Udacity Data Viz Project (1) Flight Delays and Cancellations

- **Link(s)** to dashboard & sheets

  Dashboard

  State

  Reasons

  Months

  Airlines

- **Summary:** I focused in my visualizations on the flight's cancelation & the reasons of cancelation from different point of view

- Findings
  1- Total cancelled trips 4433 flights which is around 1,6% of the total trips
  2- cancelation per state: we find the TX is the most cancelation among the US states with 661 flights then IL with 537 flights represent 14.91% & 12.11% from the total delay.
  3- Top cancelation weekdays is in Mondays over the year with 1068 canceled flights represent 23.42% from the total delay.
  4- Top cancelation Month is Feb over the year followed by Jan & March means winter season is the most cancelled and the top reason during this 3 months was the weather.
  5- Top reason for the cancellation over the year is the weather with 54% while its 0% for security reasons
  6- Most canceled flights belong to Southwest airlines with 818 flights represent 18.45% from the total delay.

- **Design:**

- **1-** the Map: A map is best suited here as I had to plot state-wise flight cancellations which involves **geographical data**. I used a **sequential blue color** wherein the darker the blue color , more the number of flight cancellations. This type of coloring makes it easier to quickly spot which states have **high/low cancellations**. I added a **month filter** so that readers can dig which states have the highest and lowest cancellations in each or a range of months.
- **2-** Pie charts: is more suitable for categorical data
- **3-** Area chart, **area chart** is more appropriate than **stacked bar chart**. It is much easier to perceive trend over time on area chart than stacked bar chart.

- after sharing the Design with friends, I got the below feedback**.**
- Feedback (month & weekdays in numbers which is not professional) I had to check how to convert the number to month and week name to do that, I will need to convert number to dates then from date to months and weekday name links in resources

- **Resources:**

1- To join the 3 tables : How Relationships Differ from Joins - Tableau
2- To design pie : Tableau - Pie Chart
3- How to convert numbers to month & week names using date name function Convert Month Number to Name? (tableau.com)
4- Create calculated filed with month name and week name to be able to use date name function How to combine Year and Month Fields (tableau.com)