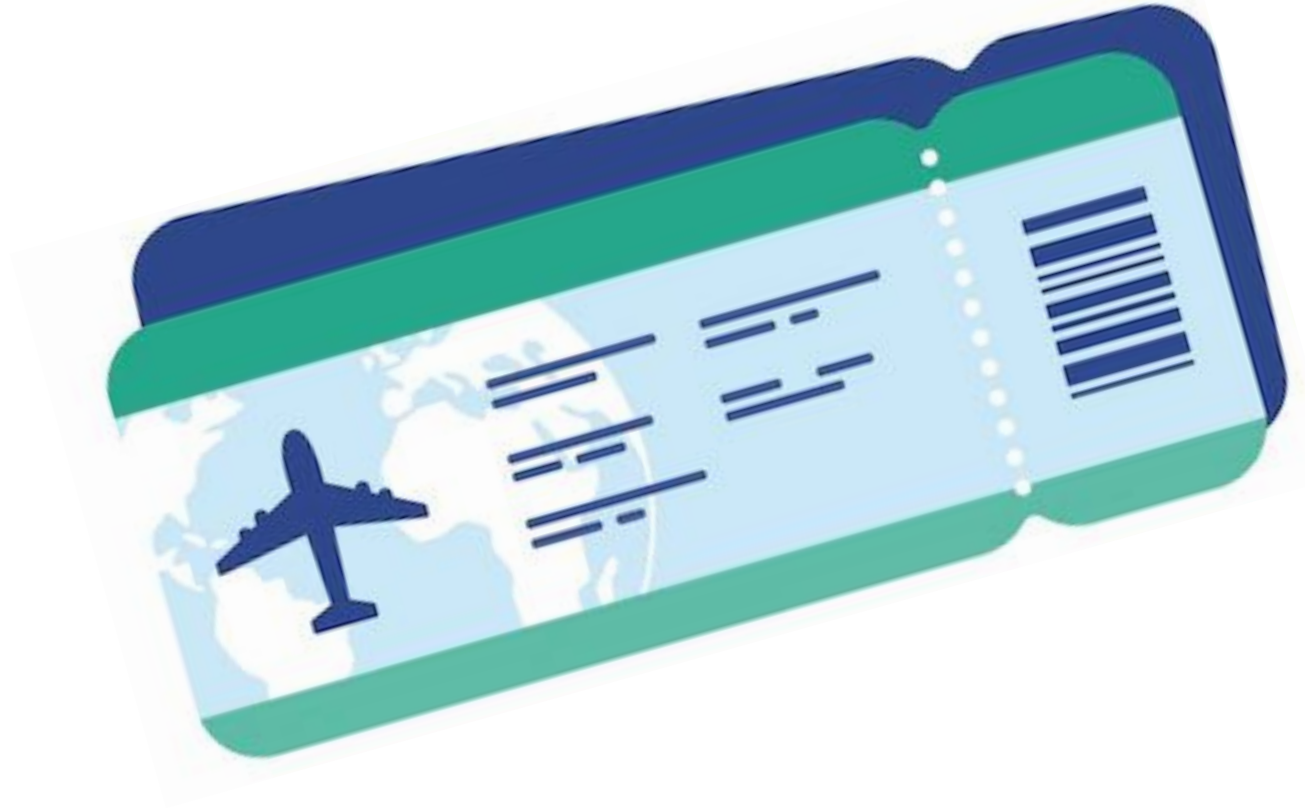
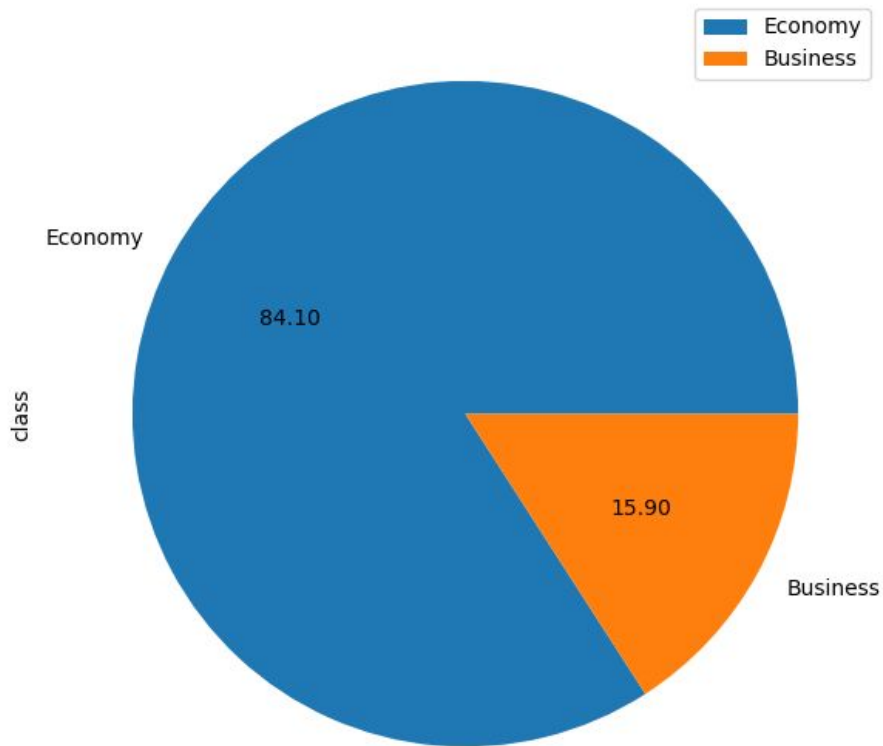


