**Project Title**:  "Analyzing Patterns in Shark Attack Incidents: A Global Perspective"

**Team Members**:

* Albert Lee
* Courtney Cole
* Jay Singh
* Mohamed Ibrahim

**Project Description/Outline**:  A detailed statistical exploration into the patterns of shark attacks across the globe, aiming to understand the factors influencing the occurrence and outcomes of shark encounters.

**Research Questions**:

1. Seasonal Patterns: Are attacks more frequent during certain months or seasons?
2. Species Involvement: Which shark species are most involved in attacks, and are some more likely to cause severe injuries?
3. Activities Leading to Attacks: Is there a relationship between certain activities and the likelihood of an attack?
4. Geographic Hotspots: Which locations are more prone to attacks, and why?

**Dataset**:  Global Shark Attack Data  URL: [Global Shark Attack Dataset](https://public.opendatasoft.com/explore/dataset/global-shark-attack/table/?flg=en-us&disjunctive.country&disjunctive.area&disjunctive.activity&dataChart)

**Task List**:

* API Data Retrieval: Implement an API call to retrieve the latest shark attack data.
* Data Preprocessing: Clean and preprocess the retrieved data to ensure quality and consistency for analysis.
* Generate Summary Statistics: Compute basic statistics to understand distributions, averages, and variances within the data.
* Data Visualization: Create charts, maps, and graphs to visually represent trends and patterns identified in the data.
* Analysis Summary: Draft a summary of the insights gained from the statistical analysis and visualizations.
* Provide potential limitations of the study and dataset.
* Conclusion and Recommendations: Conclude with key findings, their implications, and suggestions for future studies or public safety measures.

GitHub Repository:  Shark-Analysis-Team

Tasks will be evenly distributed and collaboratively refined. The team will use GitHub for version control and progress tracking, ensuring an integrated and transparent workflow.

Data Retrieval: All

Data Preprocessing: All

Generate Summary Statistics: Individuals

Data Visualization: Individuals

Analysis Summary: Individuals

Limitations: Individuals

Conclusion/Recommendations: Individuals and then one combined conclusion as a group?

1. Seasonal Patterns: Are attacks more frequent during certain months or seasons? - Albert
2. Species Involvement: Which shark species are most involved in attacks, and are some more likely to cause severe injuries? - Jay
3. Activities Leading to Attacks: Is there a relationship between certain activities and the likelihood of an attack? - Courtney
4. Geographic Hotspots: Which locations are more prone to attacks, and why? - Mohamed