

## Goals:

- The goal is to visualize the distribution of terrorist attacks (from 1970 to 2017) across the world.
- To provide interactive hover information that displays the exact attack count for each country.

Terrorist Attacks by Country



## Insight:

- The choropleth map effectively highlights the global distribution of terrorist attacks. Hovering over a country we can see the precise attack count.
- Upon observing we can see that the countries with the highest number of terrorist attacks are concentrated in the Middle East, South Asia, and North Africa.
- Some of the countries with the highest numbers of attacks include Iraq: with 213,279 attacks, Afghanistan: with 83,661 attacks, Pakistan: with 65,860 attacks, and India: with 48,321 attacks.

## Data abstraction:

- **Dataset Type:** Tabular data (CSV file)
  - **Item:** Terrorist incident
  - **Attributes:**
    - **Country:** Categorical type. The nation where the attack occurred. (Additional attributes used in code: Region, City, latitude, longitude)
    - **Attack Count:** Quantitative type. Represents the impact or casualties caused by the attacks. (Additional attributes used in code: Killed, Wounded, AttackType, Target, Group, extended, Target\_Type, Weapon\_Type, Motive)
    - **Year:** Quantitative type. Uses data from all the available years. (Additional attributes used in code: Month, Day)

**Task abstraction:**

The Choropleth map helps the users to manually explore the distribution of terrorist attacks over the globe. By looking at the colour intensity, users can locate and compare the precise attack count for a specific country. This helps in discovering patterns and trends about terrorism.

- **Marks:** Areas – Represent countries.
- **Channels:**
  - Colour – Represents attack count
  - Spatial position – Represents the position of each country on the map
- **Users:** Analysts, researchers, General public.
- **Actions:**
  - High-Level – Discover
  - Mid-Level – Explore, Locate
  - Low-Level – Identify, Compare
- **Targets:** Spatial Data – To view (by hovering) the attack count on a country.

**Additional data source:**

- The Choropleth map was created in python3 using the Plotly express package.
- The dataset used is called “Global Terrorism Database”, available as a CSV file at kaggle.com  
Link: <https://www.kaggle.com/datasets/START-UMD/gtd/data>

## **Peer Feedback :**

### **1 Goals and Insights: 60%**

A clear description of goals and insights has been provided with elaborate description of the task being performed. Hovering over the visualization does have a limitation of using a GUI as a compulsion as it does not give a complete quantification by just observing the image

### **2 Data Abstraction: 100%**

Exactly prescribed the utilized Dataset type, . Utilized Items and Attributes for Visualization are accurately prescribed and no misconception in Attribute type is seen.

### **3 Task Abstraction: 60%**

Task abstractions are described. Colorbar Intensity was defined and has been explained but the bins or levels of colorbar was rather more vague to understand as the colorbar intensity fades easily over each level. Would rather indicate the boxed colorbar for better understanding. Target of the visualization was to compare which was also present in the report. No misunderstandings of task abstractions. Image of the visualisation: 100%

### **4 Image of the visualisation: 40%**

The image is very blurry of quality, clearly shows the insights as described. Clearly labelled elements. Hovering over the visualization always has a limitation of using a GUI as a compulsion, inorder to run the code and hover over it as it does not give a complete quantification by just observing the image. So by just observing a .png image shall give very abstract sense and not a quantified sense of data.