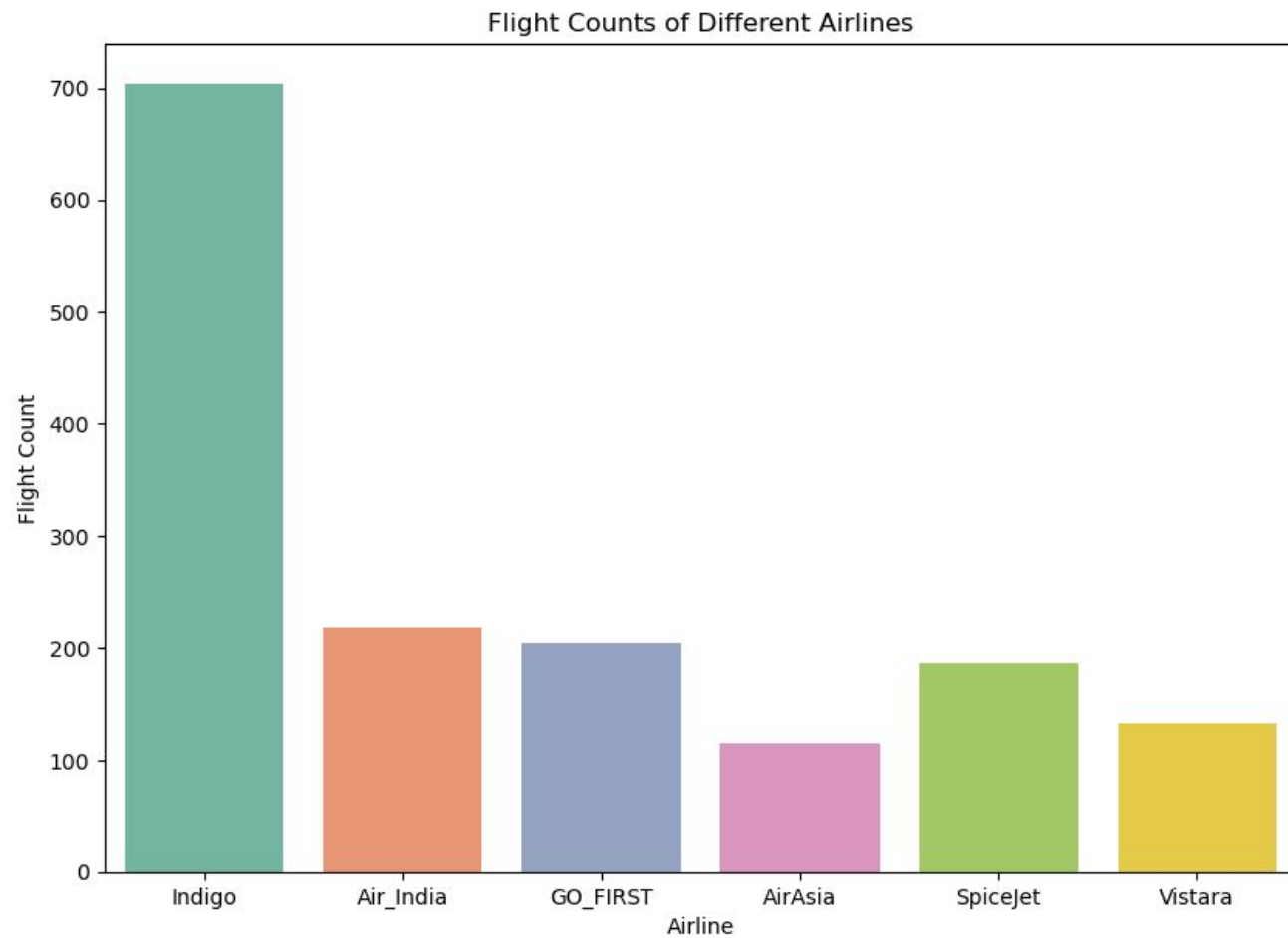
Flight Ticket Price Predictor

Final Project
DA - Ironhack
Clara Balcells

