DATA SCIENCE INSTITUTE

FRANK J. GUARINI SCHOOL OF BUSINESS

DATA VISUALIZATION

ANALYZING THE 2016 PRESIDENTIAL ELECTIONS

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Problem Statement:

A comprehensive data visualization that explores and highlights various aspects of the 2016 presidential election. The visualization will not only showcase the final election result but also delve into key factors that influenced the outcome. The visualization will be informative for a wide audience, including political analysts, historians, and the general public, providing valuable insights into the electoral process and the factors that can impact election outcomes.

Dataset:

For the accurate data of number of votes and the list of states and votes recorded by the state we need some accurate data and after browsing in multiple government sites found a related dataset for the project which is 2016 General elections results from the US Government website:

https://www.fec.gov/introduction-campaign-finance/election-results-and-voting-information/federal-elections-2016/
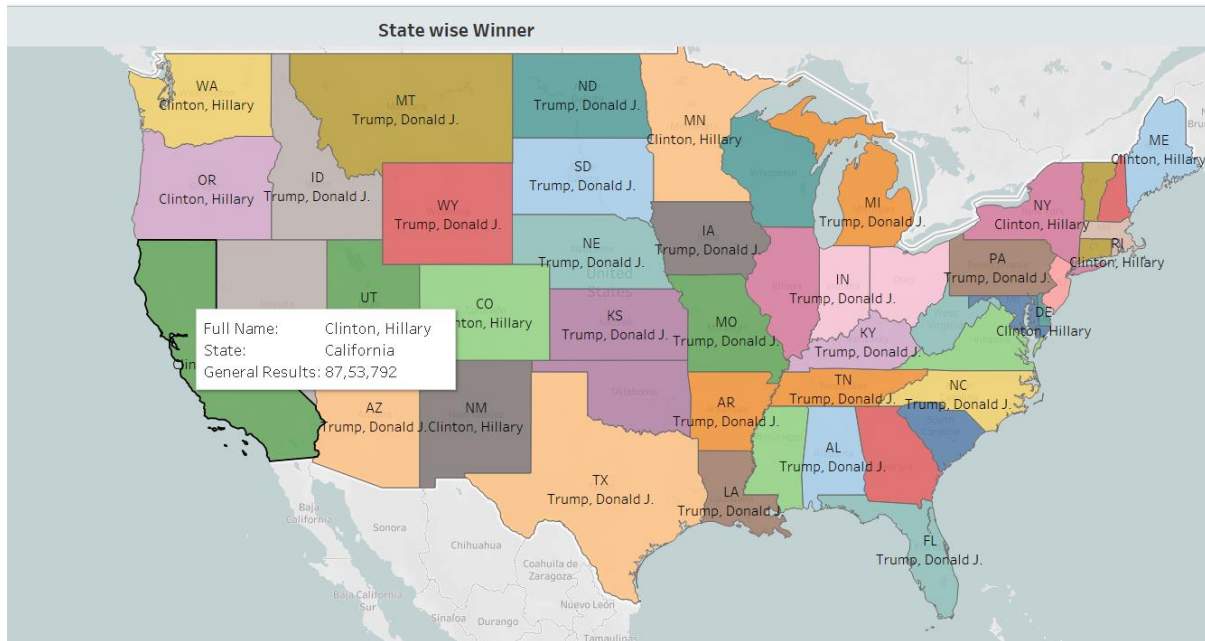
Data Cleaning:

This dataset[Excel] has a multiple sheets with the votes casted by different parties, senates, votes cast for congress along with 2016 Presidential General elections results. The dataset I have chosen have lots of null values and empty rows and unwanted columns those have to be removed before visualising the plots.

