Gun Violence in America

GROUP E : Selina - Mike Ariwodo - William M - Aimee V - Jarvis L - Vertta M - Pradip - Valentia Z - James D - Gina S

We know the dangers of guns.

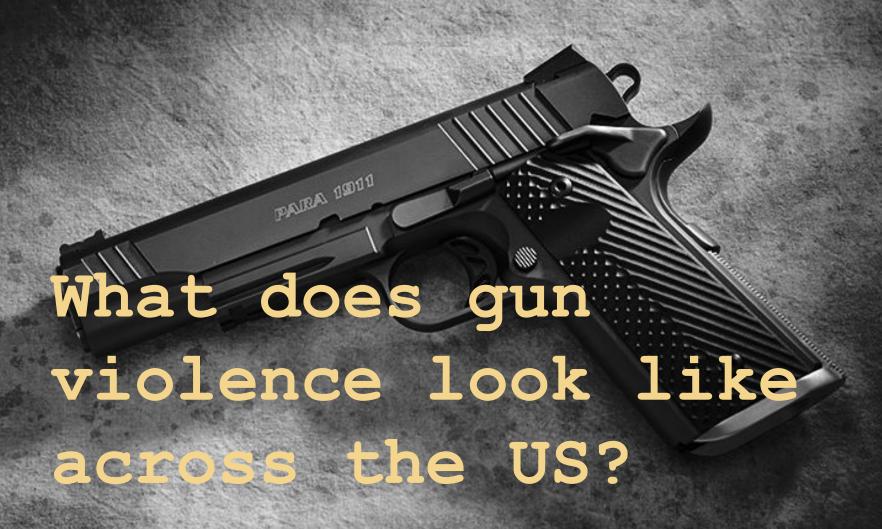
According to Amnesty International

Deaths

- More than 500 people die every day from gun violence
- 44% of all homicides globally involve gun violence
- There were 1.4 million firearm-related deaths globally between 2012 and 2016.

Injuries

- An estimated 2,000 people are injured by gunshots every single day
- At least 2 million people are living with firearm injuries around the globe





Description

Police say Monday's holiday mass shooting had been planned for weeks.

Seven people died and dozens were injured as Robert Crimo III fired as many as 70 rounds into the crowd from a Highland Park rooftop. The shooter accessed the roof via a fire escape ladder, then fled the scene wearing women's clothing.

'BLOOD **HORRIF**

Shootir Dresse

1 View desi

Atlanta police officer involved in fatal shooting of Rayshard Brooks fired as protests grow

A second officer was placed on administrative leave after the chief of police resigned earlier Saturday.



Detroit 5-year-old dies in accidental shooting on city's west side

By Robin Murdoch and Jack Nissen | Published August 23, 2022 | Crime and Public Safety | FOX 2 Detroit



DETROIT (FOX 2) - Another child appears to have died from an accidental gunshot after a boy got their hands on a firearm in Detroit.

Police were on Oakfield Avenue on Detroit's west side late Monday after a 5year-old was privately conveyed to a hospital after being injured by a gunshot.