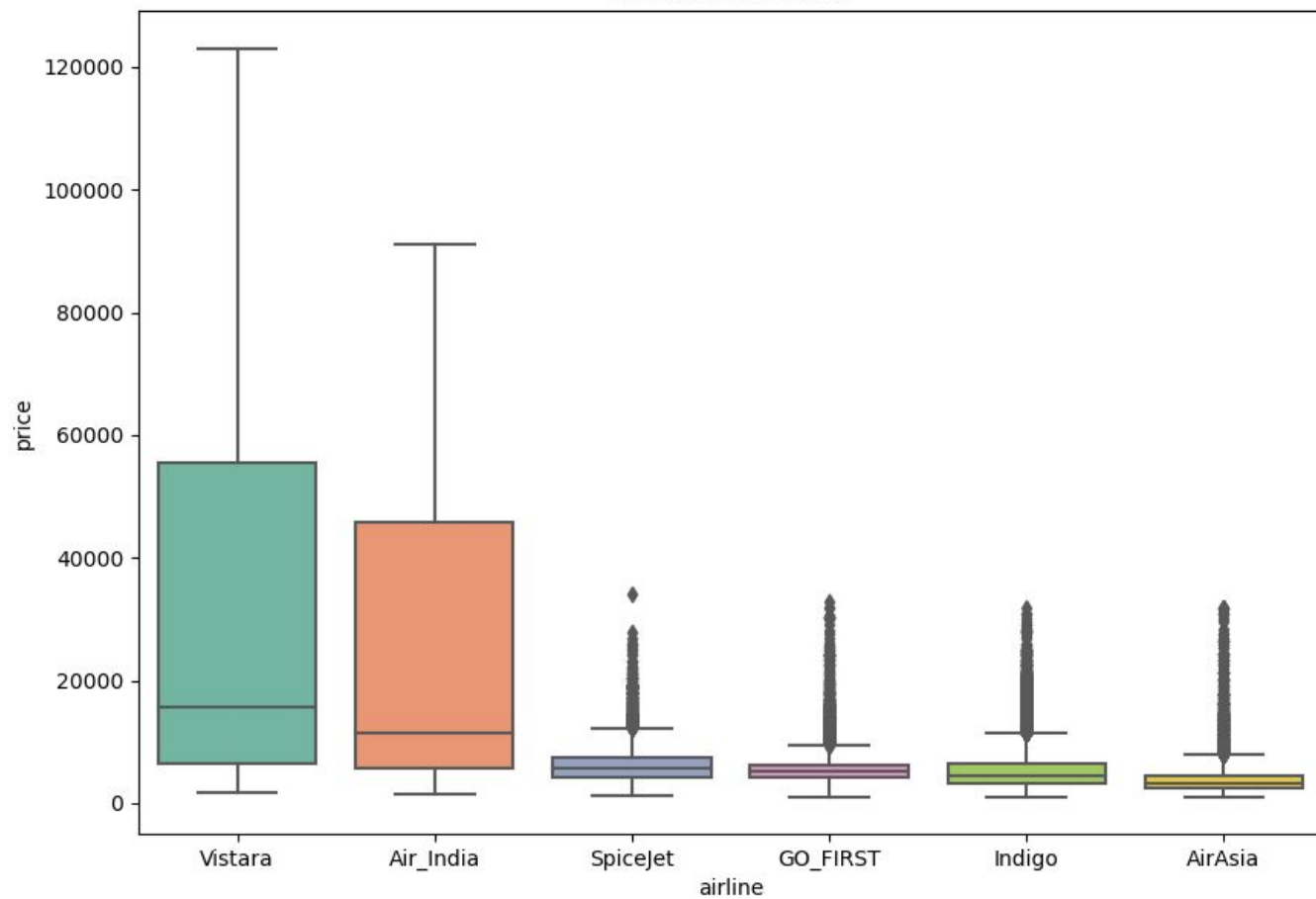


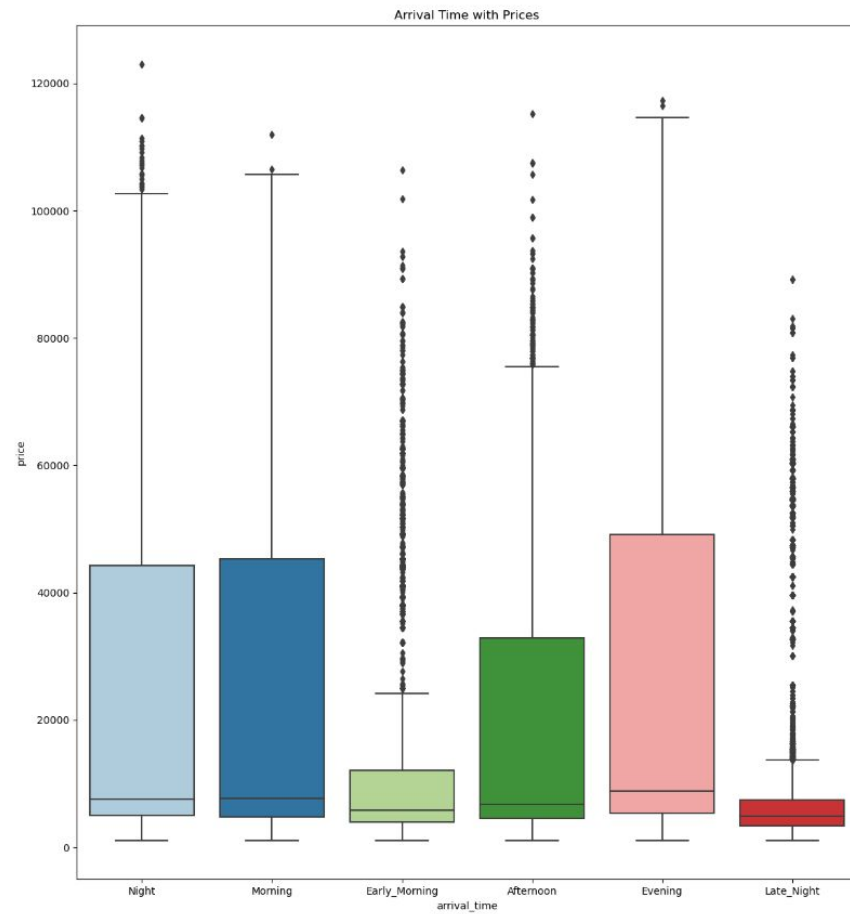
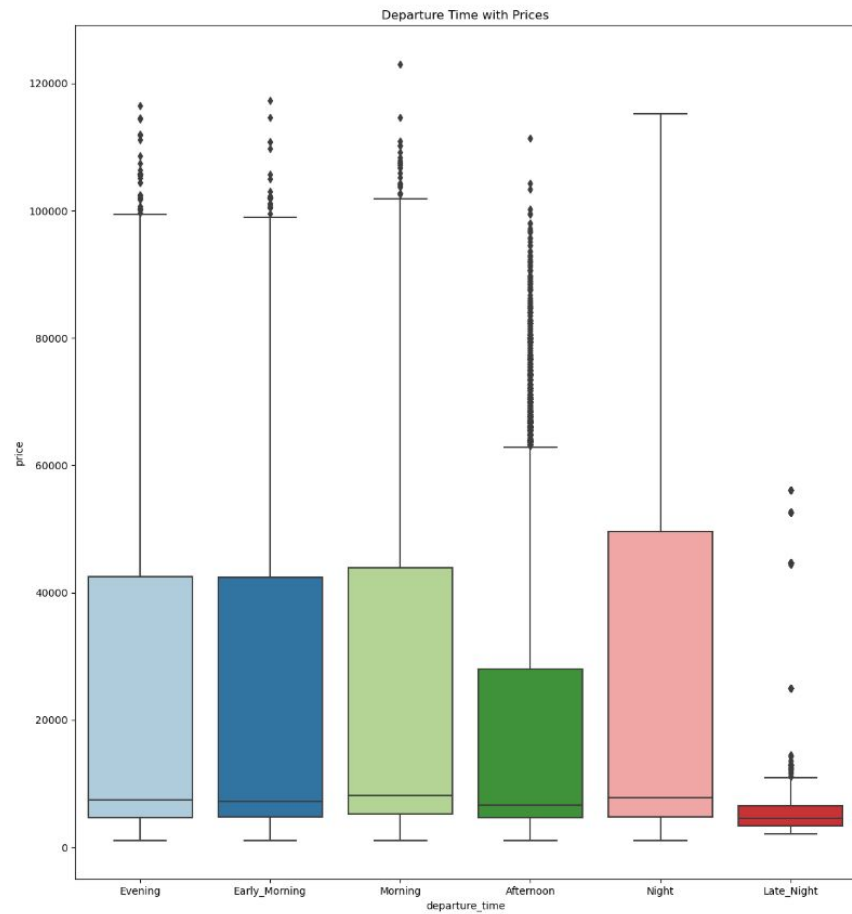
