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DS 4002 CS3 - Hook Document

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**Your Task:** Use Previous Air Traffic Trends to Predict the Future (Of Air Travel)

**The Scenario:**

You work for an aviation company as an analyst at the San Francisco Airport, and you are tasked with finding trends in passenger counts and forecast future trends for the next 3-5 years. Global tourism has skyrocketed in recent years, making it essential for airlines to prioritize efficiency in their routes, adjust plane capacity if necessary, and keep their competitive edge in the industry. Formulating a predictive model can help your company make informed decisions that impact the future of air travel and how many passengers will fly with your company.

In order to make these decisions and help your company, you will have to rely on the data collected by the airport. In this study, you will need to clean, transform, and analyze the data and create a predictive model using time series modeling techniques. In short, your mission is to: perform exploratory data analysis, build and train predictive models, and deliver a polished forecast.

**The Deliverable:**

You will be producing a polished report that summarizes the results of your analysis and forecasts for the next 3 years. You will also provide visualizations and recommendations for future actions for the aviation company.

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**Github Repository Link:** <https://github.com/efredenburgh/CS3/tree/main>