Latest News

Detroit rapper drops new song after car trashed at Livonia collision shop

One-stop Covid testing and treatment sites added around Detroit

Wayne Police Department's therapy dog Zeke dies from

Domestic Violence Awareness Month: Michigan's new hotline provides support

Man accused of shooting at teen outside Oakland County youth facility



Trending















Our ETL Process

GVA GUN

GUN VIOLENCE ARCHIVE

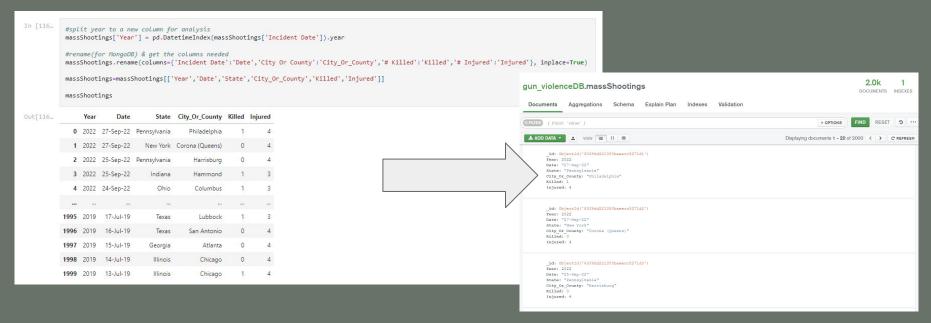
Datasets CONGRESSIONAL REPORTS CHARTS & MAPS LAST 72 HOURS REPORTS EXPLAINER ABOUT US PAST YEARS MASS SHOOTINGS Export as CSV Interactive Map State 2015 2016 2017 2018 2019 2020 2021 Incident Alaska 8 9 5 World Cities **US States US Counties** World Population Review Continents Countries Zips Alabama Gun Ownership by State 2022 Show Source Arkansas U.S. state party control as of January 2022 [edit] See also: Government trifecta § State government trifectas Arizona This section needs to be updated. The reason given is: House composition and notes referring to vacancies are out of date. Please help update this article to reflect recent events or newly available information. (January 2021) AK Party registration or California 2020 presidential Senior Junior U.S. House of State Governor State House identification (% as of + election U.S. Senator U.S. Senator Representatives 2020) Republican Alabama Republican Republican Republican 27-8 Republican 77-28 Republican Republican Republican 6-1 Colorado 52-35^[b] ND MN MT Republican Alaska Republican Republican Republican 13-7 Coalition 21-19[c] Republican Republican Democratic 24-13^{[d][9]} Connecticut WY SD Republican Democratic 5-4 Arizona Republican Republican 31-29 Democratic Democratic Democratic Republican 16-14 35-33[d][10] Republican OR CO NE Arkansas Republican Republican Republican 28-7 Republican 77-23 Republican Republican Republican 4 NV 48-35^[b] District of Columbia Democratio California Democratic Democratic Democratic 31-9 Democratic 59-19-1 Democratic Democratic Democratic 42-11 45-24[d][11] CA UT NM KS Delaware Democratic Democratic 41-24 Democratic 4-3 Colorado Democratic Democratic Democratic 20-15 Democratic Democratic 30-28^{[d][12]} AZ OK Democratic Connecticut Democratic Democratic Democratic 24-12 Democratic 97-54 Democratic Democratic Democratic 5 37-21[0][13] Florida TX Democratic Delaware Democratic Democratic Democratic 14-7 Democratic 26-15 Democratic Democratic Democratic 48-28^{[d][14]} Republican Georgia Florida Republican Republican Republican 24-16 Republican 78-42 Republican Republican Republican 16-11 36-35[4][15] Democratic Republican 8-6 Georgia Democratic Republican Republican 34-22 Republican 103-77 Democratic Democratic 43-42^[b] Democratic Hawaii Democratic Democratic Democratic 24-1 Democratic 47-4 Democratic Democratic Democratic 2 54-29^[b] Republican Kentucky Gun Ownership: 54.6 Republican Republican Republican 28-7 Republican 2 Idaho Republican Republican 58–12 Republican

How Should Our DB Tables Be Set Up?

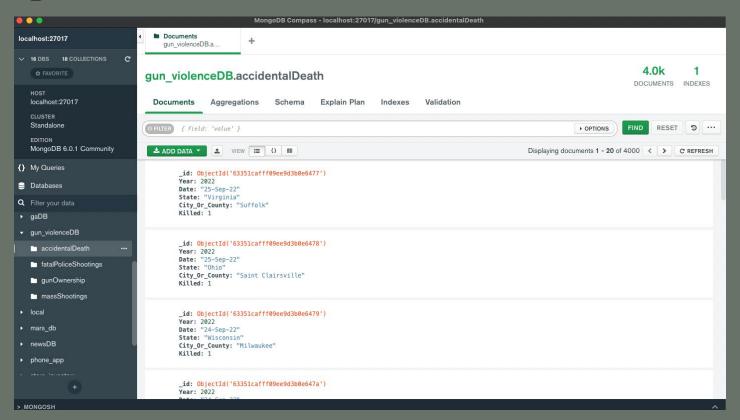
- The team discussed different data sets to use that were related to gun violence and ultimately decided to narrow the focus to:
 - o Fatal Police Shootings
 - o Mass Shootings
 - O Accidental Death
 - O Gun Ownership By State
 - O Party Affiliation By State
- Due to varying data within each CSV, we decided to use
 Mongodb to hold our data in collections

Data Cleansing With Python In Jupyter

Data was cleaned and sorted using a Jupyter notebook We also selected the desired fields for our analysis according to our goals Data was then merged into collections in our gun_violenceDB database.