The final dataset which I use for visualisation is fully processed and cleaned and can be ready to use.
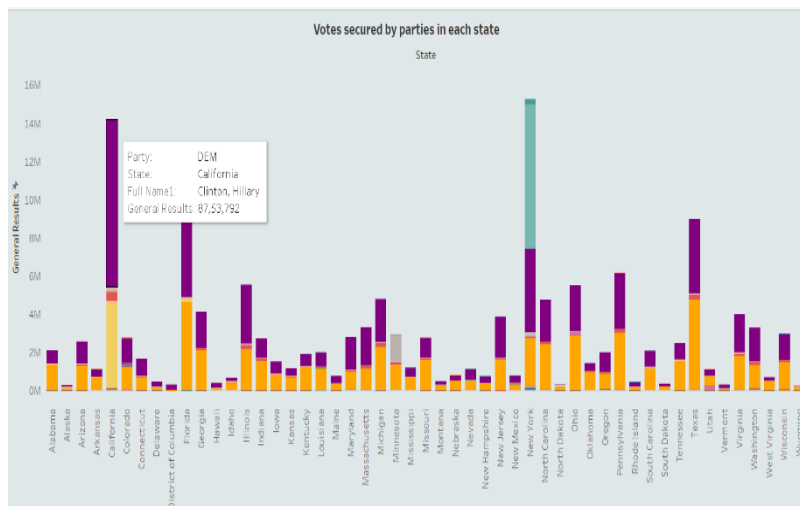
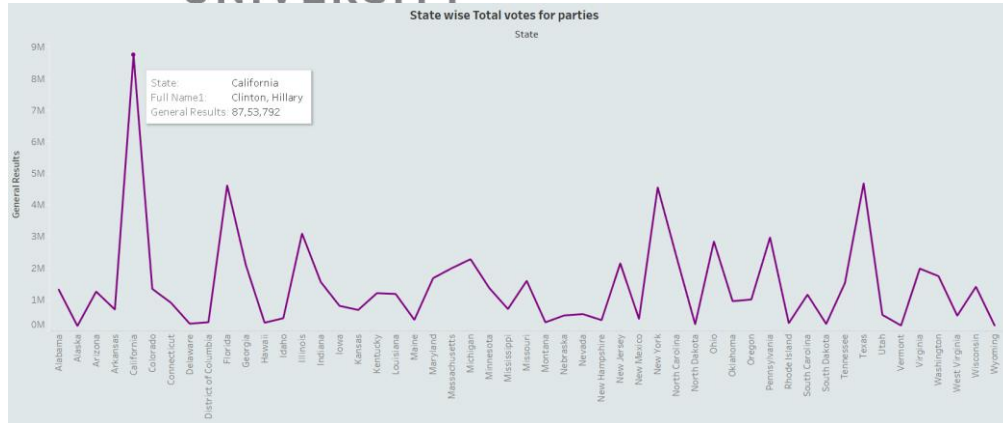|	STATE	STATE ABBREVIATION	FIRST NAME	LAST NAME	Full Name	PARTY	GENERAL RESULTS	GENERAL %	WINNER INDICATOR
0	Alabama	AL	Donald J.	Trump	Trump, Donald J.	REP	1318255.0	0.620831	W
1	Alabama	AL	Hillary	Clinton	Clinton, Hillary	DEM	729547.0	0.343579	L
2	Alabama	AL	Gary	Johnson	Johnson, Gary	IND	44467.0	0.020942	L
3	Alabama	AL	NaN	Scattered	Scattered,	W	21712.0	0.010225	L
4	Alabama	AL	Jill	Stein	Stein, Jill	IND	9391.0	0.004423	L
5	Alaska	AK	Donald J.	Trump	Trump, Donald J.	REP	163387.0	0.512815	W
6	Alaska	AK	Hillary	Clinton	Clinton, Hillary	DEM	116454.0	0.365509	L
7	Alaska	AK	Gary	Johnson	Johnson, Gary	LIB	18725.0	0.058771	L
8	Alaska	AK	NaN	Scattered	Scattered	W	9201.0	0.028879	L

Charts and Visual building:

