Capstone Project Submission
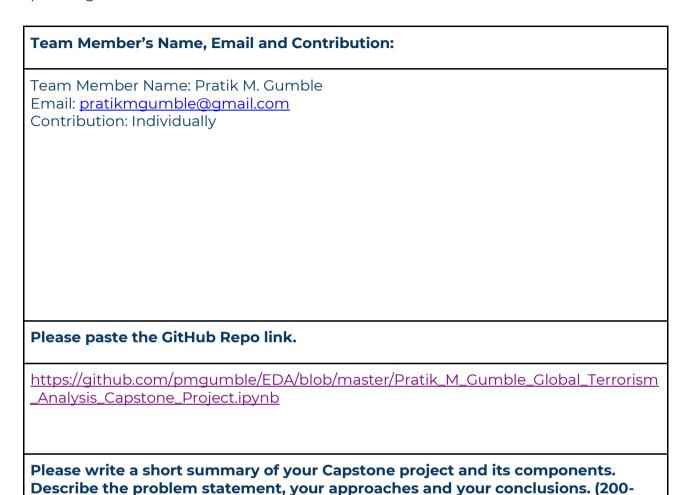
Instructions:
i) Please fill in all the required information.
ii) Avoid grammatical errors.

Team Member's Name, Email and Contribution:
Team Member Name: Pratik M. Gumble Email: pratikmgumble@gmail.com Contribution: Individually
Please paste the GitHub Repo link.
https://github.com/pmgumble/EDA/blob/master/Pratik_M_Gumble_Global_Terrorism_Analysis_Capstone_Project.ipynb
Please write a short summary of your Capstone project and its components. Describe the problem statement, your approaches and your conclusions. (200-400 words)

Problem Statement
As a data scientist to perform exploratory data analysis to uncover the underlying structure. The
analysis and prediction of terrorist attacks on terrorist groups provide valuable information for
antiterrorism and terrorism prevention operations, to improve the security and stability of social
life.

Approaches:

1. Starts from the analysis of Dataset and its statistics, identified the number of rows and columns in data set. The first step involve is Data preparation, Data Cleaning & Basic Analysis
2. The columns containing null values, selecting only those columns which will be useful in our EDA. Rename the columns for better understanding.
3. After analyzing the data using various functions and methods of Numpy and Pandas Libraries and Data Visualization techniques, various observation are made which are inferred below every visualization.
4. Identified the useful and crucial variables for EDA, identified null values and replace with significant data.
5. Basic analysis by visualization, plot the success rate of terrorist attacks
6. From correlation plot identified correlated variables which are Killed, Causality and wounded.
7. Starts EDA with number of attacks in each year which gives idea about increasing terrorist activities trend
8. Looked for global top 20 countries who are suffered most in terrorism, same way we looked for cities targeted most by terror activity. Regions affected by terrorism.
9. Regions attacked across the year gives idea about year wise terrorist attack zone on various regions. Which further can be investigate with certain data region wise.
10. Most weapons used in terrorist attacks, who are the main targets of terrorist groups.
11. Understand the type of terrorist attacks that cause death, look for the trend of attacked versus killed. Year wise deaths
12. Look into the dataset for most notorious group
13. Using graphical visualizations using maps identified terror groups their regions and activities carried out in regions,
14. Conclusions:
    1. Iraq country has highest number of attacks, Middle and East Africa region has highest number of attacks. Explosives are the most weapon used by terrorists. Taliban is most Notorious group with highest number of terrorist
    2. Terrorist activities are more in Middle East and North Africa Attacks have increased from 2010 in Middle East and South Africa
    3. Safety measures have to take regarding explosive devices as bombing explosions are the most weapons used by terrorists
    4. Strong security should be given to Private citizens and Property ,Military, Police etc. as they are main target in terrorism