

Aircraft business risk analysis project

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Project overview

- ☐ To analyze the aviation accident data
- ☐ Recommend low risk aircraft model for the company's aviation operation team

Business Understanding

- ❑ The company aims to expand into aviation industry
- ❑ Business Stakeholder: Head of Aviation Division
- ❑ Key questions:
 - Which aircraft are safest?
 - When do most accidents occur?
 - What type of flights are high risk?

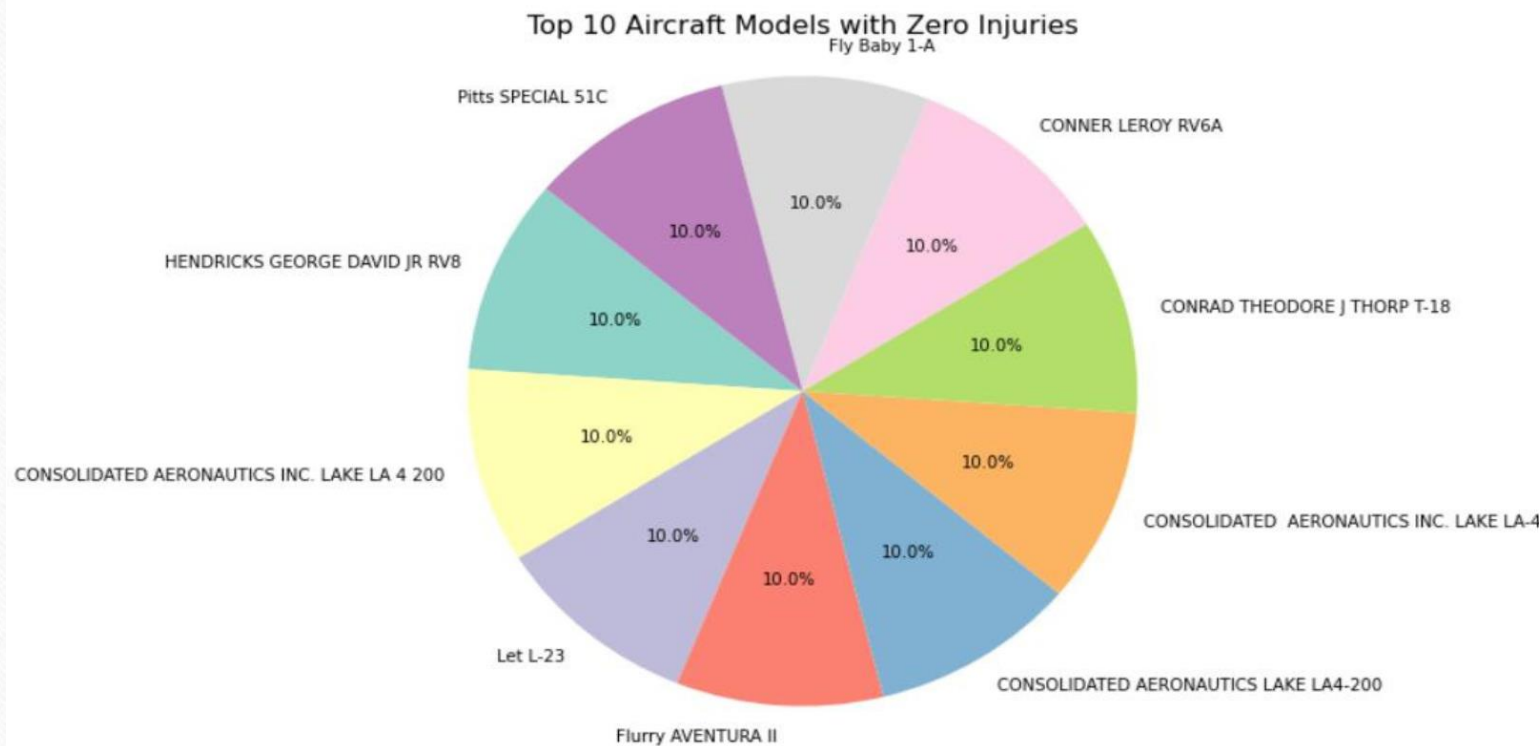
Data

- ❑ Data from National Transportation Safety Board
- ❑ Covers Aviation accidents record(1962 -2023)
- ❑ Key features:
 - Aircraft Make/Model
 - Purpose of Flight
 - Broad Phase of Flight
 - Injury severity

