# **Capstone Project Submission**

#### **Instructions:**

- i) Please fill in all the required information.
- ii) Avoid grammatical errors.

# **Team Member's Name, Email and Contribution:**

## 1)Arun Gupta (<u>gupta.arunkumar95@gmail.com</u>)

- 1.1 Data Processing
- 1.2. Data Wrangling
  - 1.2.1. Data Cleaning
    - 1.2.1.1. Fixing all the missing values in the data set
    - . 1.2.1.2. Percentage of null values in data set

## 1.3 Exploratory Data Analysis

- 1.3.1 Analyzed number of killings, wounded and casualties in each region
- 1.3.2 Visualized Year and Region Wise Casualty count
- 1.3.3 Top 30 Worst terrorist Attacks with country, year and casualties
- 1.3.4 Heat map for Null values check

# 2)Farhat Jahan, (<u>ifarhat006@gmail.com</u>)

- 1.1 Data Processing
- 1.2. Data Wrangling
  - 1.2.1. Data Cleaning
    - 1.2.1.1. Fixing all the missing values in the data set
    - 1.2.1.2. Percentage of null values in data set

## 1.3 Exploratory Data Analysis

- 1.3.1 Visualized methods of attack.
- 1.3.2 number of casualties in each region and country.
- 1.3.3 Terrorist activity by region plot.

1..3.4 Visualization of Terrorist Activities by country in each year.

# 3)Sharaffin B, (<a href="mailto:sharaffinb@gmail.com">sharaffin B</a>, (<a href="mailto:sharaffinb@gmail.com">sharaffinb@gmail.com</a>)

## 1.1. Data Processing

#### 1.2. Data Wrangling

- 1.2.1. Data Cleaning
  - 1.2.1.1. Fixing all the missing values in the data set
  - . 1.2.1.2. Percentage of null values in data set

## 1.3. Exploratory Data Analysis

- 1.3.1. Bar plot to check which are the most attack types,top countries affected
- 1.3.2 Scatter plot graph for top targeted attacks with year,
- 1.3.3 Histogram for Frequency of attacks with respect to years
- 1.3.4 Box plot visualizing the region of attack and the timeline
- 1.3.5 Frequency of most attacked regions in a pie chart
- 1.3.6 Line chart for People killed.

#### 1.4. Conclusion and Recommendation

# 4)Shrutika Kawade, (kawade.shrutika70@gmail.com)

## 1.1. Data Processing

#### 1.2. Data Wrangling

- 1.2.1. Data Cleaning
  - 1.2.1.1. Fixing all the missing values in the data set
  - 1.2.1.2. Percentage of null values in data set

# 1.3. Exploratory Data Analysis

- 1.3.1 Count plot to Observe which region is affected by terrorism in each year
- 1.3.2 Plotted graph to check the targeted place by terrorist
- 1.3.3 Heat map for the correlation between the values

- 1.3.4 Wordcloud to observe names of the state mostly attacked
- 1.3.5 Plotted a line graph to observe the most active gang from 2004-2017
- 1.3.6 Observation on Al Qaeda as the group with most kills

# 5)Yuvaragavan Palanisamy (yuvaragavanmech@gmail.com),

#### 1.1. Data Processing

#### 1.2. Data Wrangling

- 1.2.1. Data Cleaning
  - 1.2.1.1. Fixing all the missing values, NA in the data set
  - . 1.2.1.2. Fixing the null values in data set

## 1.3. Exploratory Data Analysis

- 1.3.1. Bar plot to check which are top weapons used, terror attack over the years
- 1.3.2. Observations on Number of Terror attacks of taliban over the years
- 1.3.3. Visualizations on number of people killed by taliban with respect to years
- 1.3.4 Bar plot for Frequency of attacks with respect to years
- 1.3.5 Line plot for Wounded people in the attacks in each year.

#### Please paste the GitHub Repo link.

Github Link: <a href="https://github.com/Sharaffin/EDA-GlobalTerrorismAnalysis">https://github.com/Sharaffin/EDA-GlobalTerrorismAnalysis</a>

Please write a short summary of your Capstone project and its components. Describe the problem statement, your approaches and your conclusions. (200-400 words)

This data set contains information on Terrorism globally and includes information such as when the terror attack was made like Year, Month, Regions attacked,city, country, Killed, wounded, terror groups, Attack type etc which helped us draw major insights from the data set. Our aim here is to explore and analyze the data to discover key findings pertaining to terrorist activities.

We have performed analyses such as univariate analysis, Bivariate Analysis, and Timewise analysis, visualized them as various types of graphs for better understanding and also tried to answer other important questions to solve the problem statement.

We tried to answer the questions such as:

- which regions and countries is most affected by terror outfits
- which terror group is the largest
- the number of casualties in every country and region
- which type of people and organizations are attacked
- the kind of weapons used on people
- the trend of attacks over the years
- the terror groups and their ways of perpetuating crimes
- The number of people killed by each terror groups
- Which years had the most attacks on a specific region
- The percentage of attacks carried out by each terror group
- The Most active gang from 2004 to 2017
- Targeted places by terrorist

We used different libraries to form tables and graphs in order to understand and answer these questions. We got to know that

- Private Citizens and Property were attacked most followed by Military,
  Police, Government and so on.
- The Middle East & North Africa was most affected among the top affected regions.
- Iraq was the country which was most affected by terror attacks and had maximum number of killed and wounded people.
- Most of the people in this region were either wounded or killed.
- The State and City that was most affected was Baghdad
- In the last decade 2014 had most number of terror attacks. That was around 16500 attacks during this year which means on average 45 attacks per day
- The most common attack type was Bombing/Explosion.
- Explosives have been consistently the most popular weapon of choice for terrorists.
- Taliban became more active since 2012 and they are responsible for the most of the terror attacks