MongoDB



Using the Data

Flask API

Use Python Flask Api to import the data from MongoDB



alDeath": 2.0, "fatalPoliceShootings": 7.0}, {"State": "A"shot"}, {"Year": 2022, "State": "Ohio", "manner_of_death": "shot"}, {"Year"

ath": 1.0, "fatalPoliceShootings": 9.0}, {"State": "Alask "shot"}, {"Year": 2022, "State": "South Dakota", "manner_of_death": "shot"}

Accidental Death

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Mass Shooting

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Officer Involved Shootings

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as", "gunOwnership": 0.457, "totalGuns": 588696}, {"State": "Wisconsin", "gunOwnership": 0.453, "totalGuns": te": "Nebraska", "gunOwnership": 0.452, "totalGuns": 22234}, {"State": "Colorado", "gunOwnership": 0.451, 2435}, {"State": "Indiana", "gunOwnership": 0.448, "totalGuns": 114019}, {"State": "Virginia", "gunOwnership": uns": 307822}. {"State": "Iowa", "gunOwnership": 0.436, "totalGuns": 28494}, {"State": "Minnesota", ip": 0.428, "totalGuns": 79307}, {"State": "Washington", "gunOwnership": 0.421, "totalGuns": 91835}, {"State": nire", "gunOwnership": 0.411, "totalGuns": 64135}, {"State": "Pennsylvania", "gunOwnership": 0.407, "totalGuns" ate": "Michigan", "gunOwnership": 0.402, "totalGuns": 65742}, {"State": "Ohio", "gunOwnership": 0.4, "totalGuns": ate": "Florida", "gunOwnership": 0.353, "totalGuns": 343288}, {"State": "Delaware", "gunOwnership": 0.344, 1852}, {"State": "Maryland", "gunOwnership": 0.302, "totalGuns": 103109}, {"State": "California", "gunOwnership": uns": 344622), {"State": "Illinois", "gunOwnership": 0,278, "totalGuns": 146487), {"State": "Connecticut". State: Tennessee, 'City, Of, County: 'Antioch', 'Killed': 18,4 'Wi fatalPoliceShootings': 2.0), ('State': Delaware', 'Year': 2022, 'Ma'shot'), ('Year': 2022, 'State': Florida', 'manner_of_death'. 'shot'), ('Year': 2022, 'State': Thorida', 'manner_of_death'. 'shot'), ('Year': 2022, 'National County: 'Antioch', 'Killed': 18,4 'Willed': City Of County: Detroit: "Killed": 1, "Year": 2022, 'Date": 22 "fatalPoliceShootings": 1.0), ("State": District of Columbia", 'Year" shot'), ("Year": 2022, 'State": "Missouri", "manner_of_death": "shot"), ("Year": 2022, 'State": "Assouri", "spot), "State": "Shot'), ("Year": 2022, 'State": "Assouri", "shot'), ("Year": 2022, 'State": "Shot'), ("Year": ersey", "gunOwnership": 0.147, "State": "Wyoming", "gunOwnership": 324}, {"State": "Idaho", "gunOwnership": : 35264}, {"State": "Arkansas", 558, "totalGuns": 35494}, {"State"

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Accidental **Injuries**

mer_of_death": "shot"}, {"Year": 2022, "State": "Arizona" 0.555, "totalGuns": 161641), {"State": "South Dakota", "gunOwnership": 0.553, "totalGuns": 21130}, {"State": "North Dakota",

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"State": "Minnesota", "gunOwnership": 0.428, "totalGuns": 79307}, {"State": "Washington", "gunOwnership": 0.421, "totalGuns":

Ownership": 0.553, "totalGuns": 21130}, ma", "gunOwnership": 0.547.

Console What's New x

Visualizing the Data in JavaScript

- Read the data from Flask Api and Json files
- Visualize the data using Plotly, Leaflet, d3.js and Chart.js libraries.

Dashboard

Are Gun Deaths Higher in Democratic or Republican

-Controlled Areas?

The data from 01/2019 to 09/2022 shows-

Gun ownership-

Blue vs. Red

2,008,712 : 3,146,865

Total Deaths-

Blue vs. Red

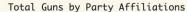
3,345 : 4,323

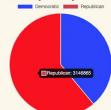
Gun Violence Dashboard

Use the interactive charts below to explore the dataset

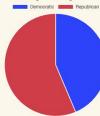
Gun Violence Charts:

This charts examined 50 US states and the District of Columbia from January 1, 2019, to September 22, 2022. Statistical analysis was performed from September to October 2022





Total Death by Party Affiliations

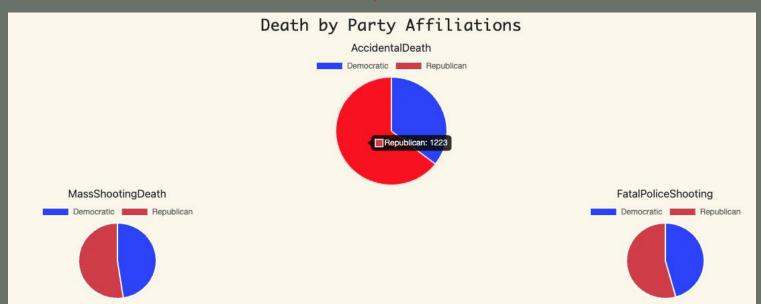


Dashboard

What's the major gun violence driving the difference in Democratic or Republican-Controlled Areas?

