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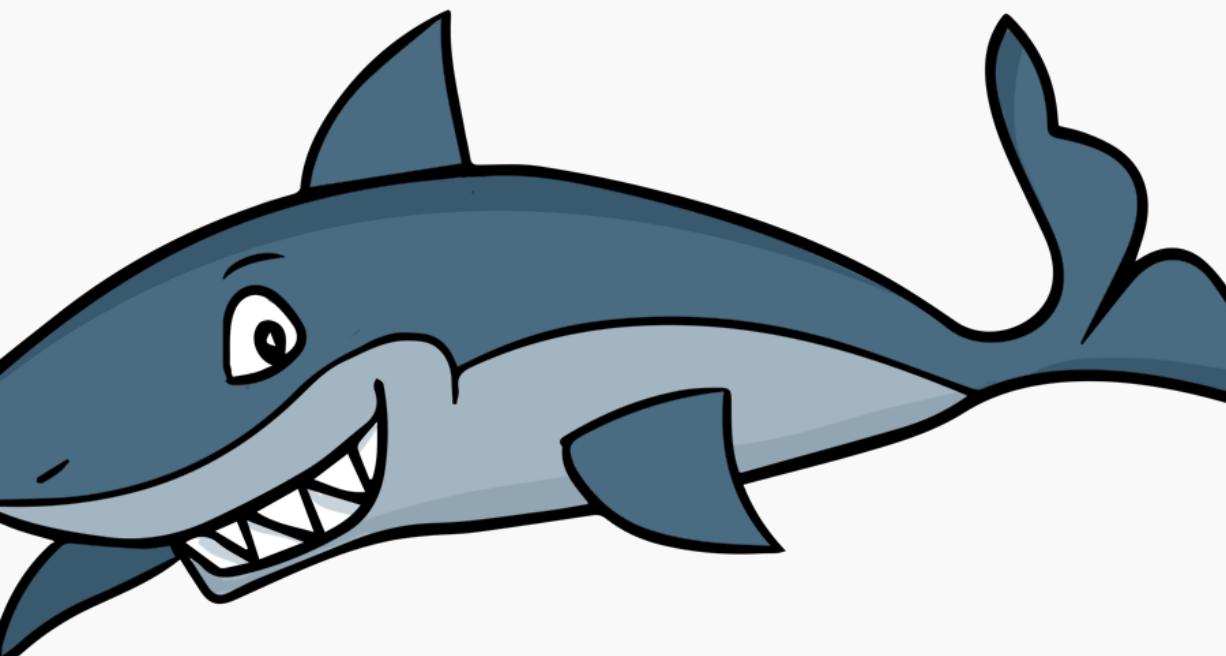
## Shark Attacks

Presented by Dickens

# Agenda

- Motivation & Problem Statement
- Dataset
- EDA Overview
- Data Cleaning
- Analytics
- Summary of Findings
- Conclusion

# Motivation & Problem Statement



- Shark related dataset
- Analysing shark attack patterns
- Relating data to overall assumptions



# Dataset Overview

## **Shape of Data Set:**

- (7058, 23)

