

# Capstone Project Submission

## **Instructions:**

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

<b>Member's Name, Email, and Contribution:</b>
<b>Name:</b> Aneeta <b>Email:</b> kajalgupta94160@gmail.com <b>Contribution:</b> <ul style="list-style-type: none"><li>➤ Prepared Colab works for EDA hotel booking.</li><li>➤ Prepare the Presentation.</li><li>➤ Type of Visualization, handle the duplicate values and Missing values.</li><li>➤ Heatmaps were used to examine the connections between the two sets of data.</li><li>➤ Examination of type of hotels.</li><li>➤ Hotel's visitor analysis.</li><li>➤ Based on meal type analysis.</li><li>➤ Most Revenue generated by which hotel?</li><li>➤ Percentage distribution of required_car_parking_spaces analysis.</li><li>➤ Contribution to writing inferences and conclusions of EDA.</li></ul>
<b>Please paste the GitHub Repo link.</b>
<a href="https://github.com/Aneeta3333/EDA-Hotel-booking">https://github.com/Aneeta3333/EDA-Hotel-booking</a>
<b>Please write a short summary of your Capstone project and its components. Describe the problem statement, your approaches, and your conclusions. (200-400 words)</b>

Bookings depend on a wide range of factors, including hotel type, seasonality, day of the week, and many more, making the hotel industry exceedingly unpredictable. Analyzing the trends in the historical data is essential to help the hotels make wise planning decisions. Hotels can undertake a variety of marketing campaigns to boost business using historical data.

This data set comprises reservation information for a resort hotel and a city hotel, as well as column features like 'is\_canceled', 'lead\_time,' 'arrival\_date\_day\_of\_month', 'meal', 'is\_repeated\_etc, as well as information on the reservation's date, duration, number of guests, children, and/or infants, and the number of available parking spaces.

After examining the aforementioned dataset, we may use this research to better comprehend consumer behavior in the hotel booking sector. I follow the steps outlined below to examine this batch of data: Recognize the dataset, clean, analyze, and visualize the data, then resolve some difficulties of an industrial nature.

We have examined a number of the important issues we raised.

- Types of hotels.
- Booking percentage based on population.
- The most prominent hotel
- Type of food Preferred.
- The maximum number of visitors from which country.
- Which Hotel produces more revenue?
- What month has the highest ADR for hotels?

In this study, we examined the busiest or most populated month for customers. We concluded that January had the fewest bookings while August was the busiest month. Further investigation found that City Hotel had the most reservations and cancellations. Online TA is the most well-liked booking section. Using the data at our disposal, we have tried investigating the factors affecting hotel bookings. These variables can be used to report trends and forecast impending reservations.