Based on my requirement and Dataset, I have created charts that shows which candidate won the 2016 presidential election with how many votes and charts for Republicans vs Democrats, chart for top 10 voters and their votes, who won in different states etc.
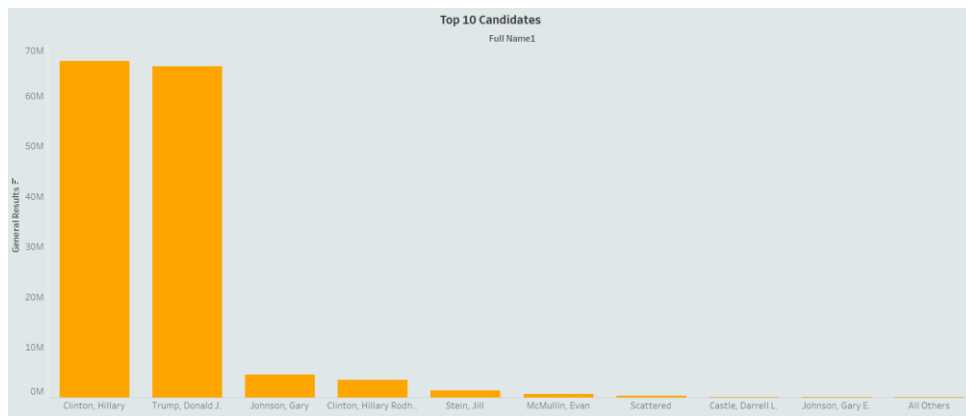

Above is an US map showing all 51 states, In this each state has a winner and I have made the map in such a way that by looking at the states we can say who won in the respective region and also when we hover on a state it will gives us the winner/candidate and the state name and the number of votes he scored in the specific state. I have used **filters** to show only the winner.

In the Stacked bar chart beside we can see all the candidates and parties participated in the respective states. we can see which party the candidate represents either it may be Republic or Democratic.

State wise Total votes for parties

Another visualization shows us a clear view of which state recorded highest voting and respective winners through a line chart.

Top 10 Candidates

A Bar Chart is a best presentation in my Point of View. Here I have a finding to elaborate where the 2016 election may be won by Trump, but the overall count or highest votes were recorded for Clinton Hillary. That means the people really want Clinton to win but as Trump got won in Maximum number of states, he Won the race.
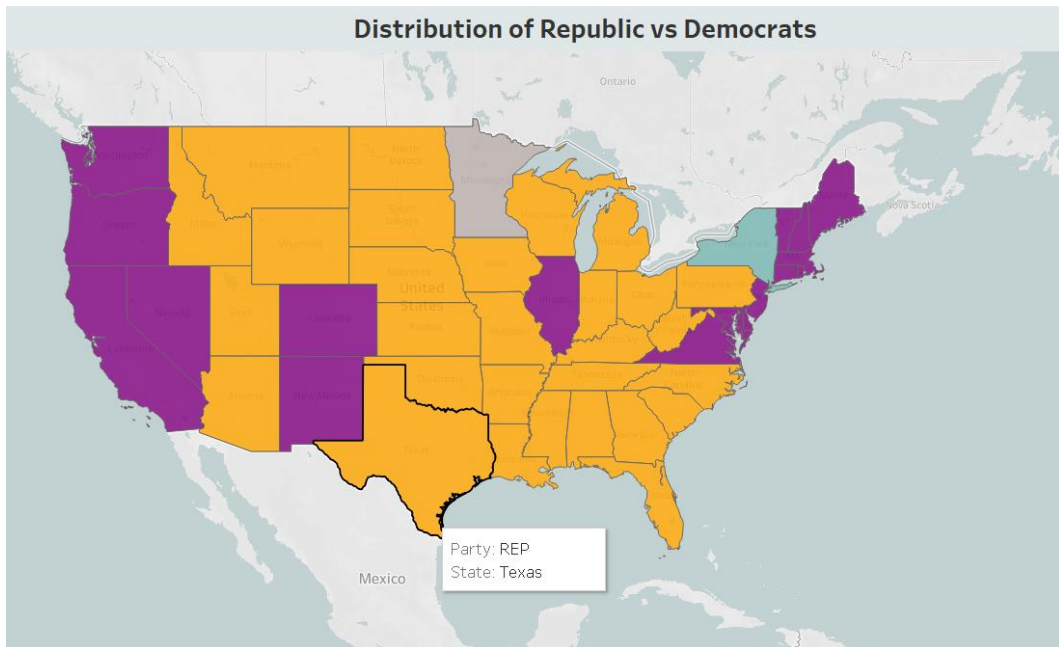