## **Overall country distribution**

- Unevenly distributed

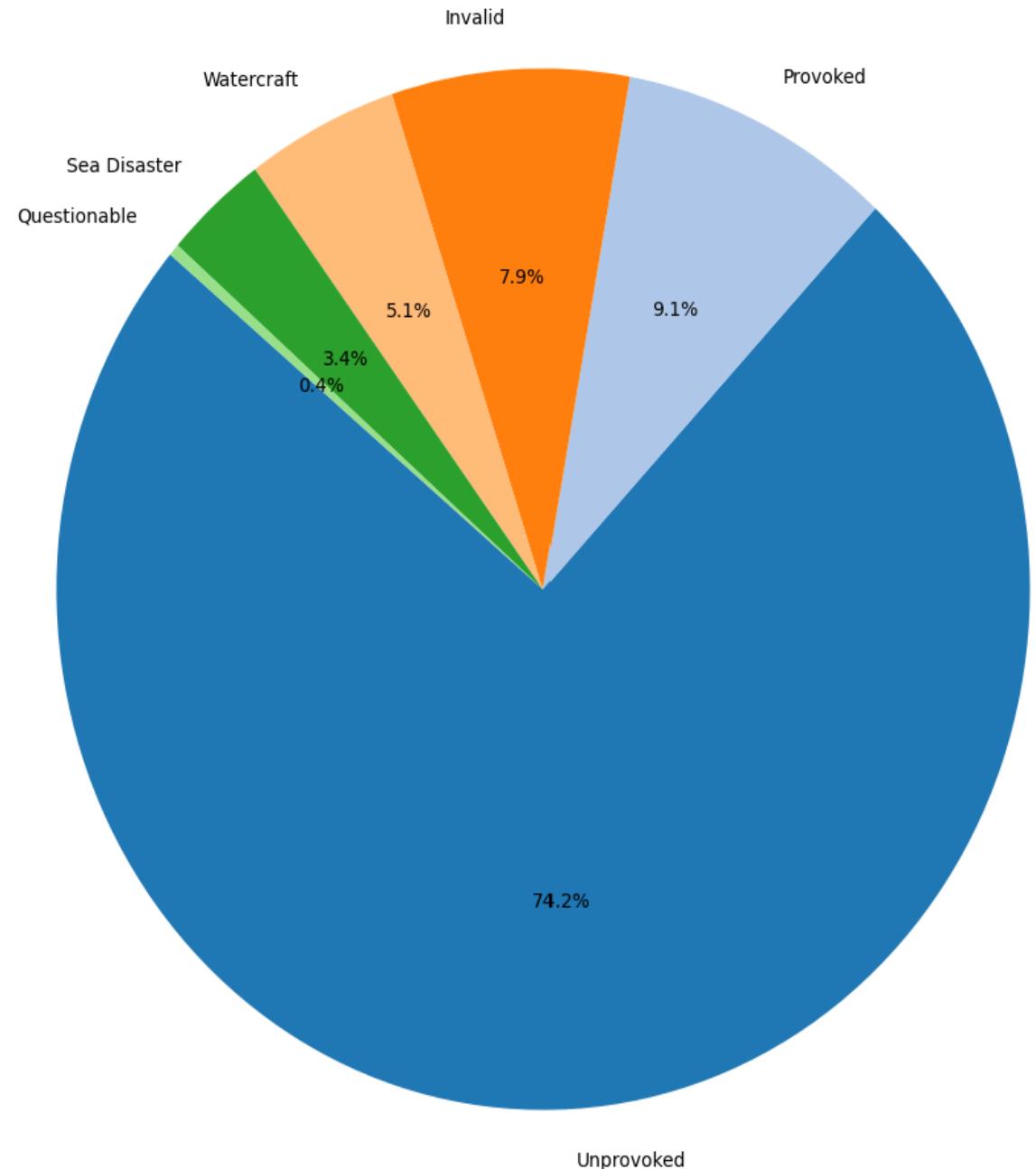
## **Main Variables**

- Country
- Type
- Fatality
- Gender
- Species

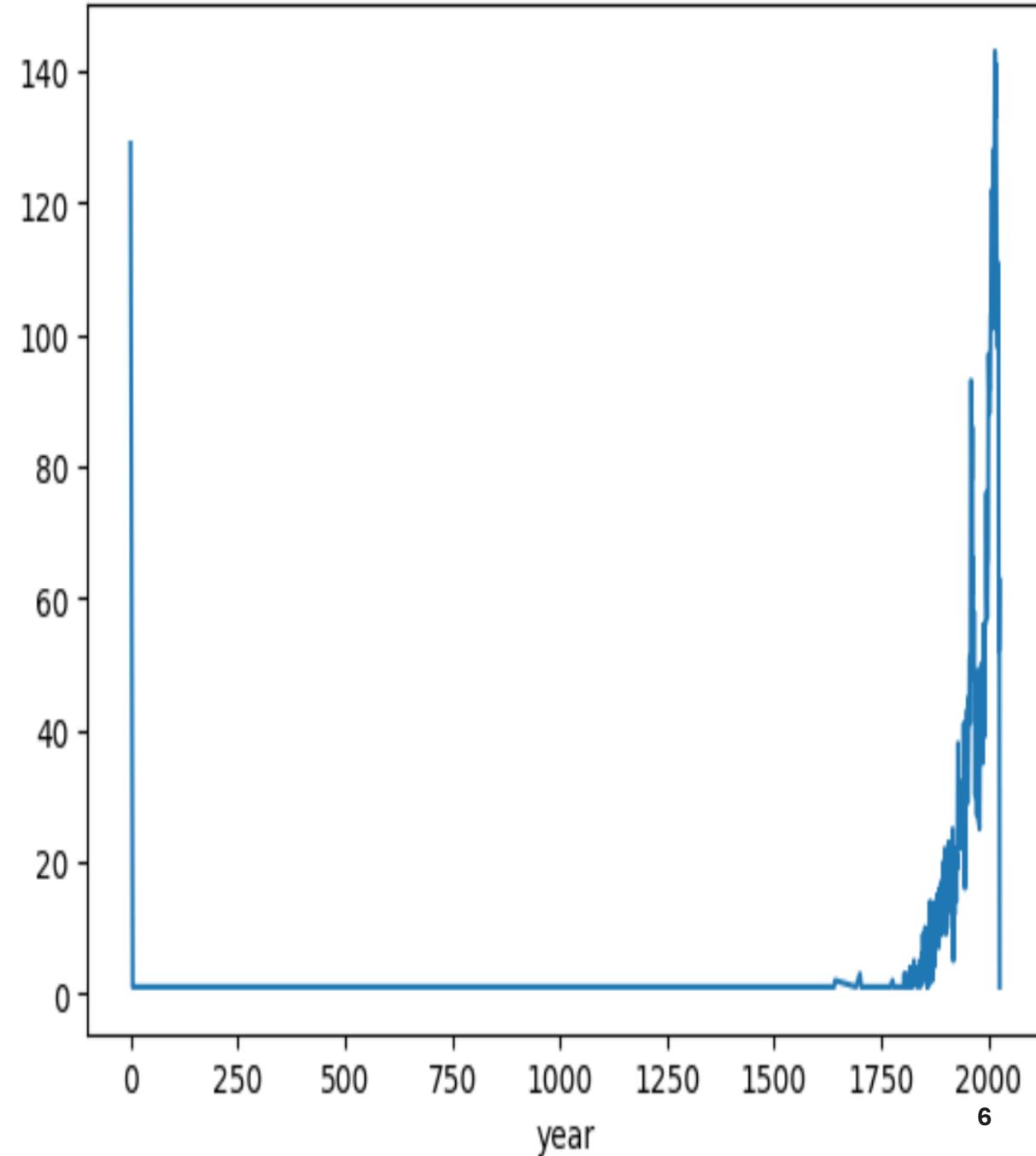
[See link here](#)