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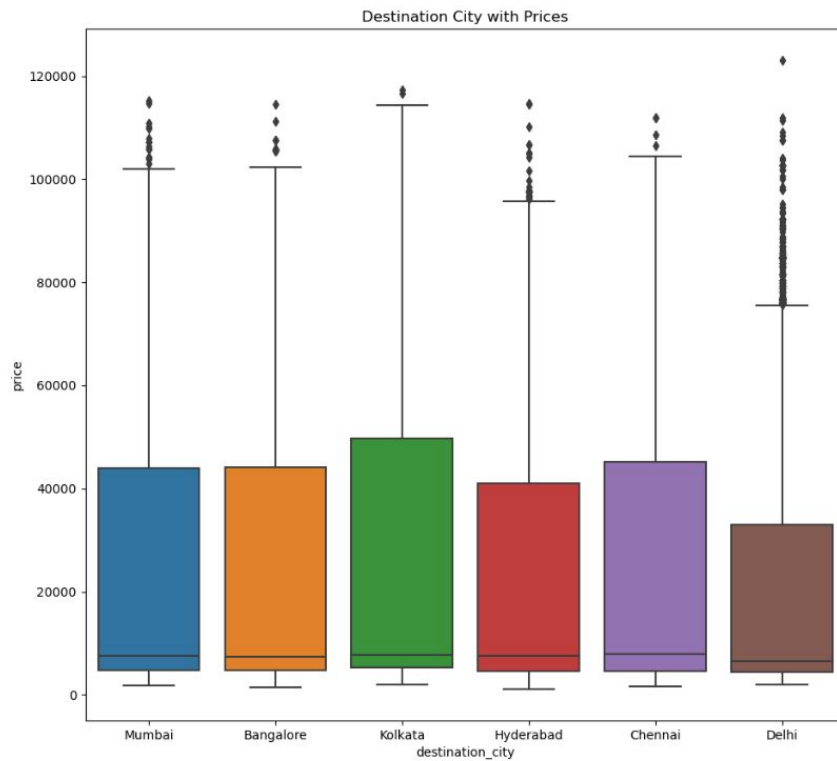
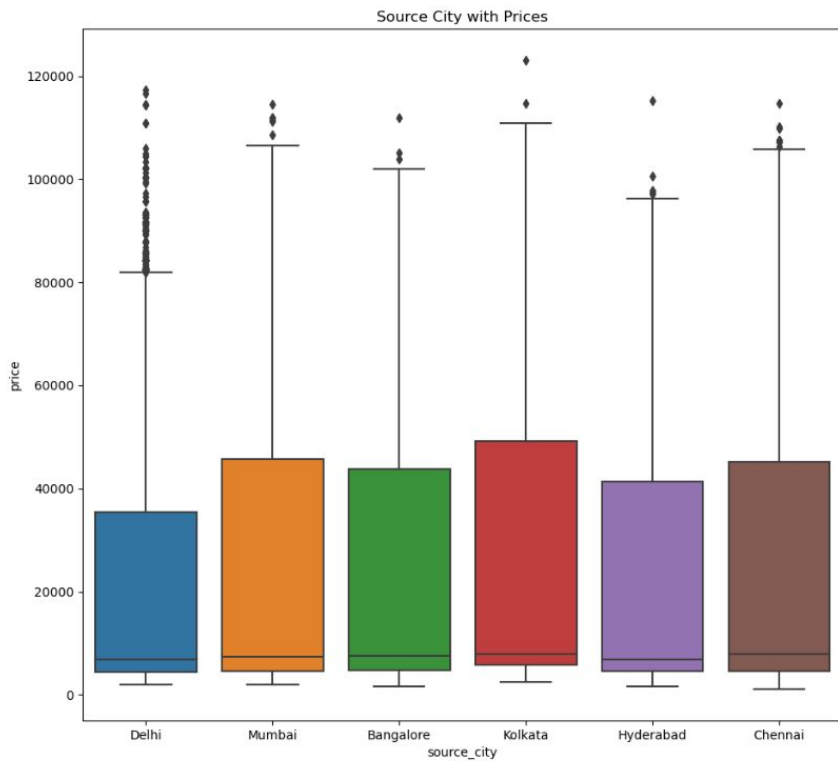




