

[U.S. Aviation Group]



The Academy is a world-class Flight Training center in 8 locations that offers 9-month and 12-month accelerated aviation career training with airline career paths to United Airlines and Southwest.

Project Description

The goal of the project is for HDAG to draw insights from internal data to help USAG understand trends in the maintenance of USAGs aircraft through dashboarding visualizations. HDAG will use Natural Language Processing tools to attempt to classify the specific internal system of the aircraft that an issue relates to, and this and other data to create real-time dashboarding software for USAG to use.

HDAG will also deploy machine learning modeling to develop a model capable of predicting maintenance and type of maintenance on USAG aircraft.

Internal Partners: Chief Financial Officer, Justin Sykes

Datasets:

1. 'SQUAWK'-transponder data: a detailed database of pilot-given aircraft maintenance requests.
2. Aircraft-flight data, giving location and time data for flights from all USAG locations.
3. Scheduling and Reservations data.

Coding Languages: Python, Tableau, SQL

Specific Skills

1. Be able to learn how to integrate SQL or API request back-end with Tableau for real-time data visualization.
2. Use that cleaned data to build a predictive ML model of aircraft maintenance.

Expected Technical Difficulty: **Medium-Advanced**