# EDA Overview

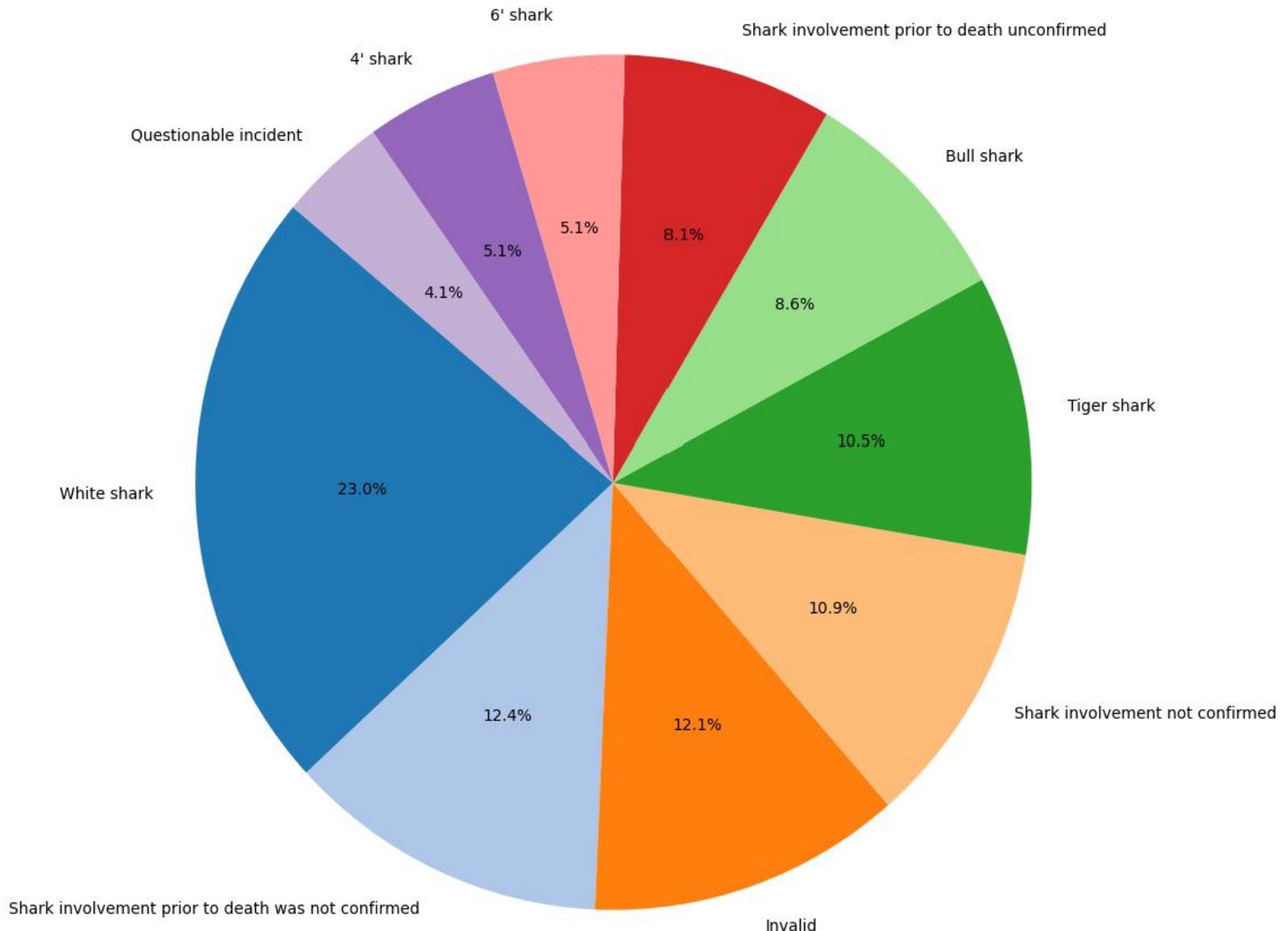
Top 6 Shark Attack Types



... <Axes: xlabel='year'>



## Top 10 Shark Species Involved



## **The following assumptions were interesting to follow:**

Hypothesis 1: Australia has the highest number of shark attacks.

Hypothesis 2: Australia has the highest number of shark related deaths.

