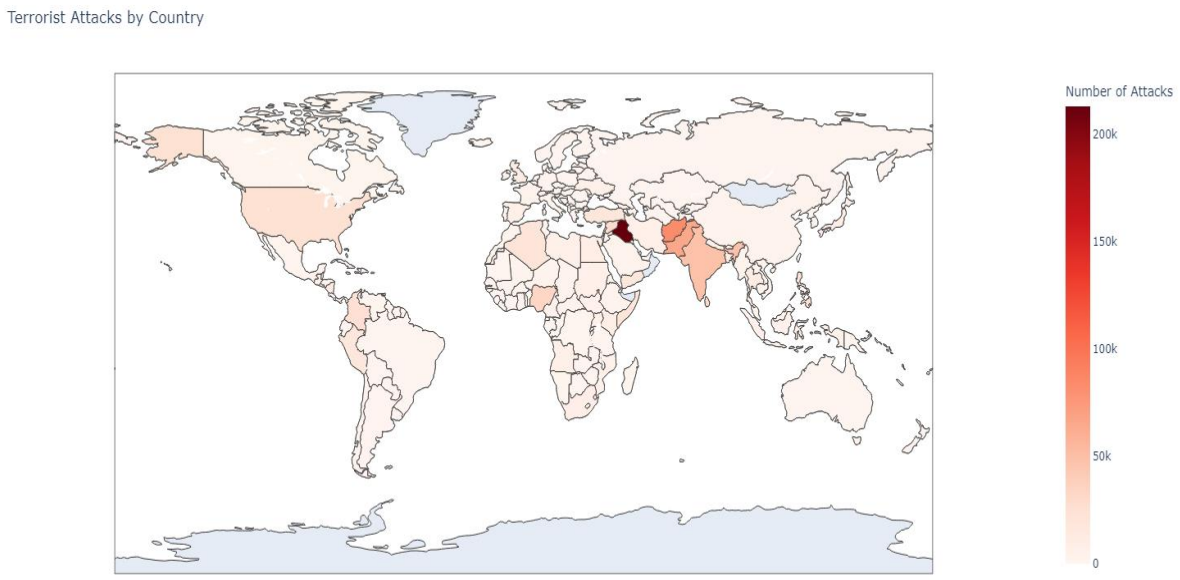
Goals:

- 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.



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 – From 2151463 to 2340638

Goals and insights: 100% - *A clear description of goals and insights.*

1. Your goals and insights are concise and clear. Well written and in bullet points.

2. A limitation of your insights would be that since you are using a static image, a user cannot interact with your visualization, therefore it's unnecessary to mention the hovering action.

Data abstraction: 70% - *More than half of the description corresponds to the data and the vis. Incomplete description of dataset and data types included.*

1. Strength of your Attributes is that you have given what type of attribute it is and its description or meaning in the dataset.

2. It's unclear what additional attributes are being used for. For example, are you using additional attributes to calculate derived attributes or are these attributes used separately?

Task abstraction: 90% - *Task abstractions are described in detail, with high- and low- level tasks. No misunderstandings of task abstractions. Detailed description of marks, channels, users, actions, and targets.*

1. You have provided details about all the necessary abstractions. Clear and concise details with correct usage for marks, channels, and targets.

2. You should elaborate more on actions and justify how or why each action can be performed by a user.

Image of the visualization: 60% - *The image is of appropriate quality, but it is unclear how the stated insights could be drawn from the vis*.

1. The scale of color saturation used is inappropriate or insufficient. For example, Iraq seems to have suffered the most with deep red color channel, with South Asia following next. Apart from that, north Africa with South America may not be too far behind, but the scale of Number of Attacks makes it difficult to distinguish from others such as Middle East and North America.

2. A potential limitation of your report is that due to reliance on interactivity of visualization, it is unclear how one can derive precise details from a static image.

3. Text in your visualization is too small and faint – that includes the title of the world map and the color bar. A visually challenged user may have a hard time reading these.