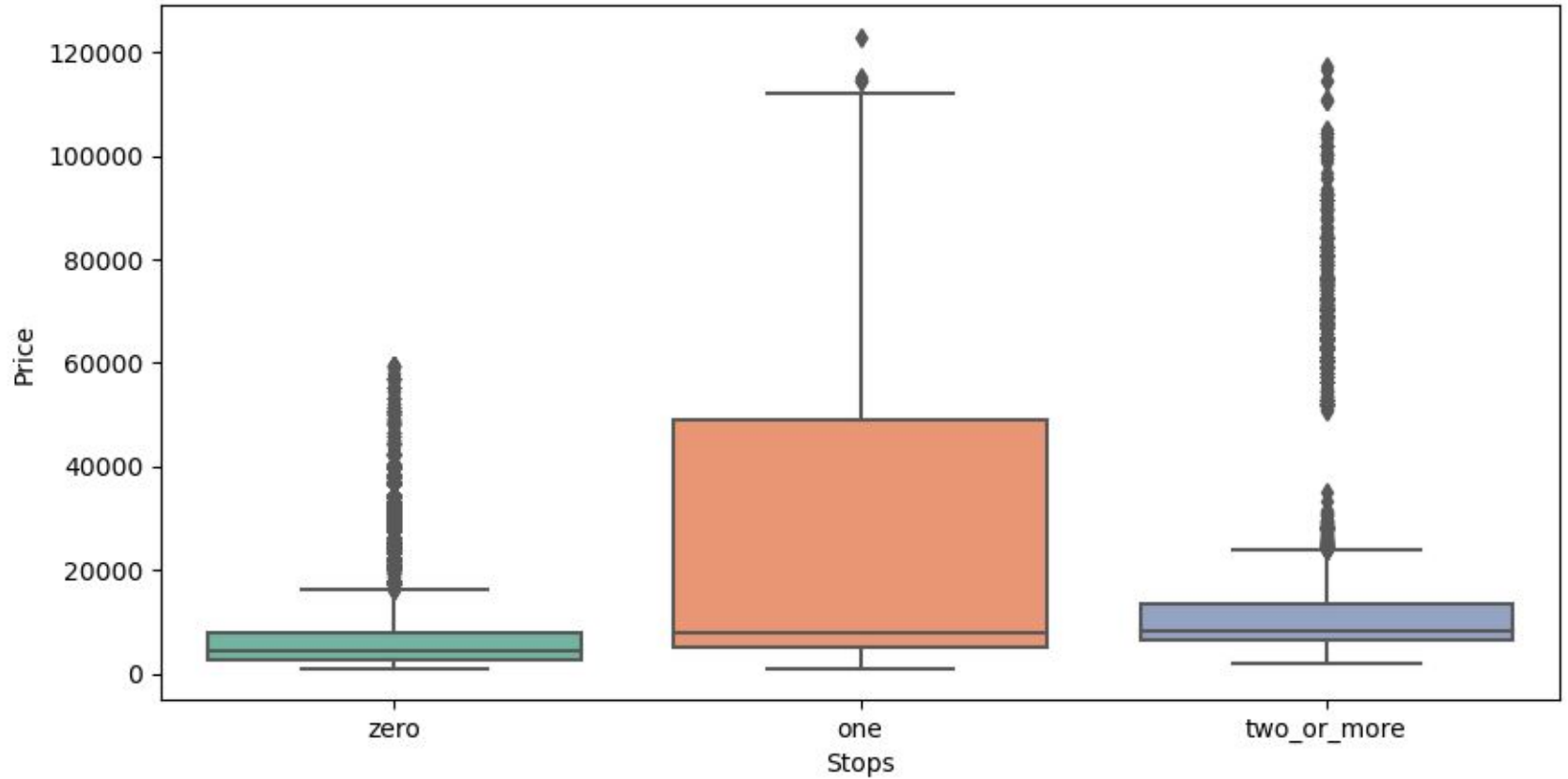
Airlines with Prices



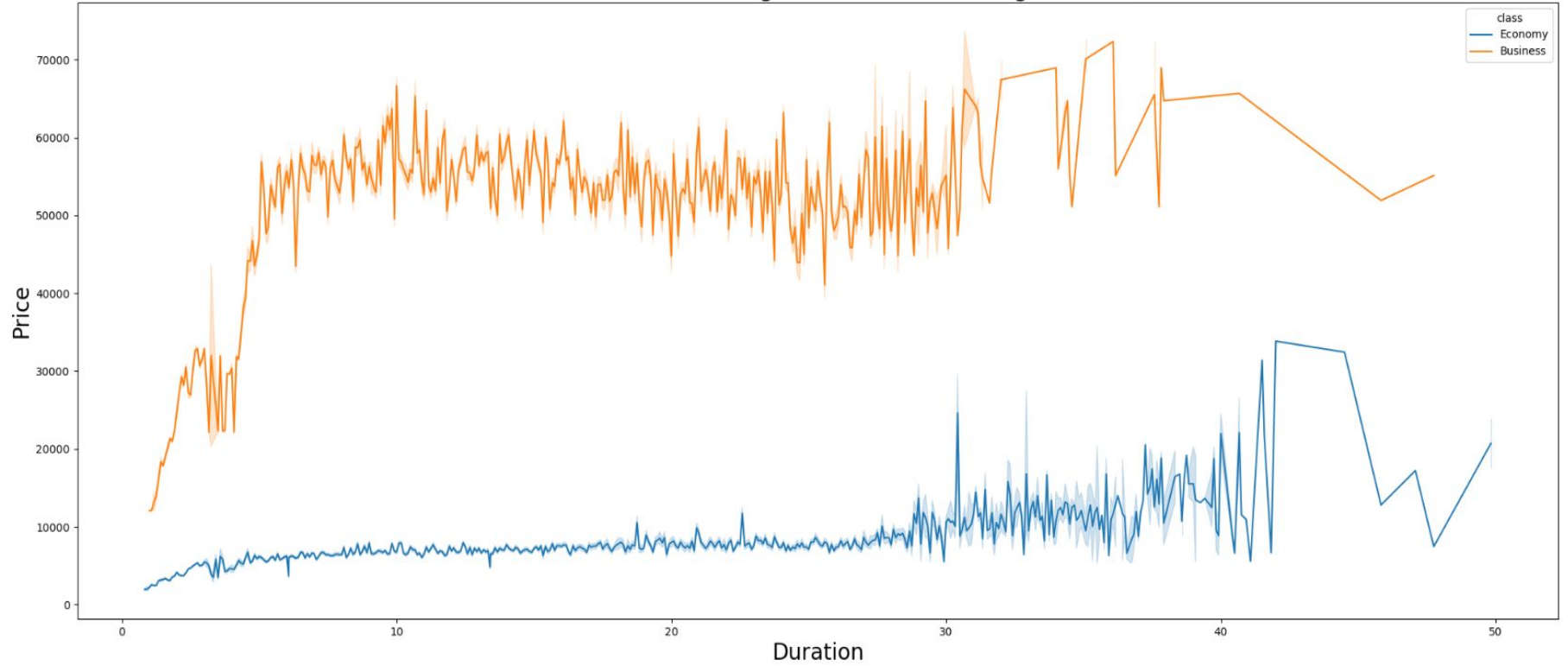