Hypothesis 3: Americans will have the highest count of shark related attacks due to provocation.

Hypothesis 4: Men's fatality rate due to shark related attacks, is higher than that of women.



# Dataset Cleaning

## **Missing values:**

- Filled columns using appropriate imputation.

## **Duplicates:**

- 3 rows dropped with unresolved issues

## **Columns:**

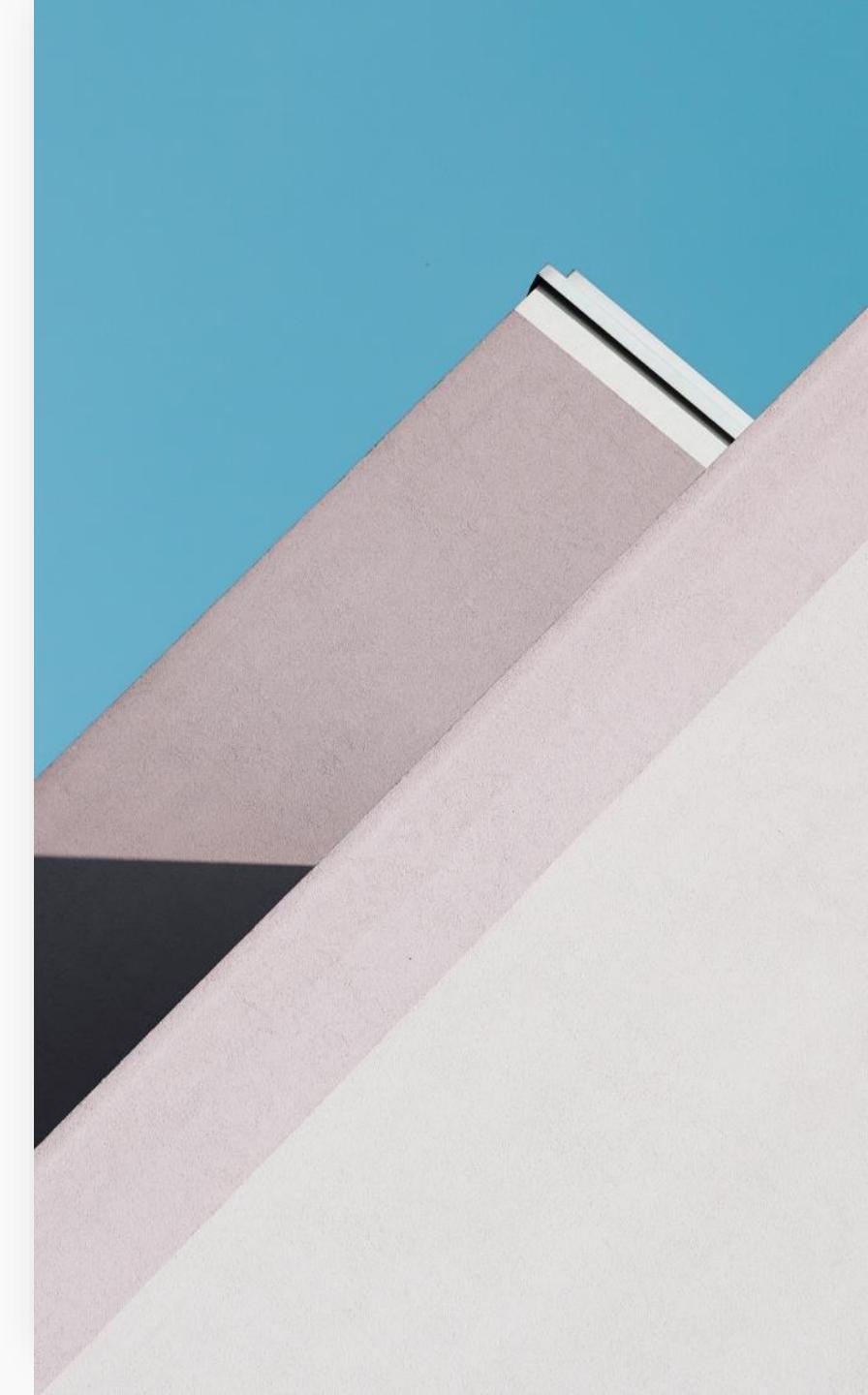
- Drop columns not relevant for analysis.

