Phase 1 Project

Summary

Data

The raw dataset and the derivative sanitized_dataset are sourced from Kaggle. It is an aggregated report containing information about Incidents and Accidents of various Aircraft.

Business Problem

Determine lowest risk aviation sectors for a company to invest in.

Methodology

- Perform EDA to discover any macro level trends
- Calculate risk using a ratio of Fatal Injuries to total injuries
- Apply this calculation to Engine Types and Purpose of Flight

- Create Visualizations to aid conclusions & findings

Solution & Findings

- Fatal Injuries have generally increased across all airplane-based flights
- Reciprocating and Turbofan are the safest engine types
- Banner Tow, Aerial Application, and Instructional are the safest purposes of flight

Running the Notebook

1. Clone the repository

```
git clone https://github.com/oblomovite/dsc-phase-1-project-v3.git && cd dsc-phase-1-project-v3
```

2. Use the package manager pip to install the required packages

```
pip install -r requirements.txt
```

3. Run the notebook

```
jupyter notebook
```

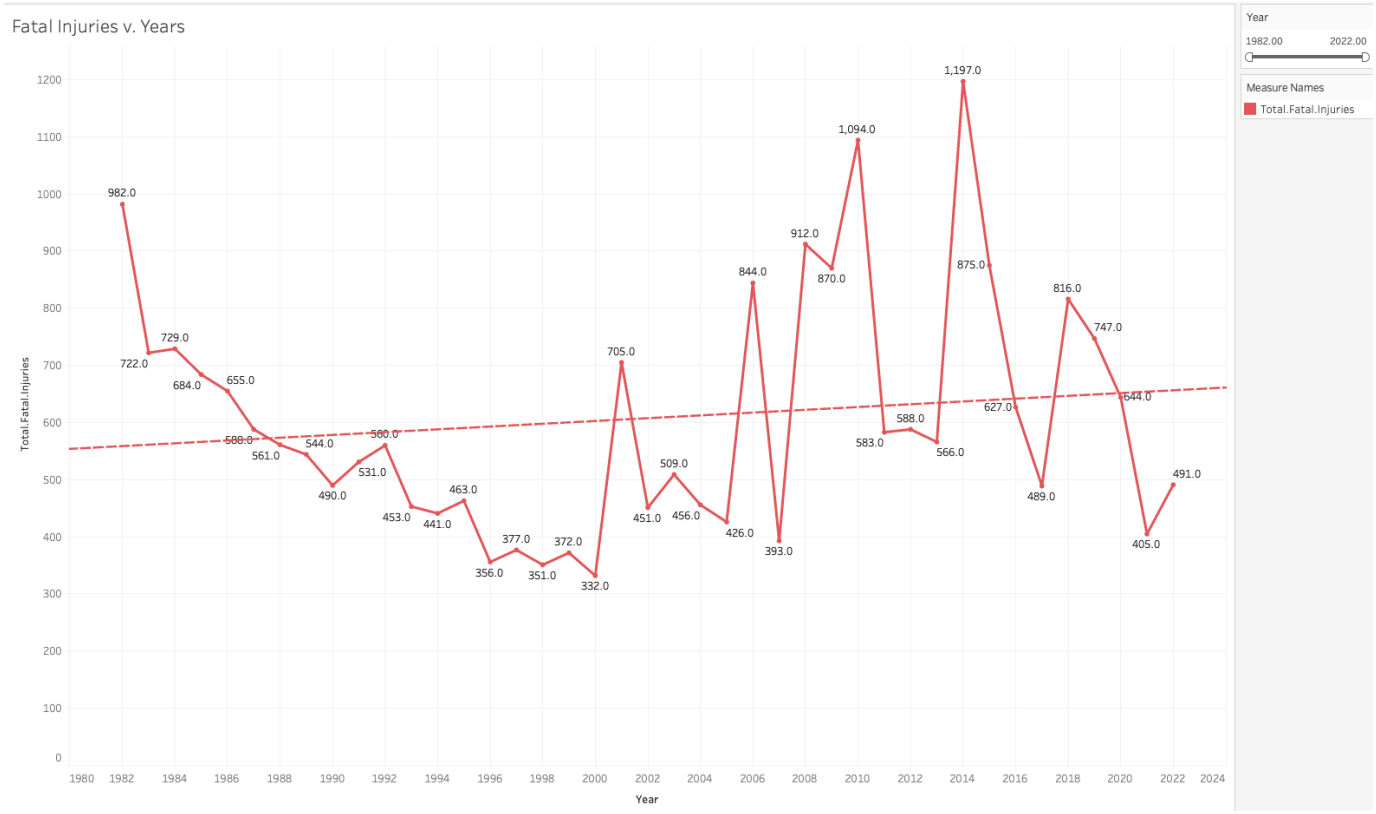
Presentation

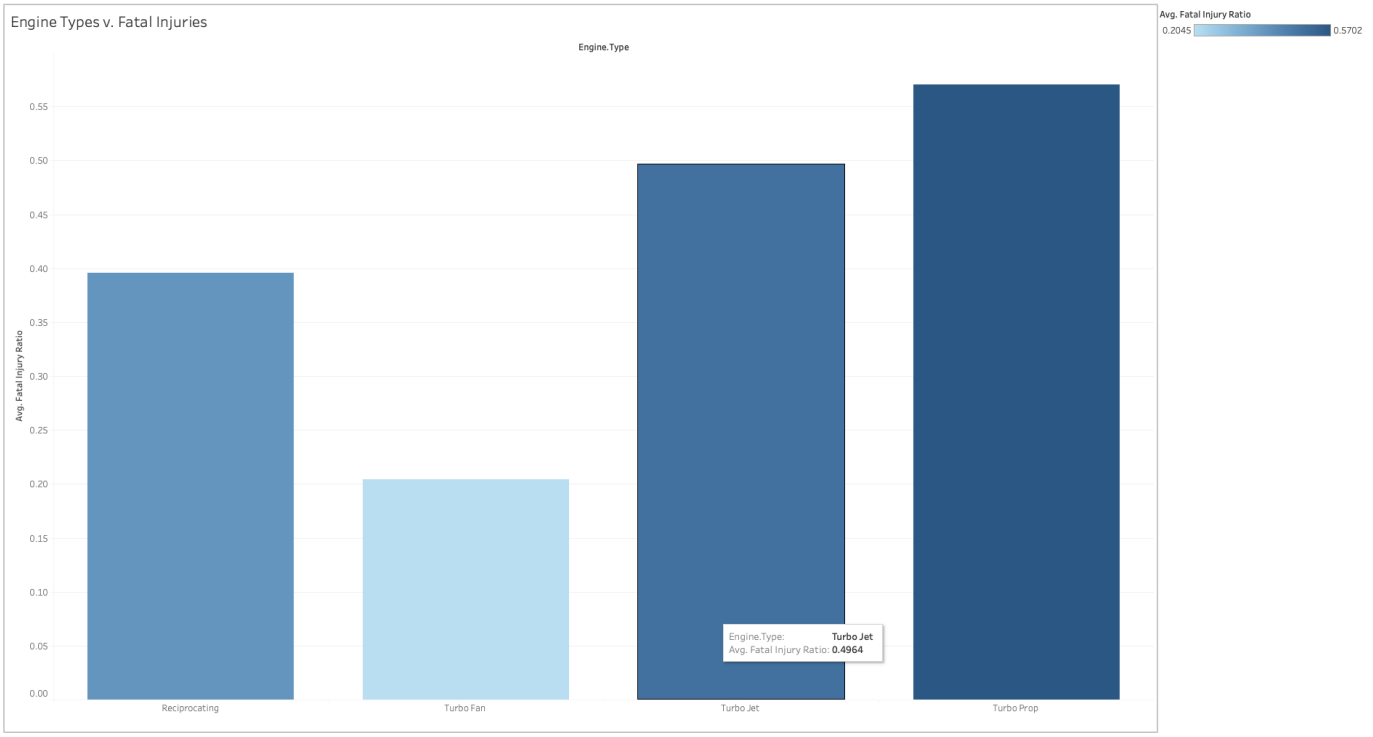
The presentation can be found here.

Tableau Dashboard

The complete Tableau worksbook can be found here.

Examples of the dashboard are here:





Project Structure

```
├── README.md
├── requirements.txt
├── dsc-phase-1-project-v3.twb
├── flatiron-phase-1-project.pdf
└── images
├── fatal_injuries_years_dashboard.png
├── engine_types_dashboard.png
└── PoF_dashboard.png
```