

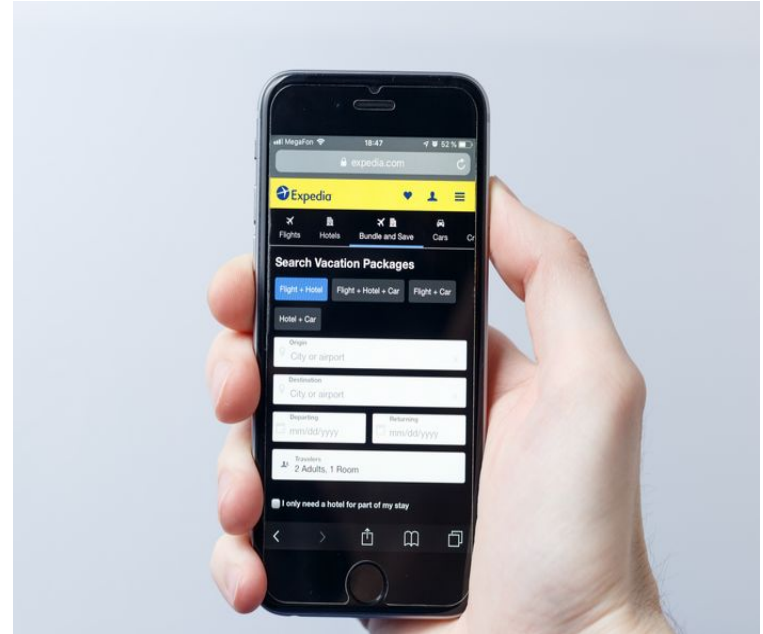
Expedia Hotel Recommendations

By Lais Amorim Menezes



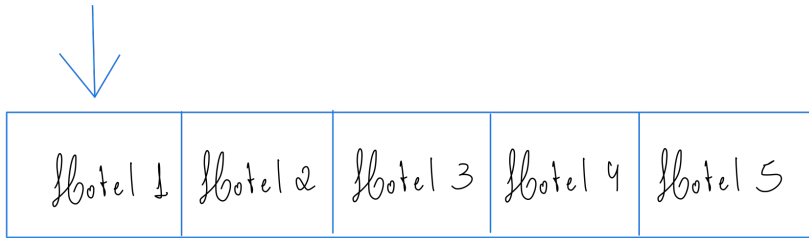
Problem statement

- The website displays random Hotels to all the customer.
- Customer spend too much time on the website trying to find a hotel that matches their preferences.
- Expedia loses customer to other websites that are quick and easier to navigate.

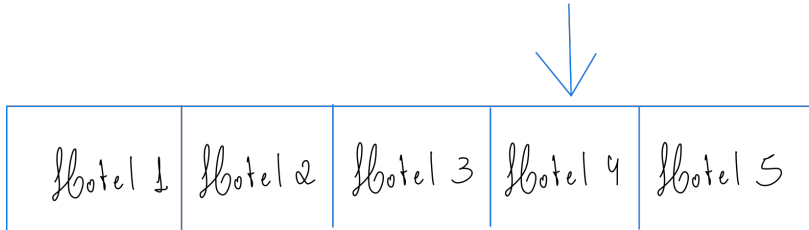


Propose overview

- Recommendation system that suggests a list of the the top 5 hotel base on a customer's previous experience and similar customer actions.
- After the modeling I will test it's accuracy using the test data.

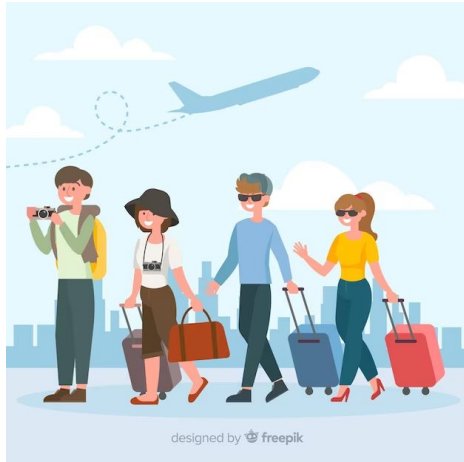


This accuracy is higher



Impact

Customer

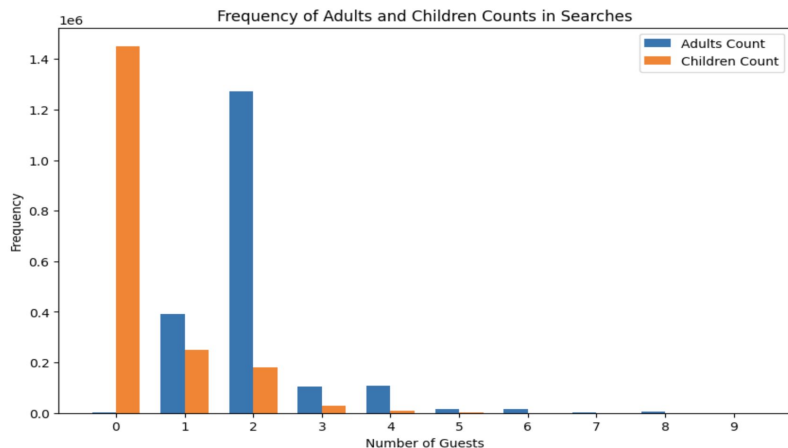


Company

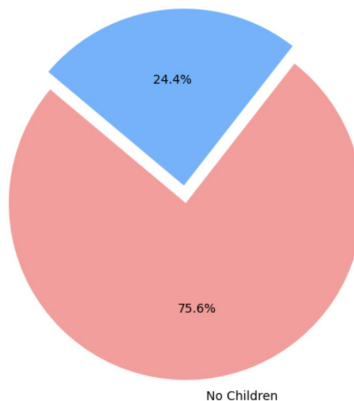


Dataset

- The train data from 2013 to July 2014.
- The test data from August to December 2014.
- The dataset doesn't contain categorical columns, instead, all columns are stored numerically.
- Most of the customer are looks for a Hotel for one day, 2 adults and 1 day.
- The target column will be hotel cluster.



Proportion of Searches with or without Children
Have Children



Next Steps

- Build a Machine learning model base on the customer id and destination.
- Generate a list of top 5 hotel clusters from the 100 hotel cluster available that the customer most likely to book.
- Run the model in the test data and check the accuracy, If necessary, I will explore additional models to get a better accuracy..





Thank you!