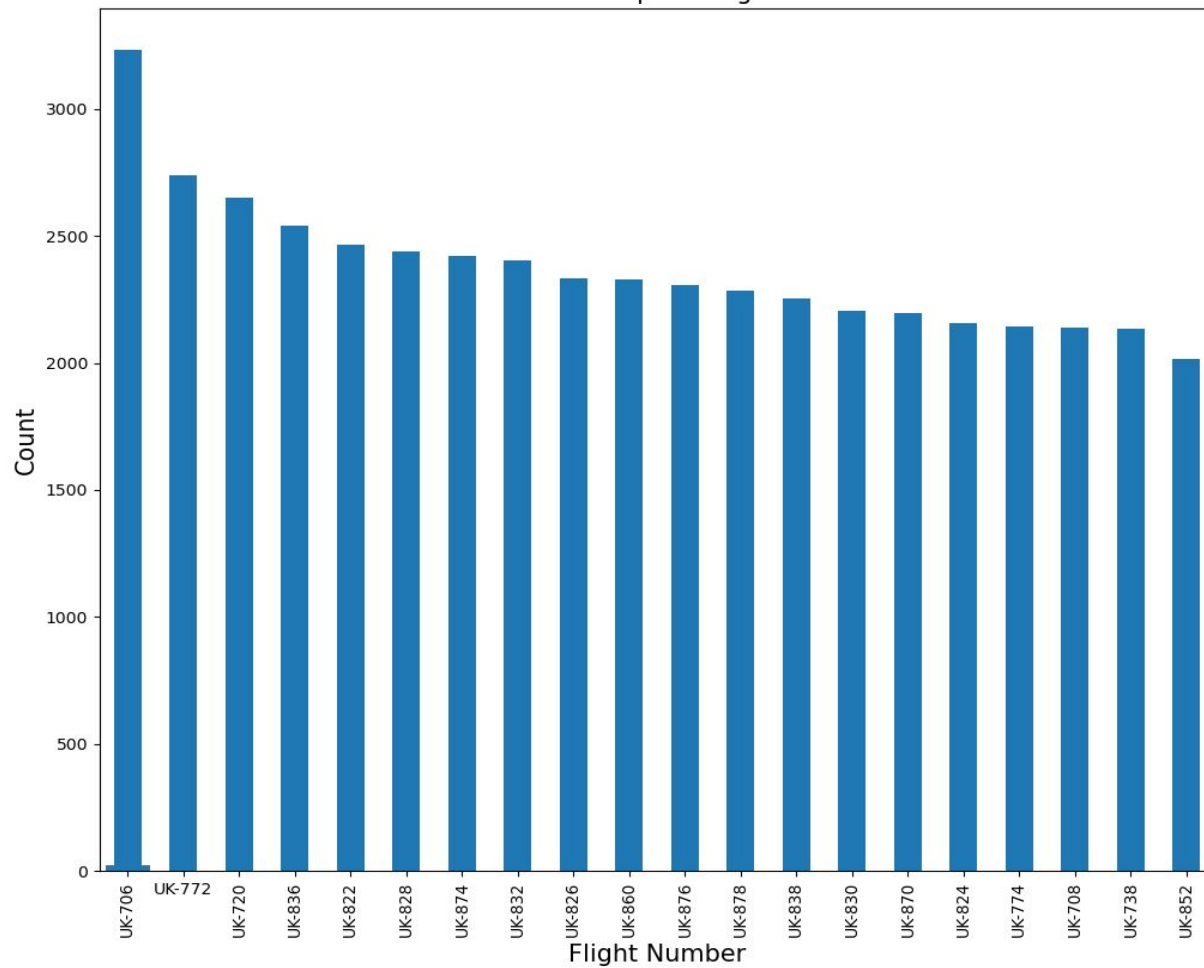
Stops Vs Ticket Price