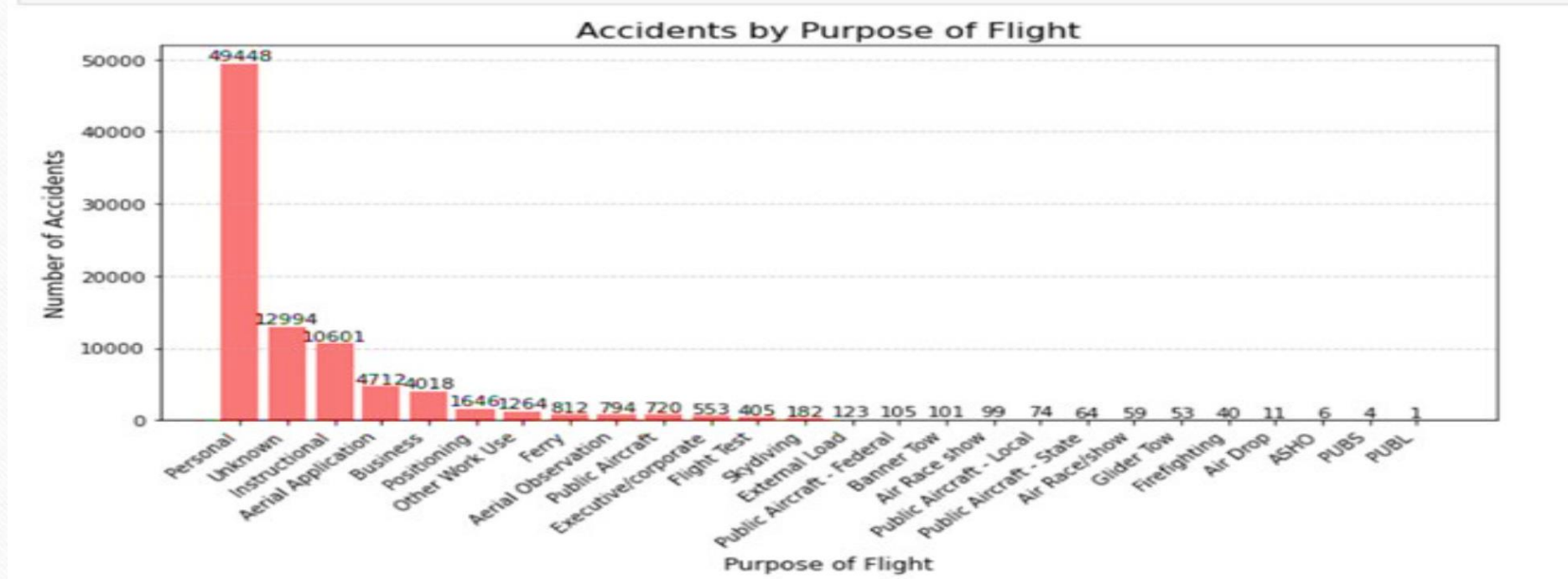
Data Analysis

- ❑ Data cleaning
 - Missing values handling
- ❑ Aggregation
- ❑ Visualization

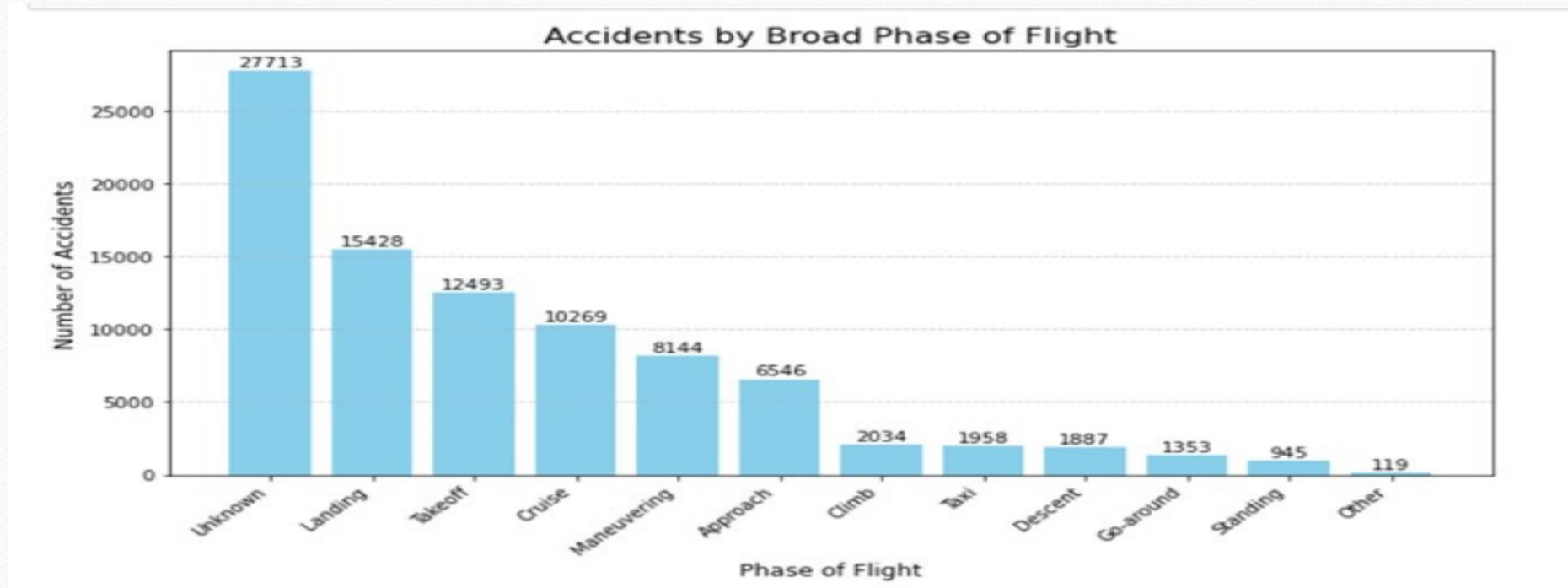
Key visualization: Top 10 aircraft with zero injuries



Key visualizations: Riskiest purpose of flight



Key visualizations: When most of the accidents occur



Recommendations

- ☐ Prioritize aircraft models with zero injury records
- ☐ Landing/Takeoff safety measures
- ☐ Take caution with flights for personal and training purposes
- ☐ Enhance & maintain emergency response systems

Questions?

Thank you



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Lets connect on [LinkedIn](#)