Interactive Media Design CA 1

Matthew Roche – X00102929

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# **CA Summary**

This goal of this CA is to provide visualisations regarding various violent crime statistics in the United States for recent years. An area in which this CA aims to provide some level of insight into, is violent crime over time and current trends. In order to achieve this goal, this CA will warrant the use of crime statistics over a number of years in order to demonstrate change and current trends. This CA will also highlight crime as it pertains to different states of the Contiguous United States, for which data showing crime statistics as they relate to specific states will have to be utilized.

Currently Gun Control and Race Equality are large concerns in the United States, for this reason this CA will highlight these concerns as they relate to Violent Crime. The CA will attempt to highlight different weapons types and the frequency with which they are used to commit crimes. It will also look at Violent Crime in relation to race by examining the rate at which crimes are committed by each race and the rate at which each race is a victim of violent crime.

These visualisations will ideally clear up misconceptions and provide an accurate insights into Crime in the US. Through these insights this CA is intended to provide a broader understanding of Violent Crime and the demographics surrounding it.

# **Background**

Violent Crime in the United States has been a very contentious issue over the last decade, according to Forbes mass shootings have been on sharply rising over the last decade, as of the 18th of October 2015 there have been 305 mass shootings in the US.

While this CA takes a much broader approach to Violent Crime than Mass Shootings, they are a globally publicised event, for this reason I felt a look at Crime in the United States would be a very interesting subject to study and attempt to visualise.

When considering this topic over others, I was heavily influenced by the impressive collection of statistics made available to the public by the FBI through FBI.gov. These statistics cover a wide range of topics relating to crime, such as crime by State, County, City etc. as well as crime by different demographics such as race, gender, sexual orientation, religion and more. Interestingly, the statistics provided by the FBI do not just numbers regarding numbers crimes, they also provide statistics such as weapons used, motivations and more.

The ready availability of interesting data sets is what lead me to choose this topic over other choices, I feel that with this information this CA will be informative and relevant to the stated goals in the summary.

There have been various data visualisations done in relation to this topic, many of which utilize the same statistics I opted to make use of. Given the very relevant and highly publicised nature of the topic I have chosen all of what I will demonstrate has at some point been demonstrated before. In order to separate this CA from what has been done before, I will aim to provide interactivity and multiple visualizations which highlight

# **Seven Stages**

## Acquire

I obtained my data from publically available FBI

## Parse

Structure the data for the data meaning – order the data into categories

## Filter

Remove all the data that you are not interested in

## Mine

Use data mining techniques to identify patterns or put data in a mathematical context

## Represent

Choose a visual model – bar chart, map, graph etc.

## Refine

Improve the basic representation to make it more visually engaging

Interact

Add methods for manipulating the data / controlling what features are available

# **Problems & Solutions**

# **Conclusions**

# **References**

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