

Individual Project Proposal: FE 550

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A report on US mass shootings

With the increase in COVID-19 cases, United States saw a swift raise in number of guns sold. This got me thinking will this translate into more gun violence in the long term. Alone in 2017 around 39,773 Americans died of gun violence. The death toll from guns is so high that it is somehow became a normal part of life. Yet, to this date, there has been almost no federal action taken to curb gun violence.

So, I have decided to dig into mass shootings in the past years in United States. I would be exploring data to understand the correlation between features and analyze how number of shootings have changed over the years.

Research Questions

- Analyze factors like gender, employment, race and mental health issues etc. to understand who is most likely to commit the crime.
- List cities and states are more prone to such attacks.
- Any correlation with calendar dates? Do we have more deadly days, weeks or months on average

With further EDA, I plan to add/remove research question, to give better insights into the dataset and the problem

Visualization tools

1) Tableau

To be used to develop Tableau dashboards and stories, for selective filtering and user focused EDA

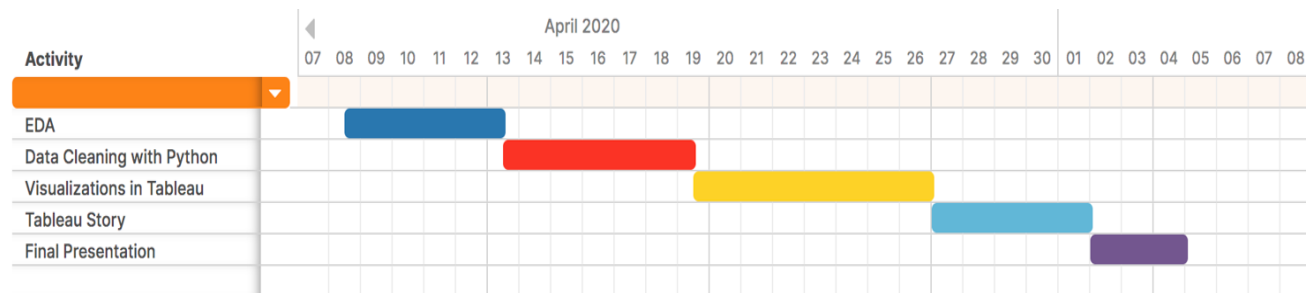
2) Python

I plan to perform data cleaning and initial data analysis and visualization of these analysis using Python

3) MapBox

This will be integrated with Tableau if I plan to generate maps in my tableau story. MapBox styles and tiles generally add a fresh and unique look to the otherwise default grey maps of Tableau.

Timeline



SWOT Analysis

Strengths:

- 1) My experience with Python would make data cleaning easier
- 2) Good Presentation skills
- 3) Adequate time to complete the project

Weaknesses:

- 1) Never worked with MapBox before.
- 2) Unsure about using the correct colors
- 3) Time management would be very crucial as I would have juggle time between school and Internship.

Opportunities:

- 1) Will the latest increase in gun sales prove it to be dangerous?
- 2) Will this visualization help understand the seriousness of the situation?

Threats:

- 1) Might have to divert focus if an interview for a summer internship comes up.
- 2) Completion of project with the highest standards.

Data Sources

- <https://www.kaggle.com/zusmani/us-mass-shootings-last-50-years#Mass%20Shootings%20Dataset%20Ver%203.csv>
- <https://www.gunviolencearchive.org/>