NTSB Aviation Analysis

for Sky High Corp

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Project Analysis Overview

- Descriptive Analysis of the National Transport and Safety Board's Aviation Accident Dataset. This analysis can be used to:
  - Identify the causes of most aviation accidents and,
  - Implement methods to curb aviation calamities.

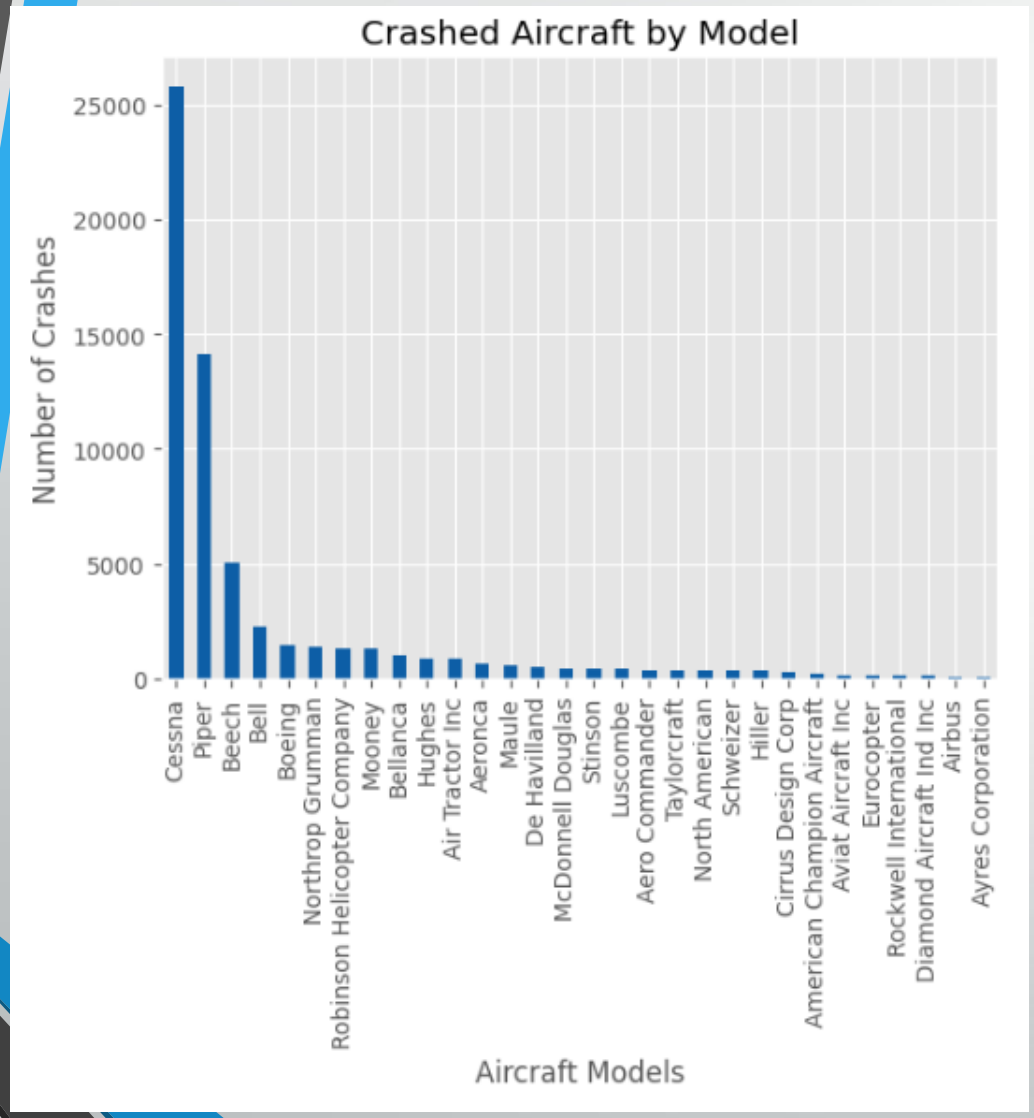
Business Understanding

- Sky High Corp wants to purchase and operate planes for commercial and personal use.
- Key Points to consider:
  - Potential risks of aircraft.
  - Aircraft with the lowest risk to start with.

Data Understanding

- NTSB Aviation Accident Dataset for over 85,000 aviation accidents from the year 1962 to 2023.

