Project 2 proposal

Our project is going to use a database from Kaggle <https://www.kaggle.com/amark720/police-killings>. This dataset uses data from the Washington post which compiles a database of every fatal shooting in the US by a police officer since January 1, 2015. The data includes information such as if it was an armed/unarmed shooting, race/ethnicities, and even state/city

Our goal is to make an interactive visualization of the data. We are going to make a choropleth map which will divide each state into a section that shows the number of killings in each state. We are going to implement a filter button which allows the visualization to be segregated based on ethnicity. For example if you would click ‘black police killings’ the map would show the number of killing in each state only pertaining to black ethnicity incidents.

We are planning to use several tools to make a visualization for our data. We will be using python and Flask as a backend to serve the data to the webpage. SQLalchemy is going to used to create a sqlite database, and also within flask to access this database. Pandas will be used to read in our csv, clean the data and transport into SQLAlchemy. The final visualization will be shown on our index.html page with help from css and javascript.

To visualize the data in a choropleth manner, a choropleth.js file will be used, and the geoJson data we will use is from <https://eric.clst.org/tech/usgeojson/>.

We are planning to use the three.js library as our new javascript library that we have not learned. This library allows us to put animations with sounds on our webpage which we will integrate into our project.

Below is a screenshot of the metadata description from Kaggle:

A screenshot of a cell phone

Description automatically generated

Example of choropleth map:

A close up of a map

Description automatically generated

If we have time we would want to implement this type of visualization:

A close up of a map

Description automatically generated