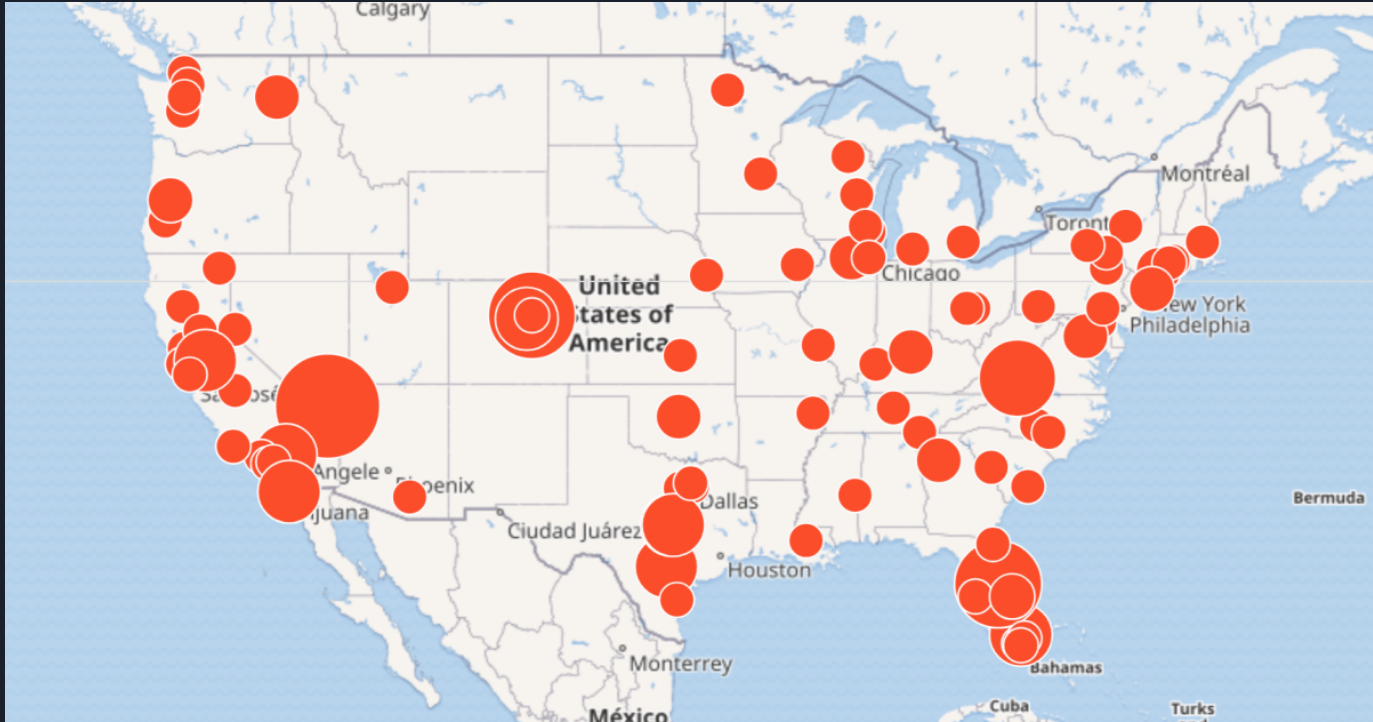




# Final Project Proposal

Team CWS: Cade Cutler, John Walsh, & Tyson Shields





# Introduction

- Gun Violence in the United States
  - Mass Shootings
  - Killing Sprees
- Young Americans are 50 times more likely to die due to gun violence than any other economically comparable country
  - 2019 report by Congress' Joint Economic Committee
- Determine ways to reduce gun violence
  - Warning Signs
  - Legal Solutions
  - Other possible solutions



# Data Preparation

- Quality over Quantity while still having enough data for report
- Mark Follman, Gavin Aronsen, Deanna Pan
- Gun Violence from 1982 to 2021
- 125 Different Occurrences of Gun Violence
  - Rampages in public places
  - 4 or more victims
- 24 separate columns of data



# Data Cleaning & Pre-Processing

- Get rid of useless columns
  - Sources
  - Specific details
  - Longitude/Latitude
- Python
  - Import the Data Set
  - Go through the data and sort into columns (Arrays or Sets)



# Data Columns

- Case (Name of Event)
- Location (City, State)
- Date of Occurrence
- Fatalities
- Injuries
- Total Victim Count
- Location (Type of Building: Workplace, School, Airport, Religious, other)
- Age of Shooter
- Prior Mental Health Issues
- Was the weapon obtained legally
- Weapon Type
- Shooter Race
- Shooter Gender
- Violence Type (Killing Spree, Mass Shooting)
- Year of Occurrence



# Data Analysis

- Create Functions in Python to Analyze the Data
- Find statistics for each column
  - How often?
  - Minimum/Maximums
  - Averages
  - Percentages
- Use the statistics we find for research



# Data Visualization

- Everyone should be able understand our report
- Our report will include:
  - The statistics we calculated
  - Research to back up our solutions
- The visualization of the data
  - Must be easy to understand
  - Information but still get through





# Allocation of Tasks & Responsibilities

- Plan to split up the analysis of the columns of data equally
- Have one master program
- Each of use takes the master program and uses it to create functions
- Combine our work
- Research possible solutions with our analyzed data