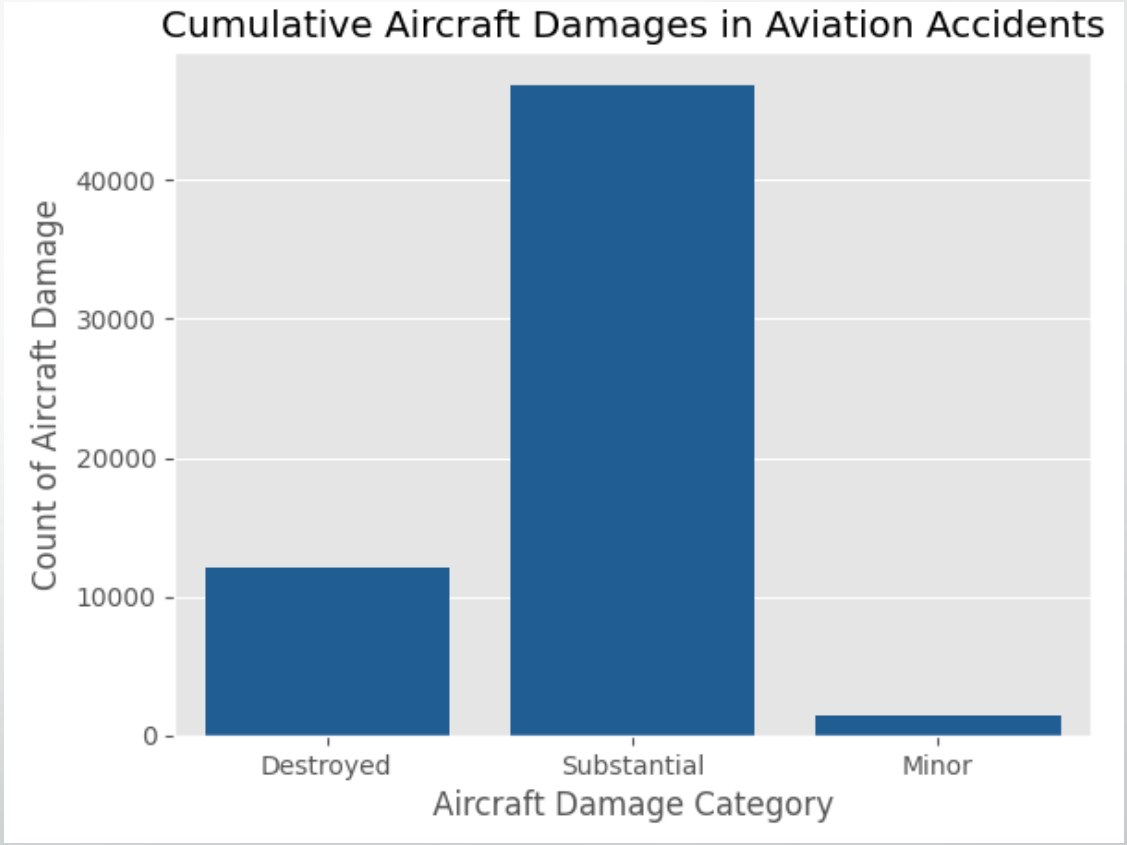
Data Analysis



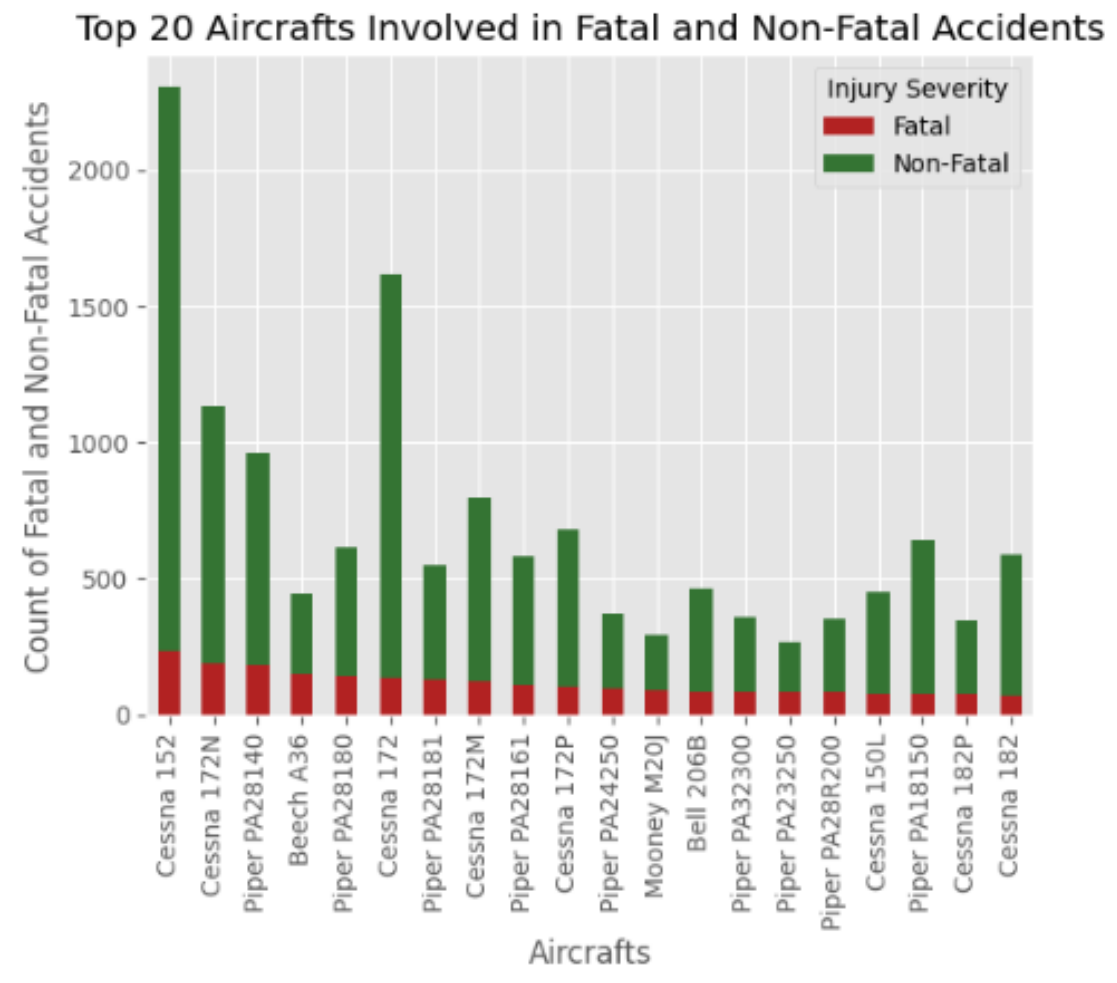
- Top 5 crashed planes are:
  - Cessna
  - Piper
  - Beech
  - Bell
  - Boeing

