Capstone Project Submission

Team Member's Name, Email and Contribution:

1) Aditya Saw-

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Contribution: Data Description, Data Cleaning, Data Exploration, Exploratory Data Analysis(EDA), Power Point Presentation.

2) Parijat Krishna-

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Contribution: Data Description, Data Cleaning, Data Exploration, Exploratory Data Analysis(EDA), Technical Document, Summary

Please paste the GitHub Repo link.

1) Aditya Saw- https://github.com/adityasawaks
2) Parijat Krishna- https://github.com/parijat22/Capstone-Project-1-Hotel-Booking-Analysis

Please write a short summary of your Capstone project and its components. Describe the problem statement, your approaches and your conclusions. (200-400 words)

The hotel sector is very unpredictable and bookings depend on a wide range of variables, including hotel type, seasonality, day of the week, and many more. To assist the hotels in making better plans, it is now even more crucial to analyse the patterns present in the historical data. In order to increase revenue, hotels can run a number of campaigns using past data. Using time series, we applied the patterns to forecast upcoming reservations.

- We examined the variables influencing hotel reservations using the data at our disposal. These variables can be used to forecast upcoming reservations and report trends.
- In terms of the hotel type, customer type, customer preferences and time preference, the investigation has revealed some significant discoveries.
- The hotel can make plans based on the EDA results to attract new customers in order to boost spending and uphold positive relationships with current clients.

- Hotels have knowledge of guest preferences for meals and accommodations which will improve their ability to price goods.
- According to some measurements growth from 2015 to 2016 was greater than that of the year after. We can compare the variations across years to find the exceptional performance and match it.
- There is not a particularly clear definition of new customers. A new client this year will return the next year or they may be a repeat client as of the second booking. Based on definition a more thorough study is necessary.
- The study of booking types for weekdays and weekends can be drilled down further.
- Few variables are used in the categorization model. By adding new variables and modifying the cost of misclassification we may fine-tune the model. In order to prevent over fitting we also need to divide the data into train and validation sets.