# **Capstone Project Submission**

#### **Instructions:**

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

## **Team Member's Name, Email and Contribution:**

❖ Kirtesh Verma Email: kirteshverma12345@gmail.com

- Contribution:
- 1. Data Cleaning
- 2. Data analysis and visualization of 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 greatest number of special requests?

## Pravin Bejjo Email: praveen.bejo.pb@gmail.com

# Contribution:

Data analysis and visualization of following questions-

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

**❖ Sahil Pardeshi** Email: <u>8623879021.sp@gmail.com</u>

#### Contribution:

Data analysis and visualization of following questions-

- 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 guest comes?

## Please paste the GitHub Repo link.

GitHub Link: -https://github.com/KirteshVerma/Hotel-booking-EDA-project

Drive Link: -https://drive.google.com/drive/folders/1aCg7rw8gecLsebyO6N4mqLKGwMgB2Qt7

#### PROJECT SUMMARY:

The hospitality industry is a broad category of fields within the service industry that includes lodging, food and drink service, event planning, travel and tourism etc. Hotels, resorts, restaurants and bars, tourism agencies etc. falls under hospitality industry. The significance of this industry is very high as it not only promotes other economic activities but also generates more employment.

For this project we are analyzing the dataset of bookings of city and resort hotel type from year 2015 to 2017. A city hotel is usually a place for lodging where as a resort hotel allows for more privacy, entertainment, and experiences during the stay of the customers. The given dataset contains 119390 entries and has 32 columns.

Our objective is to discover the important factors that governs the booking. We do this my performing Exploratory Data Analysis (EDA) techniques on our hotel booking dataset. 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.

In Problem statement we defined the problem. We asked question that will help us to do a more meaningful analysis. For example, what is the booking percentage of city and hotel type, what is the meal preference of customers, which months are busiest, what is the average daily rate etc.

In data visualization we translated the dataset and metrics into charts, graphs and other visuals. This helps us to understand the trends and relationship between different variables present in our dataset.

We did a thorough analysis of the data and understood the relationship between different features that govern the bookings. 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.