## **Resulting features:**

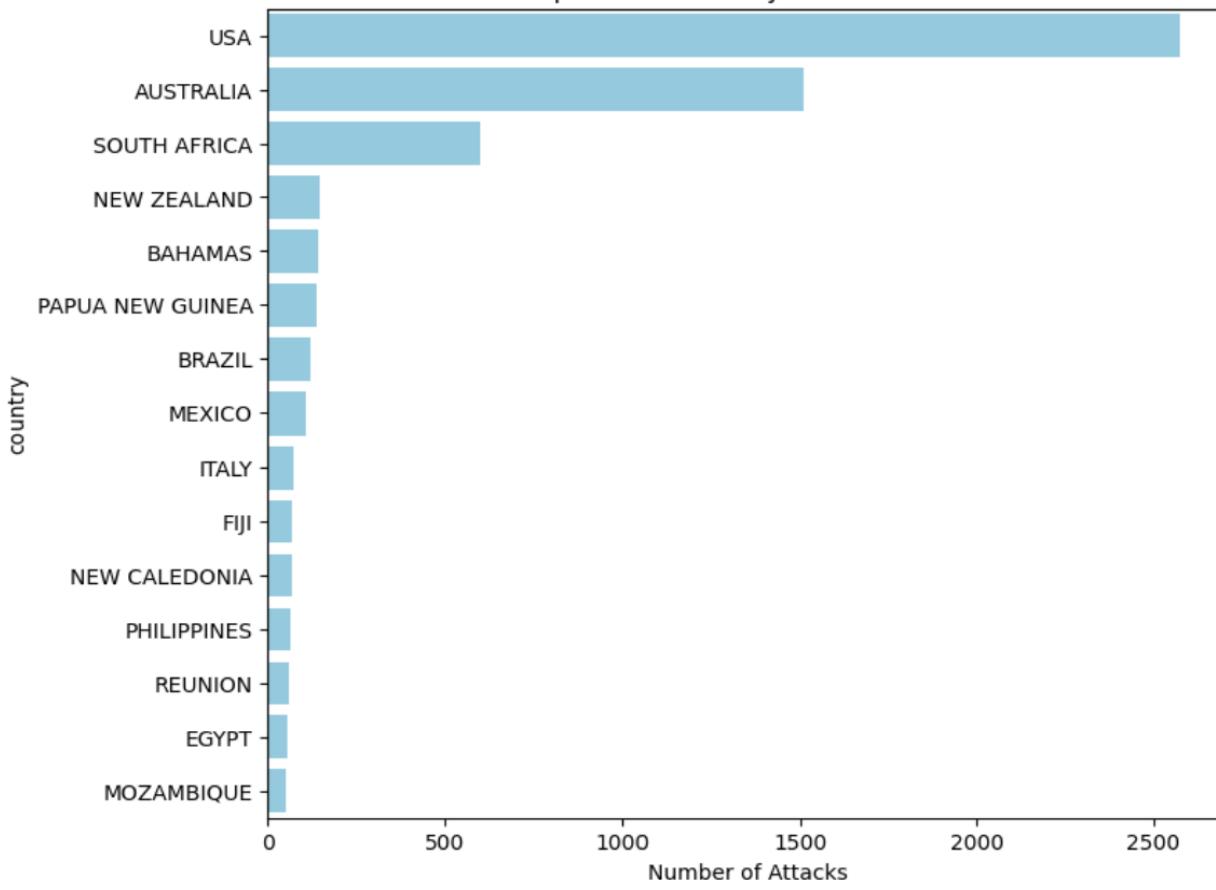
- The dataset only has 13 columns from 23.