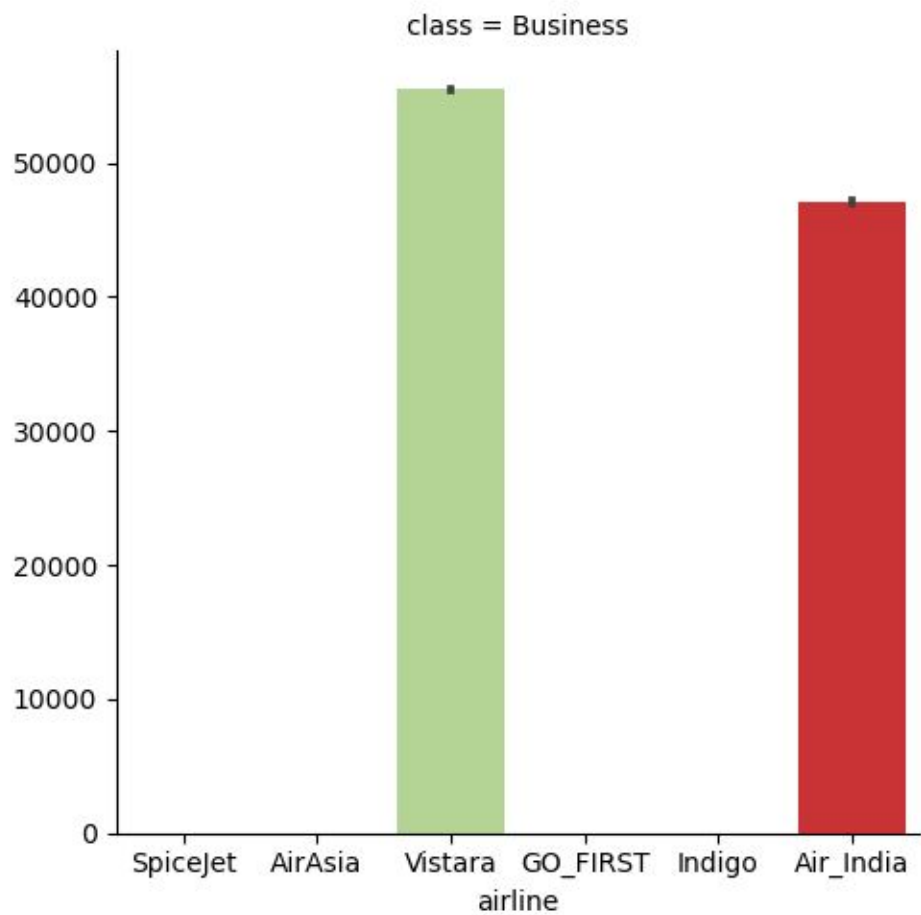
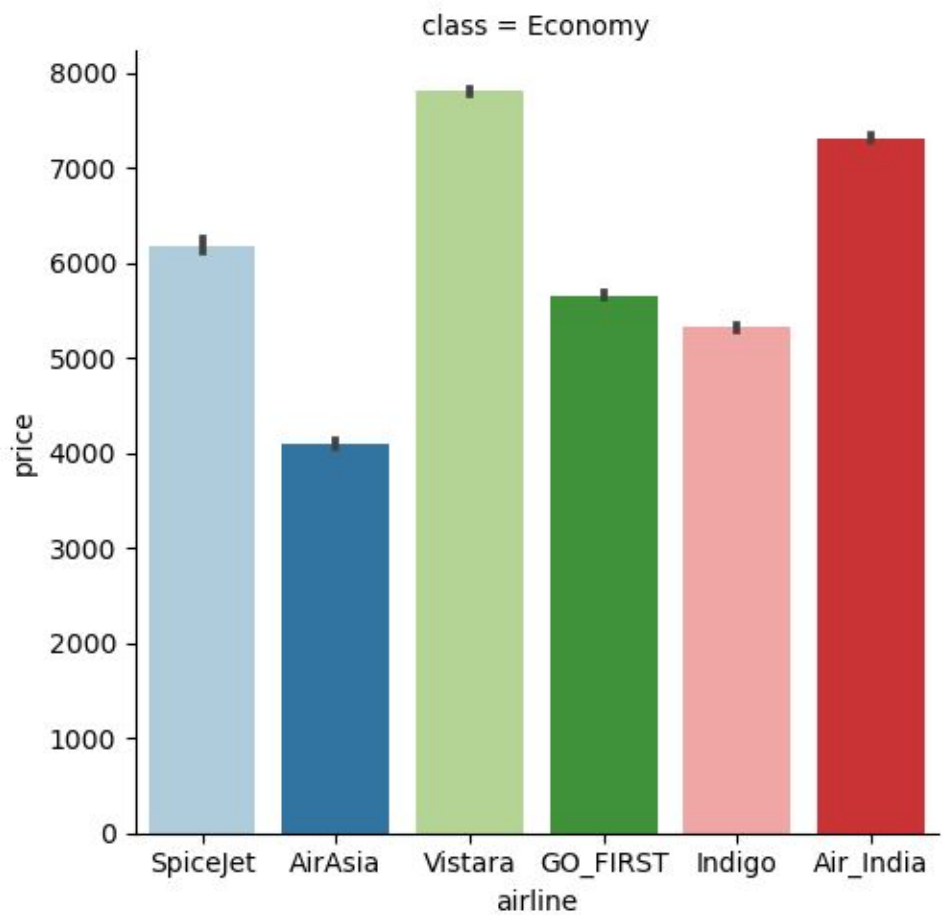


