

ANALYSIS OF AIRCRAFT ACCIDENTS IN USA FROM 1948 -2022

Data from AviationData.csv

PROJECT OUTLINE

- **1.Problem Statement**
- **2.Framework**
- **3.Exploratory Data Analysis**
- **4.Result and Inferences**
- **5.Actionable Insight**

1.Problem Statement

- The aim of this project is determining which aircrafts are the lowest risk for a company to purchase and operate. This is by analyzing the Aircraft accidents and incidents that occurred from 1948 – 2022 and translating the findings into actionable insights that the head of the new aviation division can use to help decide which aircraft to purchase.

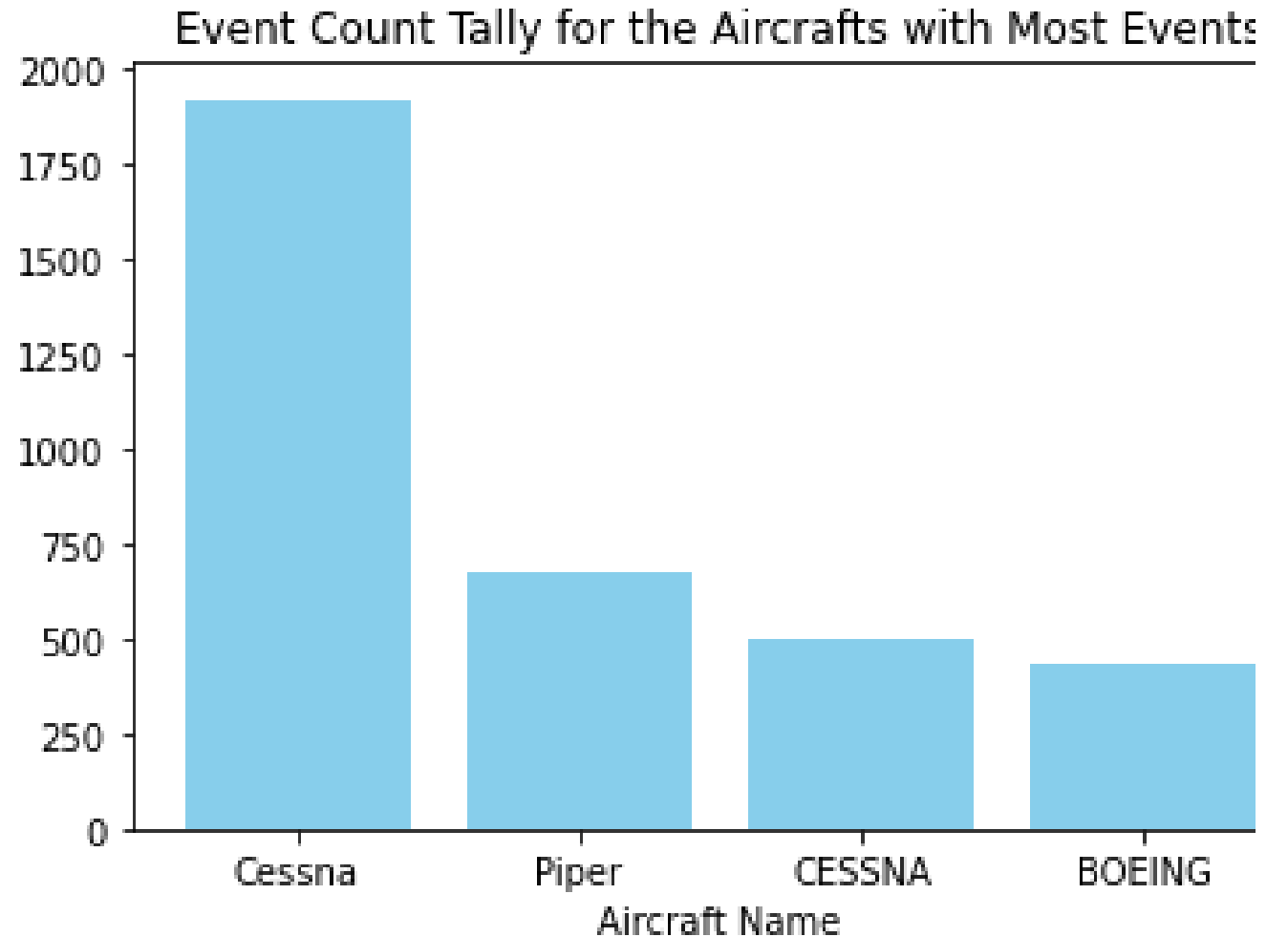
2.Framework

- The Aviation data analyzed was from 1948 -2022 and included events(both accidents and incidents) for aircrafts in the US.
- The data contained different categories such as: Total Fatal Injuries, Total Minor Injuries, Event Date and Total Minor Injuries
- By using Python and software tools such as pandas and Tableau, it was relatively easy to analyze the data and come up with data-science backed recommendations.

