

Phase1ProjectDSAviation # Flying Through The Years ### Author: Jeremiah Rubin-BlackXWulf # Overview This Project Analyzes aviation data accidents about civil aviation accidents and selected incidents in the United States and international waters. The project will focus on airplane accidents and how many engines each plane has. The aviation companies that make airplanes can use this analysis to improve and or add more engines to their airplanes for more safer flying and reduction of injury incidents. # Business Understanding volumetric\_efficiency

Aviation companies in America can reduce accidents and incidents through improving there airplane engines or adding additionally engines. Doing so will reduce incidents in the air and or crashing. Using Aviation data I'll describe patterns of accidents and incidents through the years on how many engines each plane had in each injury incident. # Data Understanding The Aviation accident database has a long list of years from the 1960's to 2023 about the accidents and how many engines they have with the injury reports per incident. # Data Preperation Screenshot 2024-06-15 133731

After getting the data for the number of engines and injury severity incidents data and accident dates, I will be prepping the data to focus on number of engines and injury severity # Exploratory Data Analysis After cleaning the data I'll be creating a bar chart showing the average number of engines and injury severity barchartaviation # Conclusions This analysis leads to showing that having less engines would have a higher and severe injury incident:

- **The more engines, the less an accident can happen.** Based on the data the more engines each plane had also had less injuries to non-fatal injuries. ## Limitations
- **How the engine failed?** No data on how the engine failed on an individual plane.
- **Was it the plane?** limiting factor if the plane was really the cause of the accident. ## Next Steps Further analyses could yield additional insights to further improve how many engine a plane should have to reduce accidents:

## Repository Structure

- data
- images
- README.md
- Flying\_Through\_The\_Years\_Presentation.pdf
- Phase1Project.ipynb