Ticket Price Versus Flight Duration according to Class

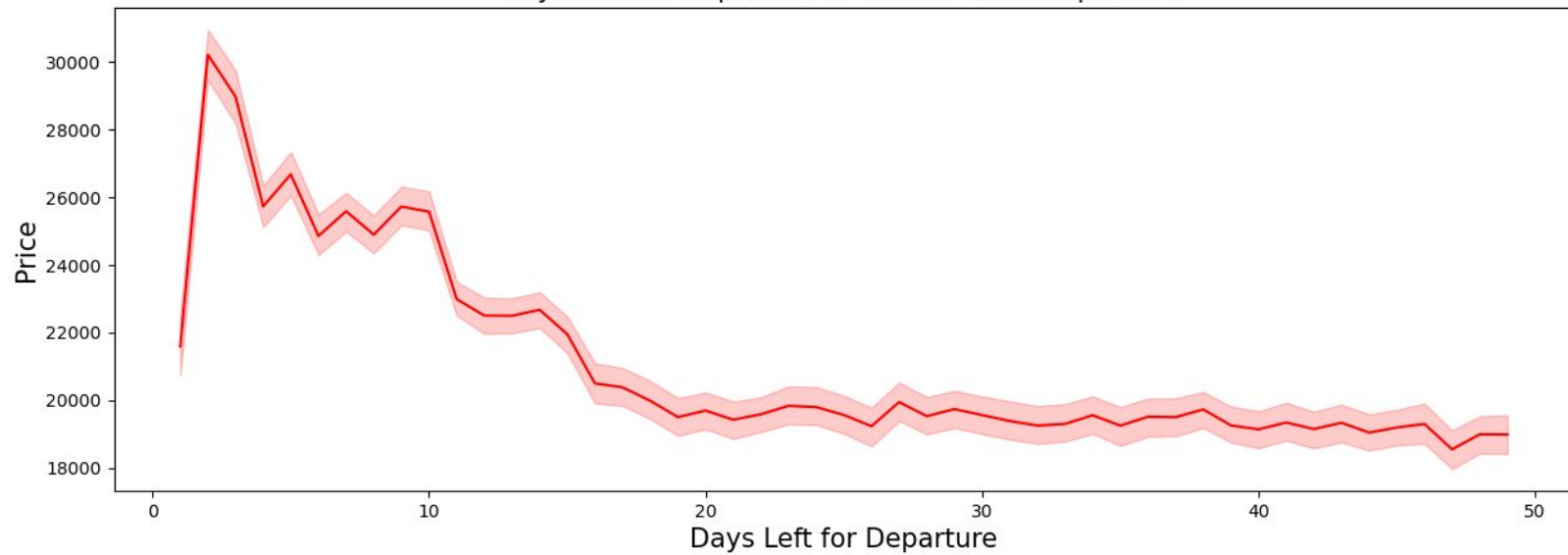


Most Frequent Flights





Days Left For Departure vs Ticket Price Comparative



EDA Conclusions

- There is a big gap between flight tickets in business and economy. Business tickets are 6 times more expensive than economy tickets.
- The most expensive airlines appear to be Vistara and AirIndia, while AirAsia is the least expensive. There are just two airlines that provide business class tickets, Vistara and AirIndia, and Vistara is significantly more expensive.
- Prices generally increase gradually until 20 days prior to the flight, at which point they dramatically increase. However, there are frequently open seats that haven't been filled a day before takeoff. As a result, tickets can be found for three times less than the previous day.
- It appears that early morning and late night departures are less expensive, whereas evening departures are more expensive. It appears that early departure, late departure, and late departure are less expensive than night time departure.
- Flights to Chennai are slightly more expensive than those to other cities, but flights from Delhi are the least expensive overall.
- Generally, the cost of an airline ticket increases with the number of stops.

Models used:

- Linear Regression Model
- Decision Tree Model
- Gradient Boosting Model
- Random Forest Regression Model
- KNeighbors Regression
- Bagging
- Extra Trees Regression

Best model performance:

Random Forest Regression Model

- R2 Score: 0.9894574805166351
- Mean Squared Error is 5398550.098449273
- Mean Absolute Error is 888.2363460939549
- Root Mean Squared Error is 2323.478017638487

Random Forest Model Prediction

