Capstone Project Submission

Project Summary:

This data article describes two datasets with hotel demand data. One of the hotels is a resort hotel and the other is a city hotel. The Given dataset contains 119390 entries and has 32 columns.

Each observation represents a hotel booking. Both datasets comprehend booking due to arrive between the 1st July of 2015 and the 31st of August 2017,including bookings that effectively arrived and bookings that were canceled.

In this project we use descriptive analytics to understand the patterns, trends, and anomalies in data. We used the dataset to perform different problems like: Booking cancellation, number of stays in weekend or weekdays, number of special requests, is there guest is repeated or not, average daily rates, seasonality, favorite meal of the customers, types of room reserved by the customers, customer type, where do the guest come from? And many other things are performed in this project.

Our main objective is to find out the key metrics and solve the business problems. For this, we will explore and visualize the dataset from Hotel booking dataset using basic exploratory data analysis(EDA)techniques. We proceeded further by following three main steps i.e., Data preprocessing, defining problem statement and doing Data visualization.

Data preprocessing is the process of cleaning the data. In data preprocessing we nullified the null values. Its an important step as null values in our dataset can lead to errors in the interpretation.

We have analyzed this dataset from different angles and have come up with interesting insights. Some of the concluded points are city hotels are the most booked hotel types, booking increases during summer time and are at their

lowest during winter time and same is the case with average daily rates, BB is most preferred meal type, cancellation rate in city hotel is higher than resort hotel, low number of repeated guest and most visitors are from western European countries. This can help in making strategic data-driven decisions by the marketing team, finance team and technical team of all the Hotel booking applications.

Team Member's Name, Email and Contribution:

- **Kirtesh Verma(kirteshverma12345@gmail.com)**

Contribution:

1. **Data cleaning**
2. **Answering following questions:**
   a) What is the most preferred meal type?
   b) What is the average stay of people on weekday and weekend night?
   c) What hotel type received the most number of special requests?

- **Pravin Bejjo(praveen.bejo.pb@gmail.com)**

Contribution:

1. **What is the booking ration between city and resort hotel?**
2. **What is the cancellation rate between the two types of hotel?**
3. **What are the types of guest?**
4. **Which months is the busiest month for hotel booking?**

- **Sahil Pardeshi(8623879021.sp@gmail.com)**

Contribution:

1. **What is the average daily rate in both the hotel type?**
2. **Was there any type of deposit before booking a hotel?**
3. **What type of booking is most preferred by customers (online or offline)?**
4. **From which country most guests comes?**

Google Drive Link:

Drive Link:- https://drive.google.com/drive/folders/1AnbdGQHzgS7oIl0Uwzzb1njUN-q_BDsm

Github Repo Link:

GitHub Link: -

https://github.com/praveenbejo95/Hotel-booking-analysis-EDA-