3. EDA

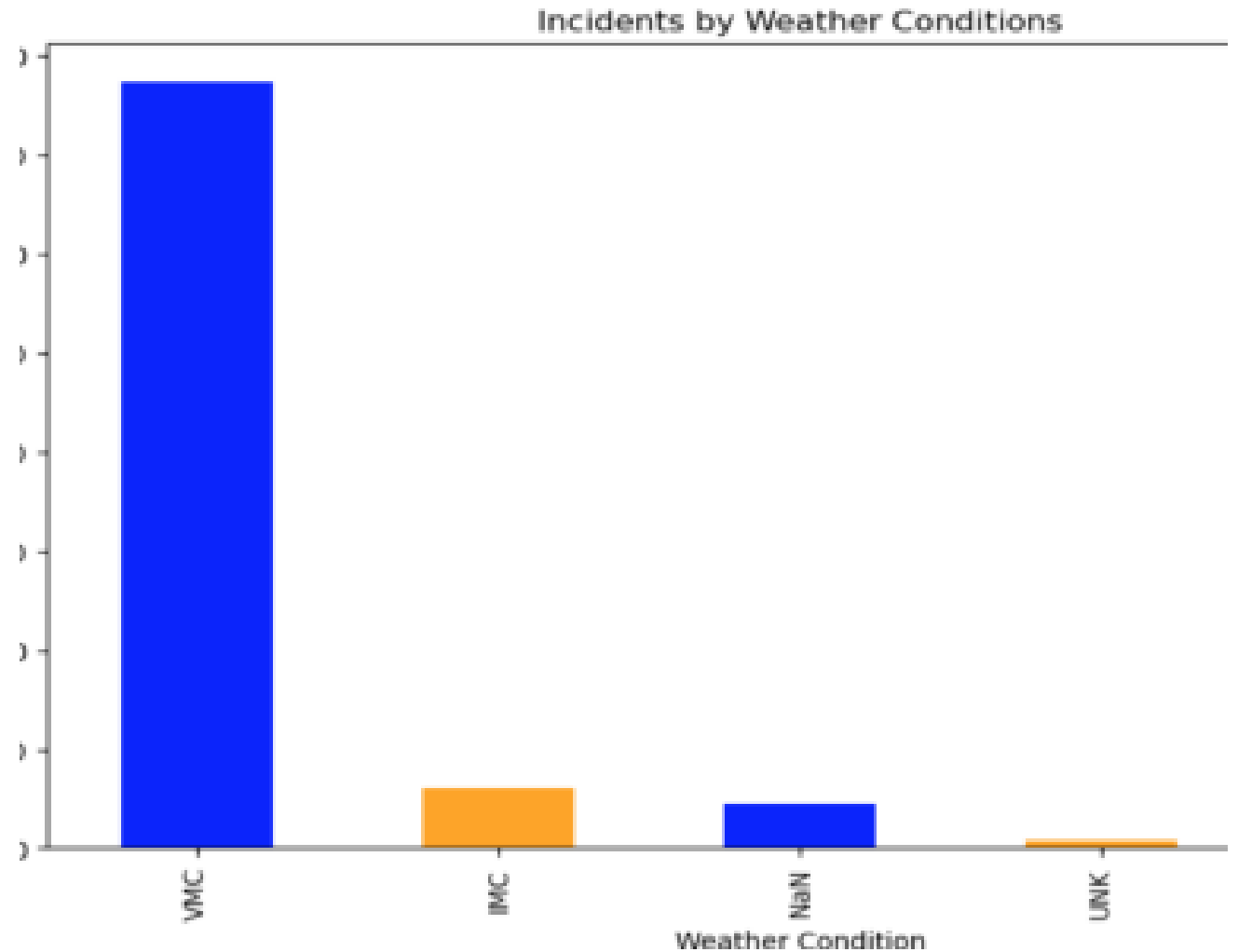
The Cessna Aircraft had the most accidents and events.

Piper, CESSNA and BOEING were also among the companies with relatively high event count



3.EDA

The graph represents the frequency of incidents that occurred by weather conditions.



4. Results and Inferences

At the end of the day, it all comes down to personal preference since a lot of aircrafts had the same frequency of incidents..

A lot of the MCDONNELL DOUGLAS makes recorded very low incident counts.



5. Actionable Insight

Based on the meticulous data analysis, the MCDONNELL DOUGLAS make proved to be one of the safest aircrafts to purchase.

The company has also proved to be very innovative since they have produced many different variations of their planes for example the 369, DC 9 33 F, DC-10 among several others.