The data from 01/2019 to 09/2022 shows-

Accidental Deaths- Blue vs. Red => 672 : 1,223



Dashboard

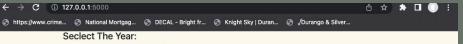
Are Gun Deaths Higher before, during or after pandemic?

The data of 2019 (before) 2020(during) 2021(after) indicates-

Gun Death-

	massShootings	accidentalDeath	fatalPoliceShootings	Total
Year				
2019	249.0	424.0	999.0	1672.0
2020	513.0	615.0	1020.0	2148.0
2021	705.0	536.0	1054.0	2295.0
2022	499.0	329.0	770.0	1598.0
Total	1966.0	1904.0	3843.0	7713.0

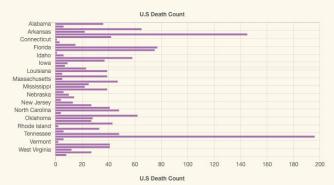
*2022 estimate death base on 9 month data: 2,130

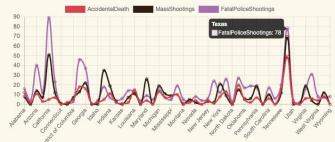


2022 Search Now

Gun Violence Charts:

This charts examined 50 US states and the District of Columbia from January 1, 2019, to September 22, 2022. Statistical analysis was performed from September to October 2022





CREATED BY • Michael Ariwodo • James Dellinger • Jarvis Lampton • William Mills • Vertta Moody • Pradip Raodeo • Gina Schulte • Selina (I Ju Su) • Aimee Vu • Valentina Zhu

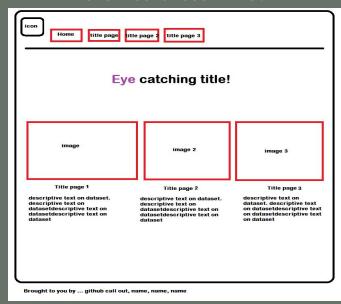
Map



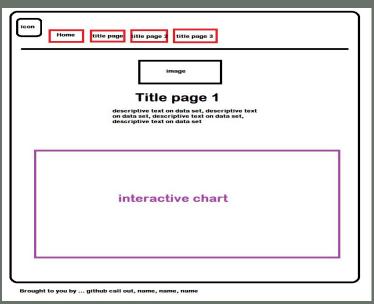
Putting It Together

Original Wireframe

- Collaborated as a team to create files for the website: styles.css, index.html, massShooting.html, & map.html.
- Added a basic layout with a two-toned color scheme.
- Created links to JavaScript files and used placeholder icons for homepage and navbar to get started.
- Started with inline CSS while collaborating but ended up moving everything over to a CSS file.



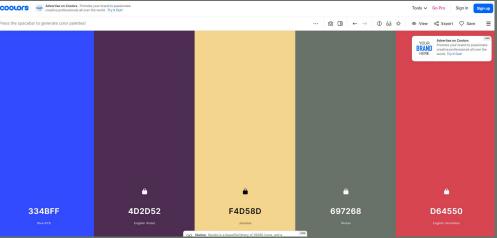




Overall Look

- Started with red and black along with more serious images and icons.
- Decided to go with a calmer look.
- Used W3 website to access the color library, font families, and other effects.
- Kept the pictures and icons in theme and made sure they focused on the data.





Final Products...

Datasets & Citations

- https://www.gunviolencearchive.org/mass-shooting
- https://www.safehome.org/data/firearms-guns-statistics/#police
- https://www.gunviolencearchive.org/accidental-injuries
- https://www.gunviolencearchive.org/accidental-deaths
- https://worldpopulationreview.com/state-rankings/gun-ownership-by-state
- https://en.wikipedia.org/wiki/Political party strength in U.S. states

Reference for javascript libraries:

- https://d3js.org/
- https://www.chartjs.org/docs/latest/
- https://www.w3schools.com/ai/ai chartjs.asp
- https://www.chartjs3.com/