

# Visualising Global Terrorism Attacks

Akash Bachu

01668053

Data Science

## Overview

The Global terrorism data was collected by "Global Terrorism Database" and contains over 100,000 incidents of terrorist attacks from (1970-2016) worldwide. The dataset has 100 different attributes for every incident. My goal is to infer and present maximum number of attacks across the globe and comparing how the kills have been reduced over the time. And also Number of terrorist attacks in the world since 1970 (5-year interval).<sup>1</sup>

List of tasks:

1. Which countries are being affected by terrorism the most?

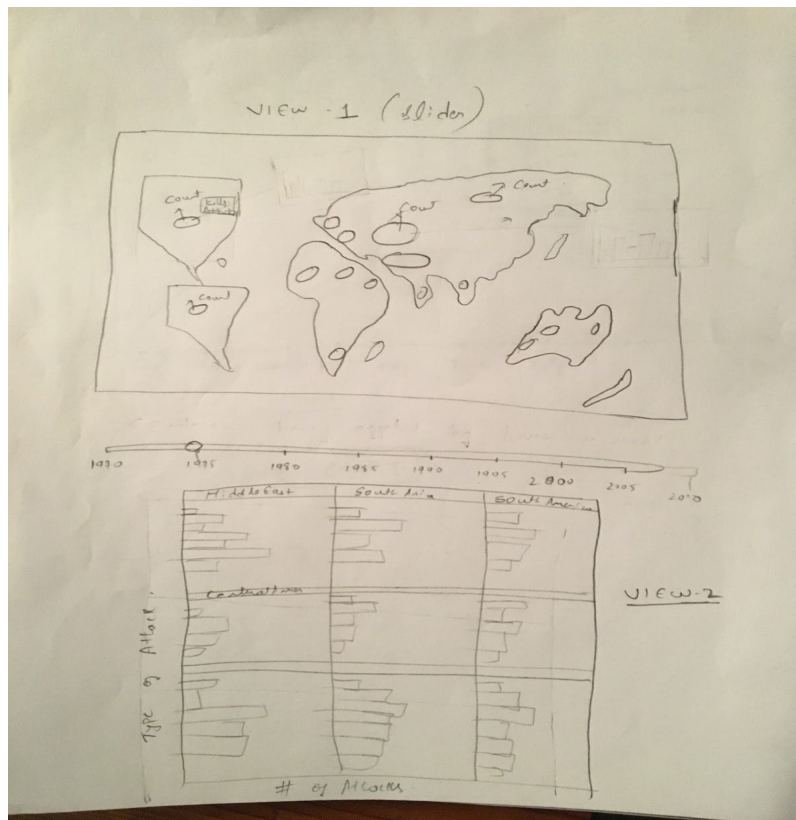
By using circle as size of which indicates the number of attacks that occurred in a country we can get a glimpse where the attacks are happening the most. By using the mouseover and mouseout functions we highlight the circles, we can use a tooltip to indicate the number of attacks, and number of people who were killed in those attacks that occurred in that particular country in selected year on the slider. The slider bar for every 5 year interval to show the intensity of attacks on each country. As we slide through the slider bar the circle resizes to indicate the number of attacks happened in that year.

2. What kind of terror attacks are most common in each country?

Barplot matrix (4x3) to visualize types of attacks in 12 regions of the world in the year selected using the year slider used for the first visualization.

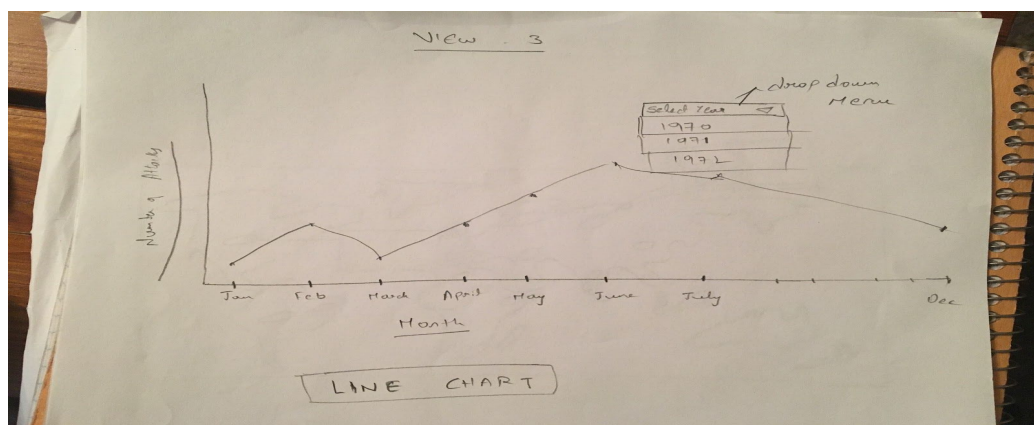
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<sup>1</sup> <https://rpubs.com/daattali/statsTerrorismProject>



3. In which month of the selected year, attacks happen the most?

A line chart to show the number of attacks that happen in every month of a selected year. A dropdown on the top right corner can be used to select the year and show the visualization.



The Initial task is to preprocess the dataset and extract what attributes are required for the visualization and when the attributes are identified, they're sorted into quantitative, categorical and ordinal ways. After preprocessing, dataset will be explored, identified what is to be done, compare the intensity of attacks with the time period and give a summary for

the dataset. For the visualizations using categorical attributes, I intend to use motion and shape Channels and for map visualization I'll be using Color Hue and Color Luminance. As I am still exploring the dataset, I might be updating the visualizations.

Data Source: <https://www.start.umd.edu/gtd/>  
<https://www.kaggle.com/START-UMD/gtd>