# Data Analytics

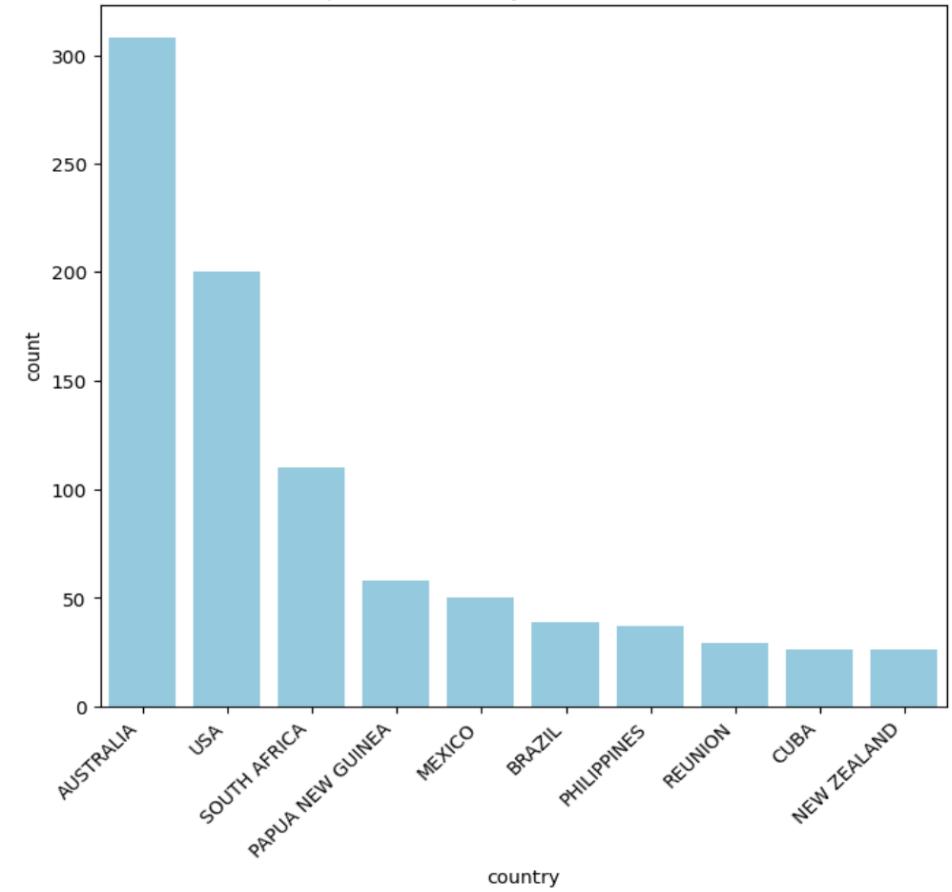
- Mostly used visual plots
- In some cases groupby was used



