# GUN VIOLENCE INCIDENTS



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# UL INTRODUCTION



#### **Motivation**:

There have been increase in gun violence recently. Unfortunately, the outcome of gun violence is horrifying.

How can we help general public be more informed and aware of incidents?



#### Obiective:

Provide an app that summarizes the gun violence statistics and locations.

#### 02 DATA





kaggle

## DATA INFORMATION

Raw data downloaded from Kaggle.

- 239,677 rows & 29 columns
- Numeric and string data types
- 2013~2018 USA

https://www.kaggle.com/datasets/jameslko/gun-violence-data



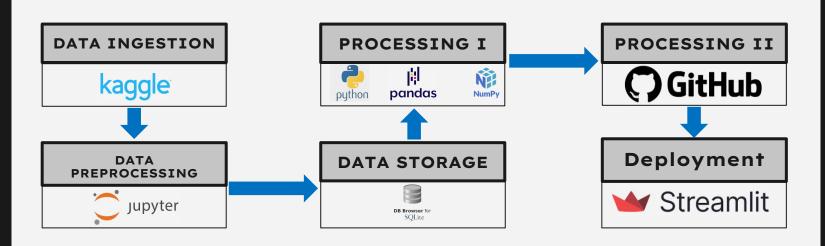
## DATA REQUIREMENTS

Cleaned and reduced data have:

- 231,754 rows
- 8 columns
- Numeric and string data types

#### 03 DATA PIPELINE





### **04** WEB APPLICATION DEMONSTRATION



https://jlee7x-de-app-project-final-project-app-tn2wv3.streamlitapp.com/



#### 05 CONCLUSIONS



Conclusion #01

Conclusion #02

Conclusion #03

More injuries than death from gun violence.

Big jump in gun violence number in 2014.

Big reduction in gun violence from 2017 to 2018, due to data ending at March in 2018.

#### 06 FUTURE WORK





#01

Add **more visualization** that displays more **metrics**, such as age, gender, etc., to users.



#02

**Automate the data pipeline** to obtain daily data and update the app.



#03

**Implement Natural Language Processing** to get **insights and trends** of behaviors of perpetrator from **article data** in the original data.

# **slides**go

#### **04** WEB APPLICATION INTRODUCTION (BACK-UP)

#### **GUN VIOLENCE DATA**

Following app will allow users to see casualties from gun violence in United States from 2013 - 2018.

If a user is traveling and going through a location, or looking to move-in for a new journey in life, the app can be used to educate onself about crimes caused by gun violence.

#### Data

The original data is from: GUN VIOLENCE ARCHIVE

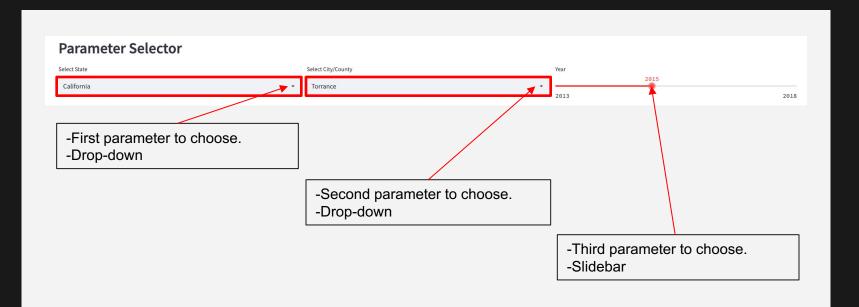
For this particular application, data were downloaded from Kaggle: Gun Violence Data

#### **Application**

The app gives each user following parameters to choose:

- · State of interest
- · City/County of interest
- · Year of interest

### WEB APPLICATION PARAMETERS (BACK-UP)



### WEB APPLICATION DEMONSTRATION (BACK-UP)

