

# Capstone Project Submission

## Instructions:

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

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

1) AMIT SAXENA

Email: [amit.saxena919@gmail.com](mailto:amit.saxena919@gmail.com)

Contribution:

- Bookings that were canceled or not canceled?
- Visualizing the number of hotel bookings that were canceled and not canceled Yearly.
- From which Country the most guests are coming?
- Busy months for Hotels
- The most booked accommodation types as Family, Couple, Single.
- Deposit Type with respect to cancelation.
- Reservation Status of visitors.
- Visualizing the type of visitors with respect to hotel type.

2) SHUBHAM

Email: [shubhamedu1501@gmail.com](mailto:shubhamedu1501@gmail.com)

Contribution: ➤ Finding how many Bookings were canceled or not canceled?

- Visualizing the number of hotel bookings that were canceled and not canceled Yearly.
- From which Country the most guests are coming?
- Finding the relationship between cancelation and market segmentation
- Finding cancellations with respect to customer types
- Busy months for Hotels
- The most booked accommodation types as Family, Couple, Single.
- Finding visitors that stay on weekends and weekdays.
- Visualizing the type of visitors with respect to hotel type.
- Finding meals for visitors. ➤ Finding Repeat guests in hotels

### **Please paste the GitHub Repo link.**

Github Link:- <https://github.com/Shubhedu/CAPSTONE-PROJECT-1-HOTEL-BOOKING-ANALYSIS>

Drive Link:-

[https://drive.google.com/drive/u/0/folders/13lxbxXYsIA\\_CfBQiAwPDKqJa\\_9Utnik7](https://drive.google.com/drive/u/0/folders/13lxbxXYsIA_CfBQiAwPDKqJa_9Utnik7)

**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 Hospitality industry sector is one of the most profitable, accounting for more than 8% of the country's workforce and hotels plays a vital role in the hospitality services. Good Hospitality services can attract more visitors to hotels which in turn can provide more growth to the tourism industry. In this project we are trying to showcase interesting facts respect to hotels and visitors point of view. Hotels can get more insight related to facilities and how can increase visitors at the same time. It will also provide best time for booking and offers provided by the hotels.

The present data set includes hotel booking analysis from 2015 to 2017 in City and Resort hotels and includes some interesting features such as arrival\_date\_year, customer\_type, is\_canceled, market\_segment, meal, stays\_in\_weekend\_nights, stays\_in\_week\_nights, adults, children, babies, is\_repeated\_guest that I have used while analyzing the data set. First of all I started the cleaning of data set to remove bad data from the data set by dropping unnecessary columns, replacing columns that have null values with 0, and missing values in the country and children columns are replaced with mode and mean values respectively. After that, I did data visualization on the respective data set. Some of my key findings were:

- 1) The Highest number of bookings happened in 2016, City Hotel Booking is more than Resort Hotel Booking and bookings were decreased by almost 15% in 2017.
- 2) From May to August the hotels are busy.
- 3) Bookings through online and offline travel agents are higher as compared to group bookings and direct bookings. The majority of people go for travel agents for hotel bookings.
- 4) More than 80% of visitors are coming from countries like Portugal, United Kingdom, France, Spain, and Germany.
- 5) The majority of bookings that are canceled are from deposit type that does not require any deposit, due to this the high cancellation rate is observed. Also it is interesting to note that refundable deposits had less cancellation than non-refundable deposits. Logically one would have assumed that non-refundable deposits have less cancellation as hotel rates are usually higher.