Trump Vs Clinton in each state

Sometimes we don't need high visualisation to analyse, just a simple List view works fine. Here I have created a chart where the Top two candidates and where they have won in a single chart so that a person don't have to go all the states to view and count the regions, he/she had won and this also

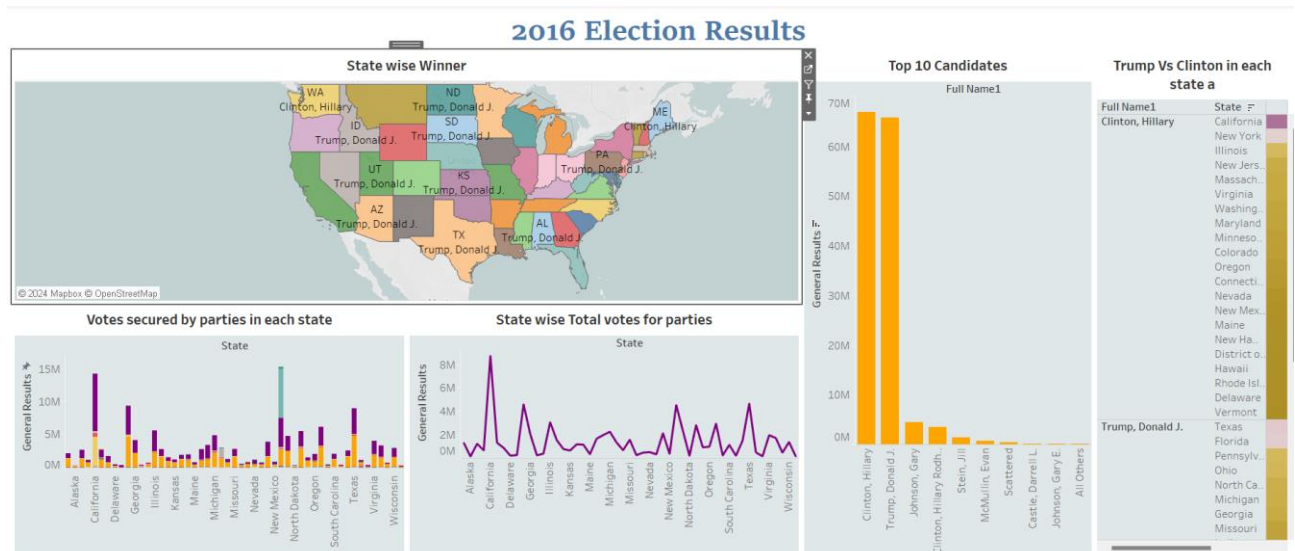displays the number of votes in the particular state.

This chart below is a simple yet powerful graph showing the regions of Democrats and Republicans won. The colour blindness/visual Impairment has took into consideration and maintained the chart.

The Purple represents Democrats which is won by Hillary Clinton and Orange represents the Winning areas of Republicans which are won by Trump.

By a little glance we can easily say who won the election as the most colours recorded by Republicans, Trump was the winner.

Dashboard:

This Dashboard is integrated with different types of charts created so far.

The Geographical map shows the votes received for the candidate and the winner in specific region. As Trump got Won in most of the states doesn't mean he is that people want. As per my analysis the people or voters or highest majority all over the US wants Democrats to be in power which we can see that in the Bar/Column chart of top 10 candidates where people or overall votes are for Hilary Clinton.

As there is a great line saying Fortune favours the Bold, we can see Clinton or democrat party only won in 21 states and Trump or Republican party got elected in 30 states which made Trump the ultimate winner even after the majority of the people want Democrats to rule.

There are different parties stood in the election race and lost and a stacked bar chart clearly shows how many parties are in the race and votes they received in the respective area.

A trend line chart is similar to the stacked bar chart but showing the winner of the respective state.

References:

https://www.bbc.com/news/election/us2016/results

https://en.wikipedia.org/wiki/2016_United_States_elections#:~:text=Trump%20won%20the%20general%20election,retained%20control%20of%20both%20chambers.

Tableau Link:

https://public.tableau.com/views/2016ElectionResults_17154700621780/Dashboard1?:language=en-GB&publish=yes&:sid=&:display_count=n&:origin=viz_share_link