Crime Characteristics by each Counties in Georgia

Group Members: Joe Johnson, Jenny Bedwell, John McMullan, Huda Alghazouli, Hwa Hara, Sarje Page, Chloe Stitik, Lennox Nguyen, Megan Harper, Diana Lam, Daulton Davis

Datasource:

https://fred.stlouisfed.org/release/tables?rid=175&eid=266512 https://crime-data-explorer.fr.cloud.gov/pages/explorer/crime/crime-trend

Overview:

With ORI (Originating Agency Identifier) of Georgia law enforcement system, we will be able to extract different crime data from 2017 to 2020 inside Georgia. This will be illustrated in our dashboard as a bar graph and pie chart, showing different crime categories and count of each crime in each county. Each county within Georgia will be located inside a drop down menu placed in a index page as well as visual page that contains interactive graphs.

From Jupyter notebook, both median household income data and crime data API will be used to import crime data of each county inside Georgia. Both data will be joined and cleaned inside jupyter notebook platform to be exported to Postgres SQL database.

For a unique JS library that was not covered in class, we will be using Vega-lite.

These two data will be visualized in an interactive dashboard using HTML/CSS and javascript on the visual page. Following views will be inside our final visualization:

- 1. Index page with summary of crime data and household income data
- 2. Inside visual page (dashboard), following visual graphs will be included:
 - a. Bar graph representing different crime categories for each corresponding GA county.
 - b. Pie chart showing percentage of Property crime vs. Violent Crime.
 - i. Property crime includes the offenses of burglary, larceny-theft, motor vehicle theft, and arson.
 - ii. Violent Crime includes murder and nonnegligent manslaughter, rape, robbery, and aggravated assault.
- 3. Leaflet page will have map with median household income data and crime data with filtered checkboxes