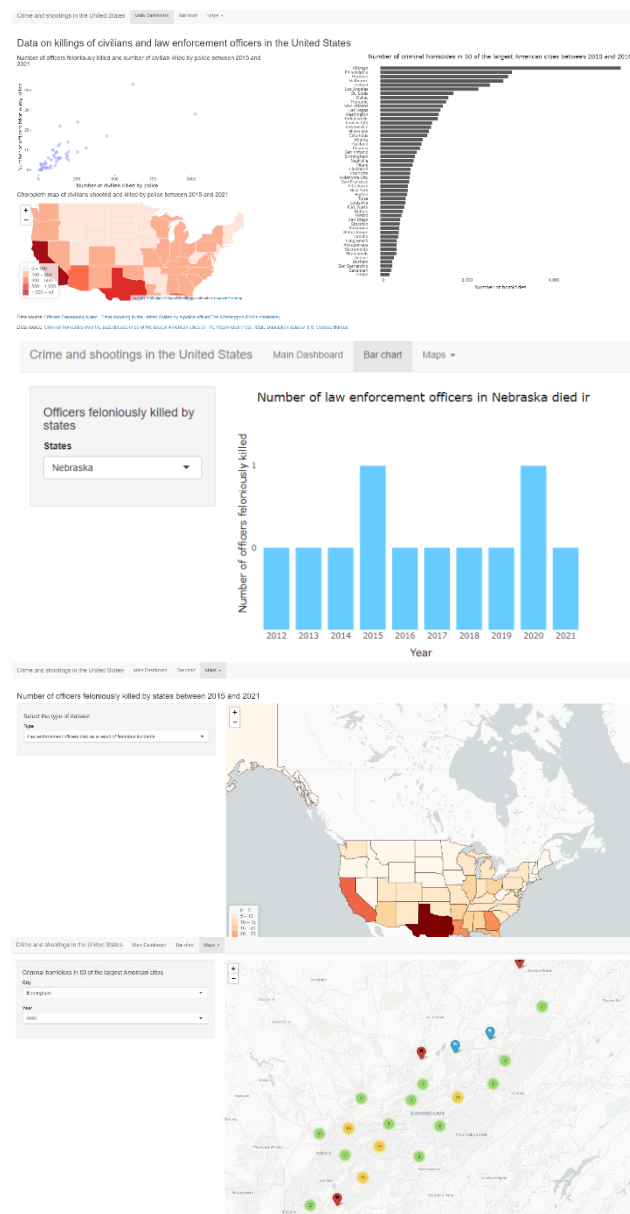


## Design summary report

The dataset I used was primarily from the Washington Post, one of the suggested sources in the assignment specification. I saw the criminal homicide dataset and the police shooting dataset at the top of their GitHub page. Then I used both datasets. In addition to that, I found the federal officers killed data from Crime Data Explorer of the FBI. I used the US population data from the U.S. Census Bureau and the Geospatial data for the United States from [rstudio.github.io/leaflet/json/us-states.geojson](https://rstudio.github.io/leaflet/json/us-states.geojson). I did manual editing of some of these data via Excel. For example, in the population data I only keep the data for 2020. In the federal officers killed data, I have also selected only the table of the number of officers killed per year by state. No changes were made to the data from the Washington Post.

I used the similar layout of shiny as in week 7. I think the interface that is seen first is the most important, so I have put three graphs on the first tab. They are scatter plot of officers feloniously killed and civilian killed, choropleth map of civilians shot and killed by police, bar chart of number of homicides in the 50 of largest American cities. These graphs are relatively representative of the theme.

In the second tab is the detailed number of law enforcement officers killed in each state by year. The third tab has a secondary navigation for choosing between the two kinds of maps. I think integrating similar images together can lead to a better viewing experience. Viewers can select the type of data by using the sidebar on the left of the choropleth map. On another map, viewers can see the locations of homicides that occurred in the city over the years by selecting the city and year. These two tabs allow to show more details of the data and give the viewer a sense of exploration.



## *Appendix*

Officers Feloniously Killed: <https://s3-us-gov-west-1.amazonaws.com/cg-d4b776d0-d898-4153-90c8-8336f86bdfec/LEOKA/downloads/LEOKA-Felonious-2021.zip>

Fatal shooting in the United States by a police officer:  
<https://github.com/washingtonpost/data-police-shootings>

Criminal homicides over the past decade in 50 of the largest American cities by The Washington Post: <https://github.com/washingtonpost/data-homicides>

State population data by U.S. Census Bureau: <https://www2.census.gov/programs-surveys/decennial/2020/data/apportionment/population-change-data-table.pdf>

Geographic Information Data of the United States:  
<https://rstudio.github.io/leaflet/json/us-states.geojson>

Some of the code is from the lab session from week 5 to week 7