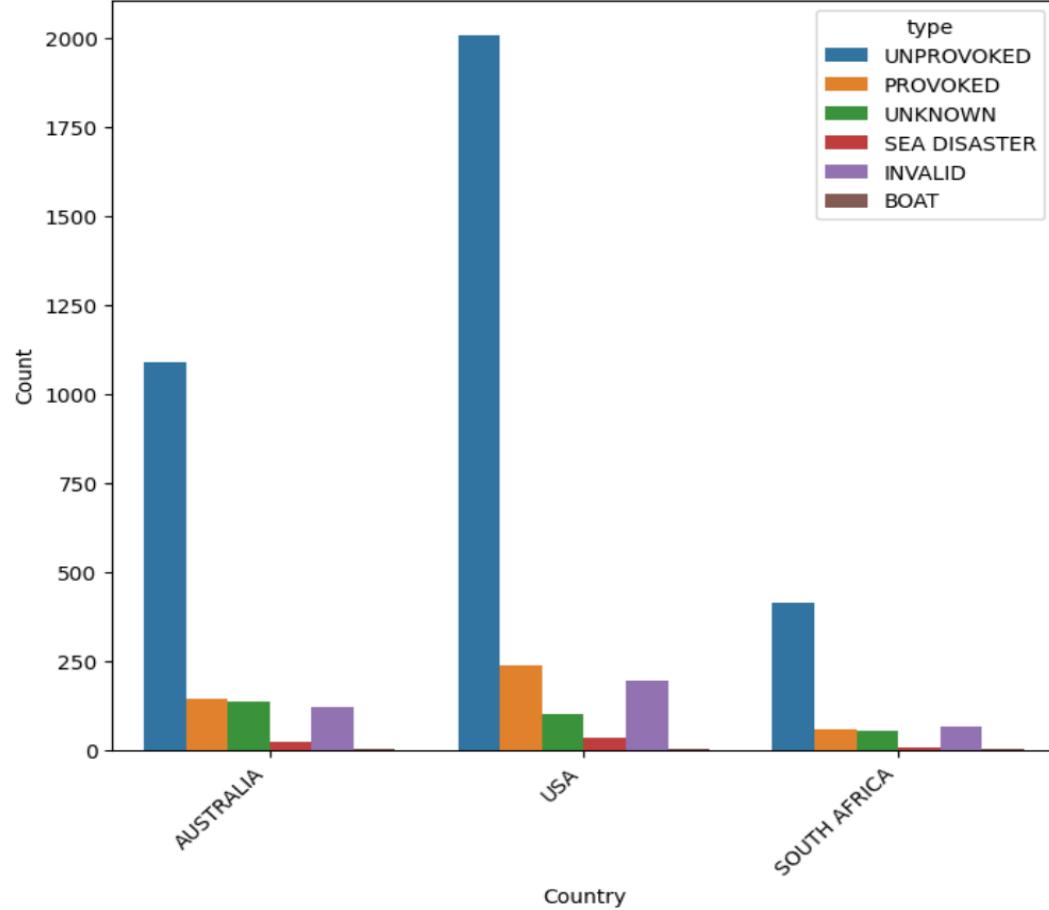
Top 15 Countries by Shark Attacks



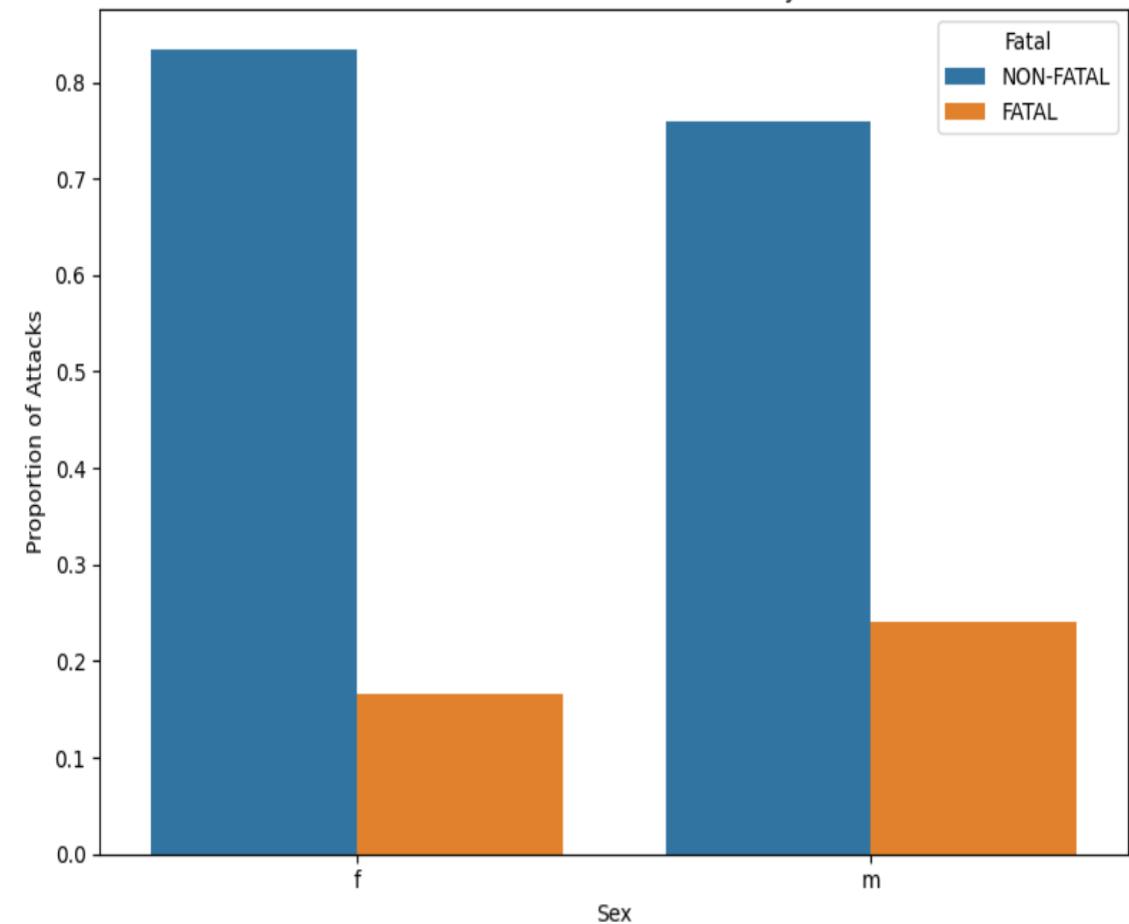
Top 10 countries by fatal shark attacks



Common type of attack for top three countries



Fatal vs Non-Fatal Shark Attacks by Sex



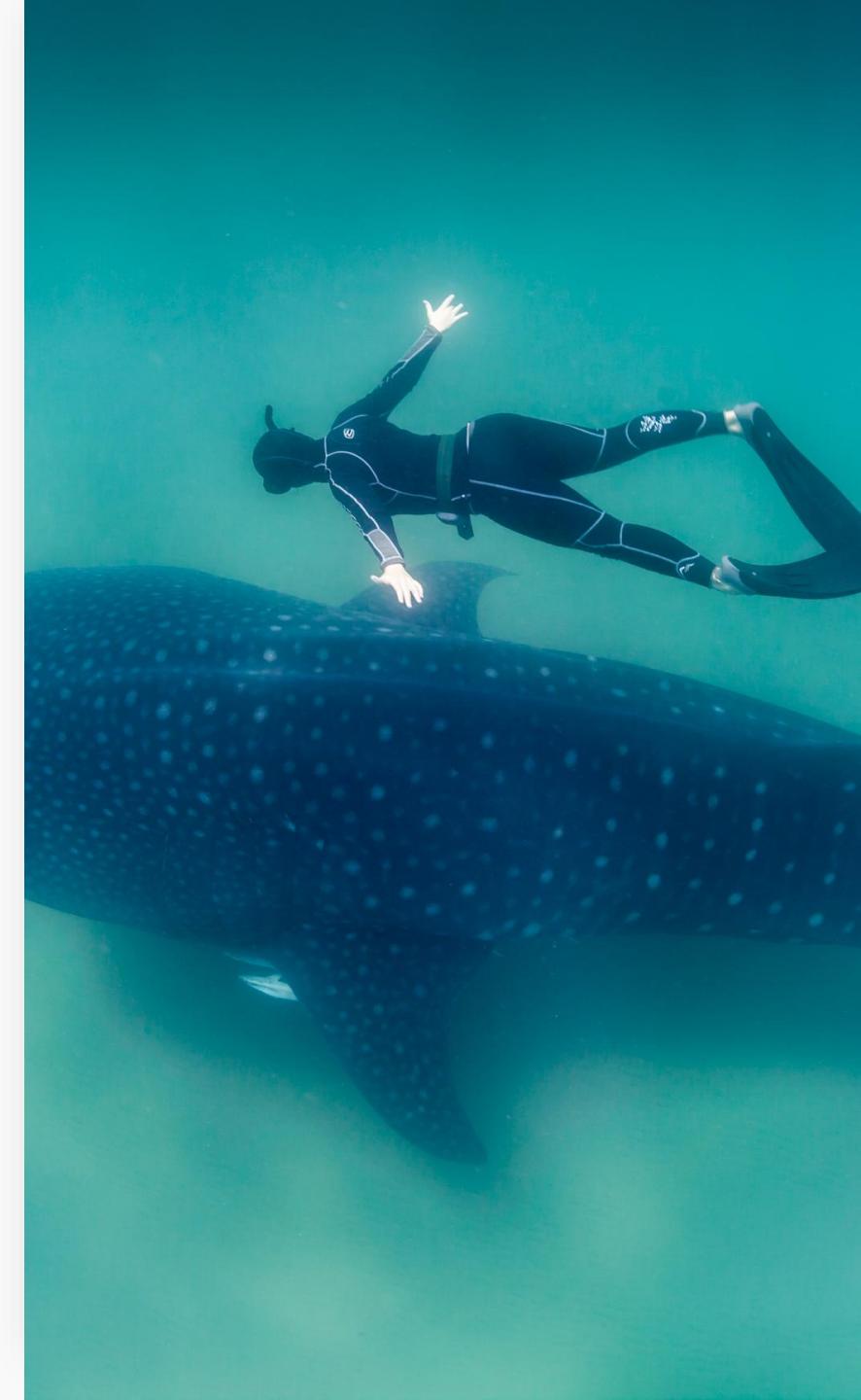
# Summary of Findings



- H1: America and not Australia, has the highest number of shark related attacks.
- H2: Australia is the location with the highest number of deaths due to shark attacks.
- H3: America has the highest record of shark related incidents by provocation.
- H4: Men definitely find ways to live shorter lives; they have the highest record of shark related deaths.

# Conclusion

- Shark attack risk is not evenly distributed across geography, behaviour, or demographics.
- While the United States experiences the most shark attacks overall, Australia presents a higher fatality risk, meaning that where and how humans interact with marine environments matters more than the number of encounters.
- Additionally, human behaviour plays a critical role in fatal outcomes, and a small number of shark species, especially the Great White, account for the largest share of incidents.



# Thank You!

