

# Capstone Project Submission

## Instructions:

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

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

Name - Ansh Srivastava  
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1. Data wrangling -ds (head, tail, info, shape, size, describe)
2. Numpy Plotting graph, bar chart, line chart.
3. Finding Null values
4. Data cleaning
5. percentage of canceled booking
6. Booking segment
7. Type of hotel people booking more
8. Find out which month people book the hotels?
9. find the year in which most booked hotel?.
10. Calculate the percentage of the nan values in the data?.
11. Taking Necessary Columns Only.
12. What is the percentage of cancellation?.
13. Find the top 10 countries from where most people booked the hotels?.
14. Make the dataframe top 10 countries?.
15. Which is the most preferred room type by the customers?.
16. What is the percentage distribution of "Customer Type"?.
17. What is the percentage distribution of required\_car\_parking\_spaces?.
18. What is the Percentage distribution of Deposit type ?.
19. Which type of food is mostly preferred by the guests?.
20. Correlation of the columns
21. Which Hotels have the most repeated guests?.
22. Relationship between the repeated guests and previous bookings not canceled?.
23. Which distribution channel has the highest cancellation rate?.
24. Which Market Segment has the highest cancellation rate?.
25. Which Hotel type has the highest ADR?
26. Which distribution channel contributed more to adr in order to increase the income?.
27. ADR across different market segment

**Please paste the GitHub Repo link.**

**Drive Link:-**[Ansh Srivastava-EDA-Hotel Booking-Analysis - Google Drive](#)

**Github Link:-** [Ansh-srivastav/Hotel-Booking--Analysis \(github.com\)](#)

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**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 objective of this project is to deliver insights to understand when the best time of year to book a hotel room is? Or the optimal length of stay to get the best daily rate? Whether or not a hotel was likely to receive a disproportionately high number of special requests? This hotel booking dataset can help you explore those questions.

Prices of the Hotels can also vary according to the month of booking, the number of guests, days of stay, hotel locations, hotel ratings, any special request, etc.

A hotel is an establishment that provides paid lodging on a short-term basis. Small, lower-priced hotels may offer only the most basic guest services and facilities.

Larger, higher-priced hotels may provide additional guest facilities.

**problem statement** - This data set contains booking information for a city hotel and a resort hotel, and includes information such as when the booking was made, length of stay, the number of adults, children, and/or babies, and the number of available parking spaces, among other things.

**Steps involved-** Loading the dataset, Cleaning and Transforming Data, Unwanted Data Removal, Null values Treatment

**Future Work** -The dataset contains immense possibilities to improve business values and have a positive impact. It is not limited to the problem taken into consideration for this project. Many other interesting possibilities can be explored using this dataset.

**Conclusions-** Out of all months, 'August' witnessed the highest number of hotel bookings whereas 'January' witnessed the least. Among all the countries in the dataset, PRT(Portugal) has got the maximum number of hotel bookings. It's observed that 'City hotels' were more canceled as compared to 'Resort hotels'. Coming to the analysis of the market segment, 'Online TA' brings maximum bookings. Considering all the three years, 'August' has got the highest average ADR in each year