**R Programming Final Project Report**

**Self-Chosen Topic Dashboard**

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1. **Problem Description**

United States are famous around the world for many reasons, one of witch is easy gun permission. Because of that, every year many incidents with this particular weapon happen. One of the cities with the biggest number of incidents is New York, placed on the East coast of the US. Gun fights in which people die, happen every day and depending on district, this is more or less casual. NYC is the most densely populated major city in the United States so those incidents are even more dangerous. Many of them are fights between local gangsters. However, even in those, innocent and unlucky pedestrians die.

1. **Goal of the Dashboard**

The goal of this dashboard is to showcase the numbers stored by NYPD (New York Police Department) database about gun incidents in New York through years 2006 – 2020.

Also, by visualizing them to bring people attention and make them realize how big the problem is.

1. **Data collection methods**

Used data is from the publicly available [NYPD database](https://catalog.data.gov/dataset/nypd-shooting-incident-data-historic) filled up by NYC Police Officers.

1. **Tools Used**

Tools used to create the dashboard:

* R Studio
* Google Chrome

1. **Conclusion**

Data clearly highlight that the problem is big. The numbers are enormous and still growing. Most incidents include action or death of mostly black people. Brooklyn is the most dangerous district with over 800 gun incidents in 2020 only, which brings an average of more than 2 incidents a day. Interesting fact is that most of those happen in a mid day and not in the night. 18-24 is the mean perpetrator age. A thrilling fact showing that young people are the ones that mostly pull the trigger.

1. **Reflection**

Overall, I am very satisfied with my dashboard. The time I spent creating it was well managed by me. I really like both the data displayed and the visual aspects of it. The output is almost the same as my initial paper design.

During the process ,I had an opportunity to practice my skills learned during this Semester’s R programming course and I am grateful for it. In the future I want to experiment with another way of creating dashboards: Shiny. I heard and saw that it is cool and brings slightly more options than flexdashboard.

1. **References**

Data source: <https://catalog.data.gov/dataset/nypd-shooting-incident-data-historic>

Description: <https://en.wikipedia.org/wiki/New_York_City>

Programming help: <https://stackoverflow.com/>