

Capstone Project submission

Instruction:

- i) please fill in all the required information.
- ii) Avoid grammatical errors.

Team Member's Name, Email and Contribution:
Sahil pardeshi(8623879021.sp@gmail.com) Contribution: Answering the following question. <ol style="list-style-type: none">1. What is the average daily rate of both the hotel types?2. Was there any type of deposit booking a hotel?3. What type of booking is preferred by customers(online or offline)?4. From which country most guests come?
Pravin Bejjo(pravin.bejo.pb@gmail.com) Contribution: <ol style="list-style-type: none">1. What is the booking ration of city and resort hotels?2. What is the cancellation rate between the two types of hotel?3. What are the types of guests?4. Which month is the busiest month for hotel booking?
Kirtesh Verma(Kirteshverma12345@gmail.com) Contribution: <ol style="list-style-type: none">1.Data cleaning<ol style="list-style-type: none">a) What is the most preferred meal type?b) What is the average stay of people on weekday and weekend nights?c) What hotel type received the most number of special requests?
Github Link: https://github.com/Sahilpardeshi1/Hotel_booking_EDA
Google drive link: https://drive.google.com/drive/u/0/folders/1_vg7BMx0dACoXz6cscKOcDMul6o4V1ES

PROJECT SUMMARY

HOTEL - Hospitality Organization Tourism ENJOY life.

The hotel industry is the section of the service industry that deals with guests accommodations or lodgings. By most definitions, the hotels industry refers not only to hotels, but also to many forms of overnight accommodations, including hostels, motels, inns and guest houses. The hotel industries are the key drivers of growth and development. There are many sectors of hospitality industries like accommodation, food and beverages, tourism, events, tourist attractions, and recreations.

The data articles report the two data sets of hotel data, one is resort hotel and second is city hotel. Both datasets have the same structures. It has 31 features in total. Resort hotels have 40060 observations and city hotels have 79330 observations. Each observation constitutes a hotel booking. Both the datasets have excluded booking due to this arriving in between the 1st July of 2015 and 31st of August 2017, including booking were canceled.

In this project our objective is to use illustrative analytics to understand patterns, purity in data and trends. We have some example problem questions like average daily rate of both the hotel type, any type deposit before booking a hotel, types of booking customer online or offline, from which countries most guests arrive and many more.

Our main objective is to find out the key metrics and solve the business problems. For this we explore and we visualize the datasets from hotel booking datasets using basic techniques of **EDA** (Exploratory data analysis).

In our hotel booking data sets we have used data preprocessing in which the null values indicated unknown values which was important to remove null values in the datasets so the chances of error was minimum. The EDA always identifies outliers, missing data, class balance and other related issues. And many other things have been performed in this project.

In our datasets we have seen that the most famous meal was BB type meal which was 77% followed by HB and SC preferred by guests in the

hotels. In our datasets we have gone through, the cancellation rate of city hotels was higher than resorts hotels. city hotels are booked more than resorts hotels we seen in our datasets.

We analyzed the dataset and we understood that both the hotel of ADR (average daily rate, favorite meals of customers, Booking cancellations, whether guests are repeated or not, number of stays in weekends, types of room reserved by the customers, customer types etc.

We have analyzed these datasets in various ways and we understood the different features of govern booking. when the booking rate is high in summer season and low in winter season, we have seen most visitors come from western european countries like portugal, spain, uk, france.