**Capstone Project Submission**

**Instructions:**

i) Please fill in all the required information.

ii) Avoid grammatical errors.

|  |
| --- |
| **Team Member’s Name, Email and Contribution:** |
| |  |  |  |  | | --- | --- | --- | --- | | **No** | **Name** | **Email** | **Contribution** | | 1 | **Vikash Kumar** | Vikash22kgg@gmail.com | I completed the entire project. | |
| **Please paste the GitHub Repo link.** |
| **Github Link:**  https://github.com/ImVikashKr/Hotel-Booking-Analysis.git |
| **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 data set contains booking information for city hotel and a resort hotel, and includes information such as when the booking was made, length of stay, the number of adults, children or babies and the number of available parking spaces, among other things.  I made an effort to first comprehend what each column in the data set meant. I consider each column's unique values, which we are unable to interpret—in this framework.  Data cleaning, deleted any unclear information that would have impacted the results of the data set. We eliminated duplicate entries while cleaning the data, dealt with missing values, changed the data type of the columns to appropriated data type and added crucial columns.  The data set can also be utilized for univariate analysis, hotel-specific analysis, analysis of distribution channels, analysis of booking cancellations, and analysis of time.  We utilised Matplotlib and the seaborn library to define data in graph formats such as scatterplots, bar plots, box plots, count plots, pycharts, kdeplots, line plots, and seaborn for various types of analysis. Other graphs that were quite useful for research in this data set included those that Seaborn used to investigate the correlations between total stay and lead time and adr and total people.  After thorough analysis, we came to a number of conclusions, including the following: Most tourists stay in hotels for fewer than seven days, and resort hotels are favoured for longer stays. The majority of the guests were from European nations, with the majority of them coming from Portugal. The City Hotel is busier than the Resort Hotel since approximately 66% of reservations are for the City Hotel and 34% are for the Resort Hotel. Additionally, the overall ADR of a city hotel is marginally greater than a resort hotel, and about 30% of reservations made through a travel agent or tour operator are cancelled. Customers can typically get better prices with low adr for longer stays (more than 15 days). Adults and adjacent market segment bookings typically have a significant number of customised requests. |