Data Analysis

- Most crashes cause significant and expensive damage to the aircraft



Data Analysis



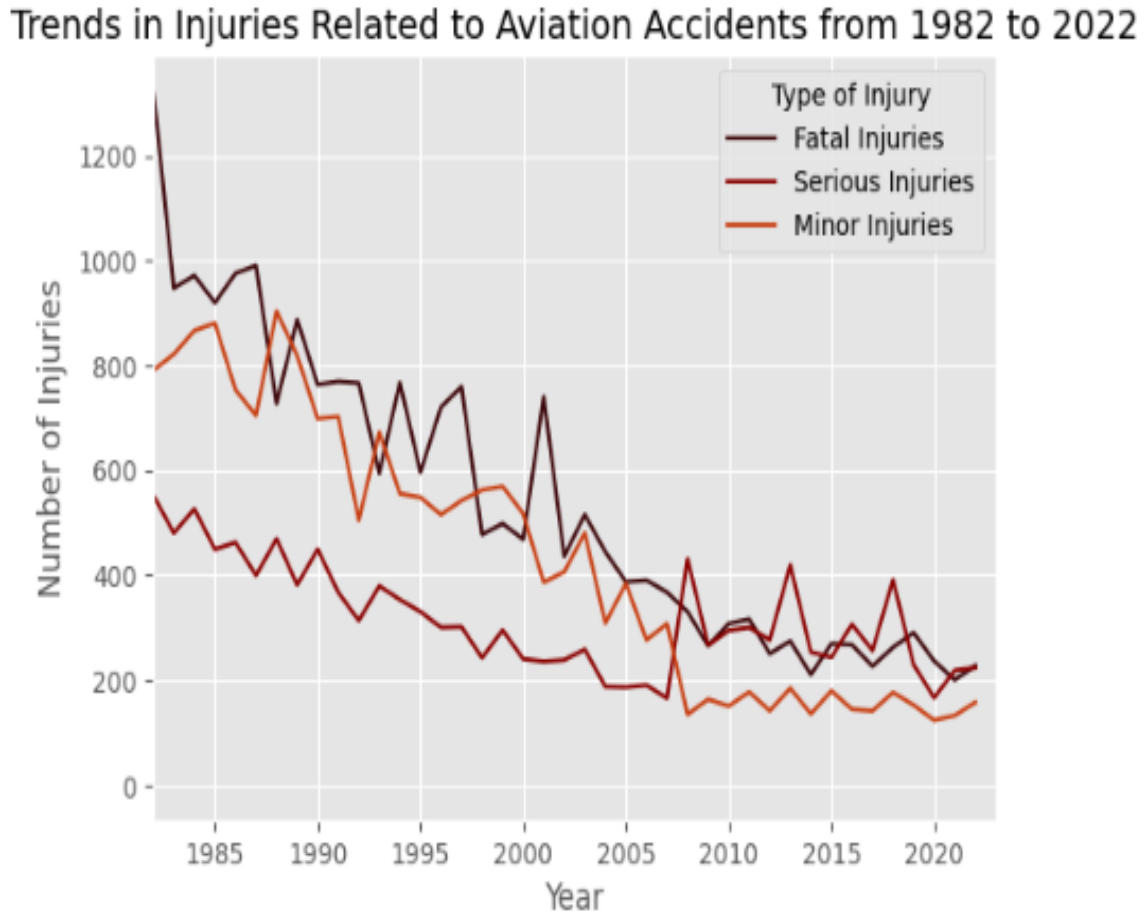
- Most plane crashes are non-fatal (No loss of human life)
- Cessna and Piper are safest due to high survival rate

