (Air_Time&Airline)

Visuals type	✓ Bar chart
Resone type	✓ It is best to compare values with categorical data
Relations	✓ AIR_TIME, AIRLINE (airlines.csv)
Filter	✓ State
Results	✓ It is clear to us by seeing the bar chart and by choosing any of the states to know the most airlines that have the most number of flights in that state, ✓ For example, from the state of Alaska, it turns out that Alaska Airlines has the largest flight time, about 162,855 flight minutes, and ranks first among airlines.