

Aviation Incidents Data

Jeremiah Rubin



Overview

This Project analyzes which airplane types that will have the least amount of incidents and how many engines each plane has. Using descriptive analysis with the aviation data set to narrow down the best plane with the lowest amount of risks. Cleaning the data finding the best plane for low risk flying. Showing a visualization to have a clear understanding to generate insight for the company.

Outline

- Overview
- Business Understanding
- Data Understanding
- Data Analysis
- Recommendations
- Next Step

Business Understanding

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- Find model plane
- Low risk/incident reports
- Identify how many engines there are

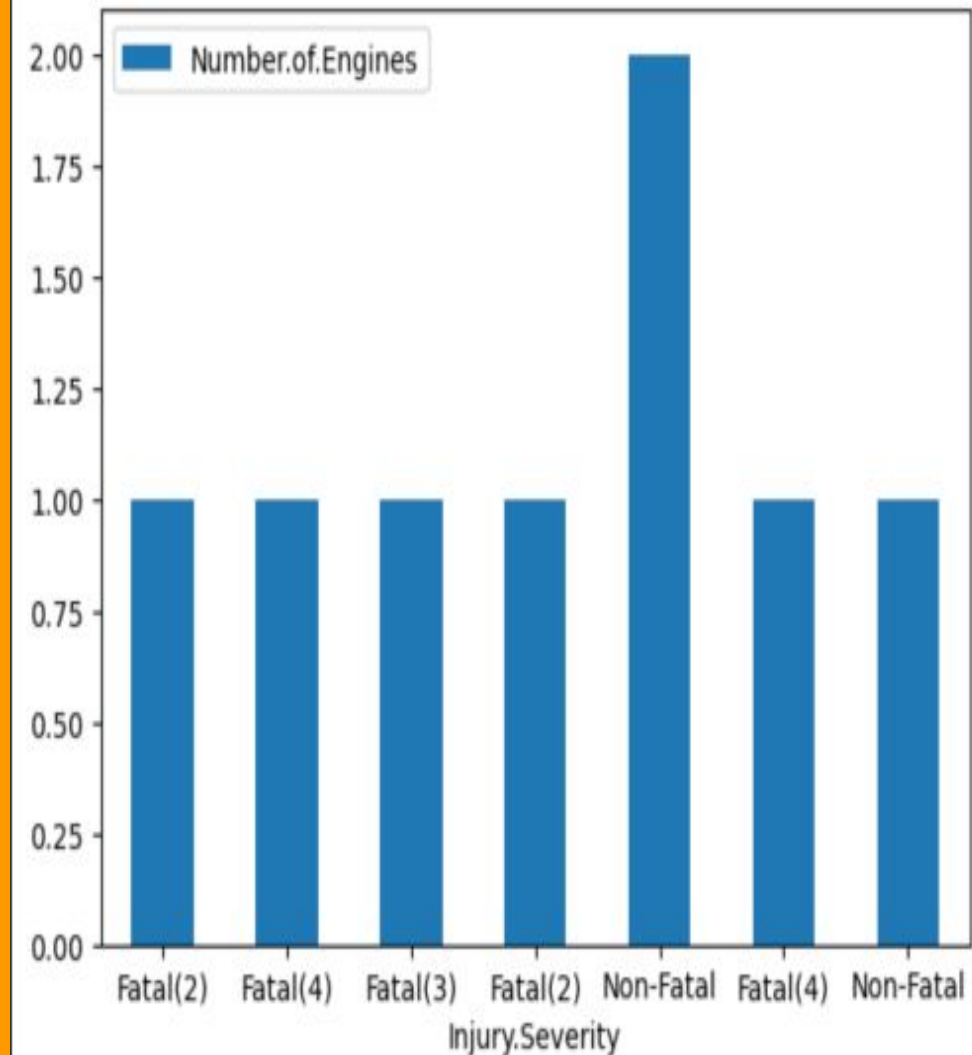
Data Understanding

- Model of plane
- Number of Engines
- Injury Severity

	Model	Injury.Severity	Number.of.Engines
0	108-3	Fatal(2)	1.0
1	PA24-180	Fatal(4)	1.0
2	172M	Fatal(3)	1.0
3	112	Fatal(2)	1.0
5	DC9	Non-Fatal	2.0