Data Analysis

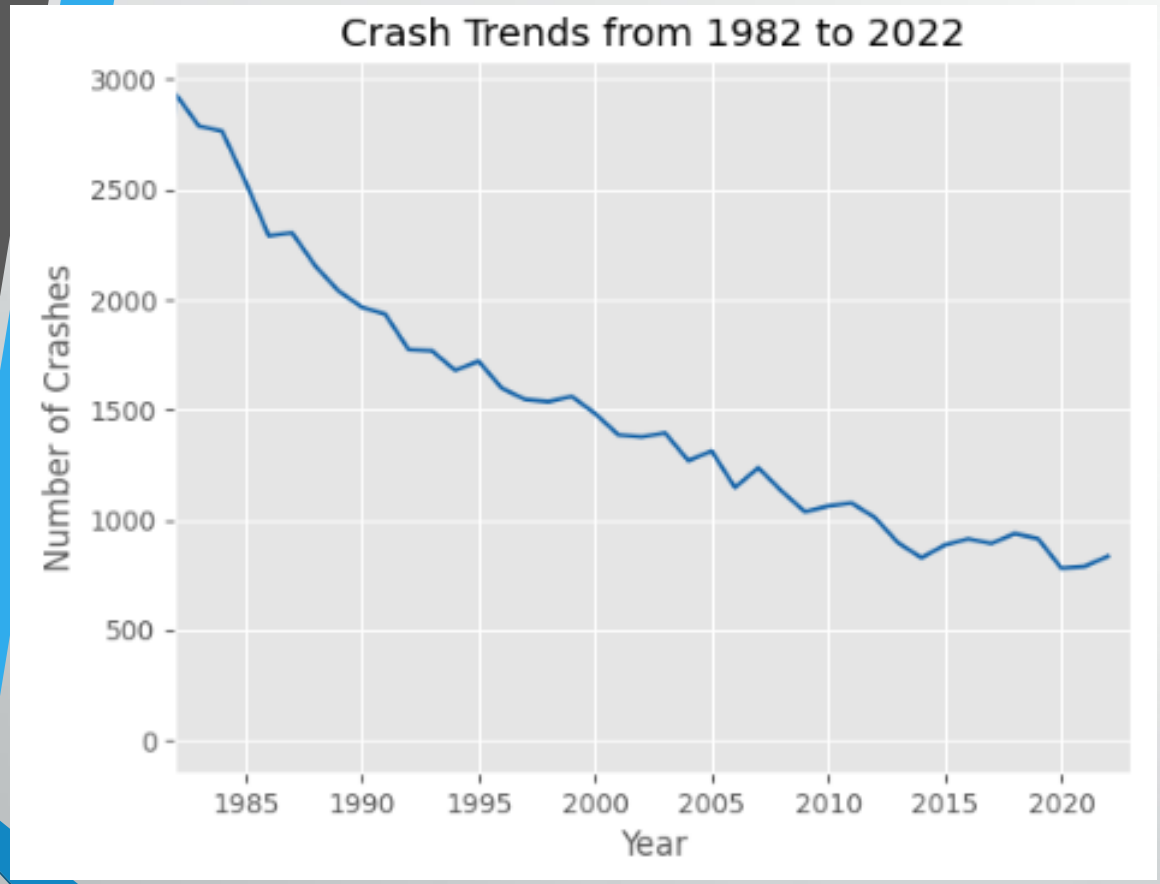
- Casualties from plane crashes have been declining.

Reasons

- Technology Advancements.
- Implementation of aviation laws to promote safety.



Data Analysis



- Frequency of plane crash per year have been reducing.

Conclusion

- Airplane crashes become rarer every year.
- Aviation casualties reduce every year.
- Most accidents cause significant damages to the aircraft.
- Most accidents are non-fatal.

Recommendations

- Cessna is the most preferred small aircraft.
- Cessna 172 and Piper PA-28 lineup preferred for personal use.
- Focus on hiring experienced pilots to reduce pilot error
- Routine service and maintenance for aircraft for longer lifespan

Questions

Thank You!

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GitHub link: https://github.com/M-Nesphory/Aviation_Accident_Project