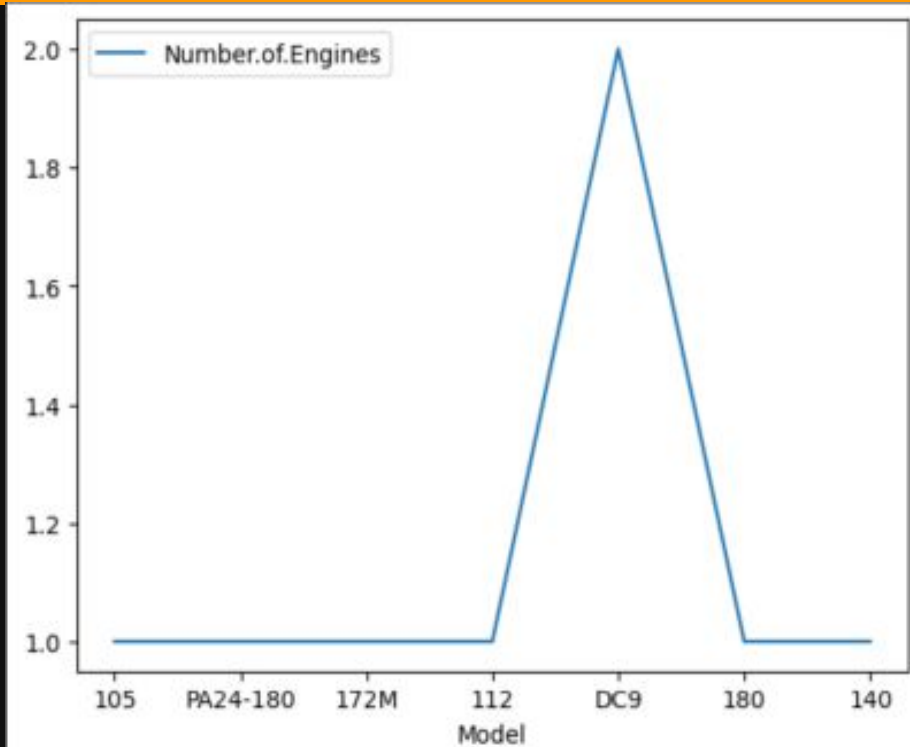
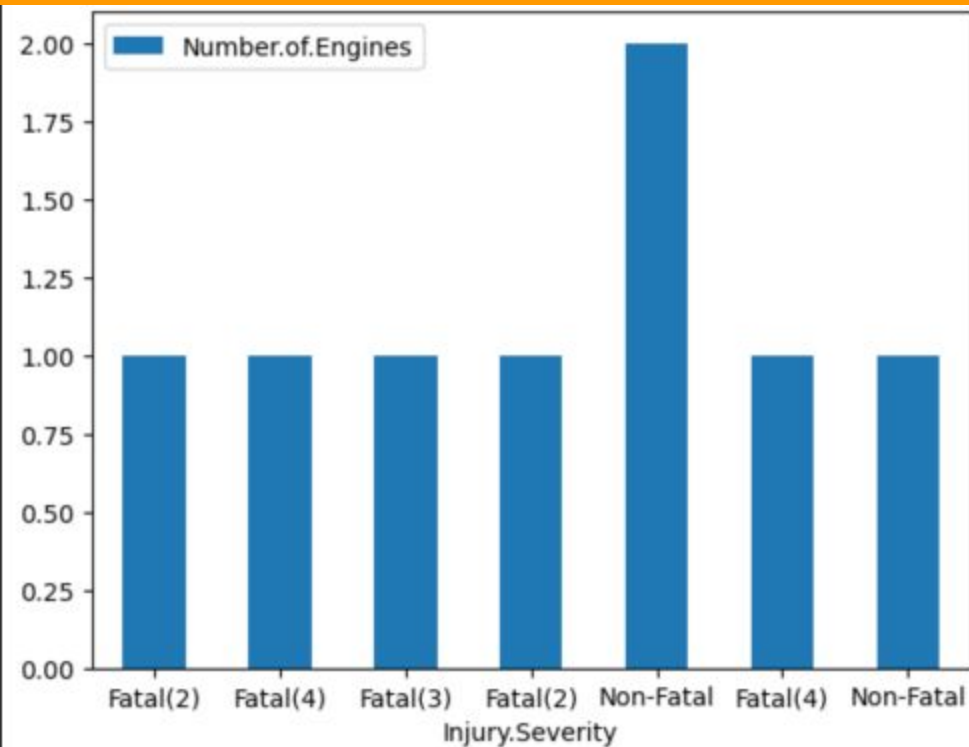
Data Analysis

- Create a bar graph
Of a suitable choice
- Includes
Number of engines,
Model of plane, and
Injury severity



Results

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Conclusions

This analysis leads with the model of plane with the least amount incidents with the ideal amount of number of engines:

- **Number of Engines.** On average each plane with the least amount of incidents had only one engine.
- **Model of plane.** DC-9 model plane has the most engines with the least amount of incidents
- **Injury Severity.** all injury incidents were non-fatal for the planes that fit the companies risk free decision.

Recommendation

- **The planes with the least amount of incidents.** The company should go with the plane with non-fatal injuries for safety precautions.
- **Saving money based on how many engines there is.** The plane that has less engines and low incident reports will cost less in the future.
- **Every year evaluation.** Every year the company can expand their aviation side to gather more planes for business projects/improvements.

Limitation

The data set lacks the know how. In the data set doesn't show you how a plane had an incident, knowing that would help narrow down malfunctions or weather.

Cost of each plane. The lack of cost for each individual plane and how much it would cost to repair them/salvage them.

Next Step

Further analyses could yield additional insights to further improve choice of model plane:

- **Better predictions for model plane based off repairing cost.** This modeling could already use available data such as how bad the crash was.
- **Predicting undesirable outcomes.** Knowing that the weather is really bad should delay the flight until further notice
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Thank you !

GitHub : @BlackXWulf

LinkedIn: www.linkedin.com/in/jeremiah-r-025a391b6