

Capstone Project Submission

Instructions:

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

**Please write a short summary of your Capstone project and its components. Describe the problem statement, your approaches and your conclusions.
(200-400 words)**

In this EDA Project, we were provided with a dataset. 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.

We will perform exploratory data analysis with python to get insight from the data.

As the first step, We have mount our drive and load our data into our Colab. Further, we divided the complete project into three main parts i.e Data Initialization , Data Preprocessing and Data Analysis On Hotel Booking Data.

In Data Initialization part we have imported all the Python Libraries required to create the work environment for our Project like NumPy , Pandas , Matplotlib ,seaborn,etc.

In the Data Preprocessing part we have successfully loaded our csv file in order to make the data readable and then we have done the Data Cleaning To remove All the null Values and all The Duplicate Data from Our Dataset

In the Data Analysis Part We have analysed the most Preferred Hotel types (City Hotel and Resort Hotels) , Maximum Number of Bookings In a Year/Month , From Which Countries Maximum bookings were made, Monthly average Daily Rate , Which Type of Customers Have made most Bookings , Cancellation Rate is high in which month , Most Preferred Meals , Most Preferred Room types ,etc.

By doing The Analysis Part we can provide the important insights from our data That can help the Hotel Management Team For making The required Arrangements and come up with innovative solutions, so that they can use them to better their revenues and businesses overall and provide Better services in Future.

Contributor Roles:**1. Kaushal Kumar Jha:**

- Monthly/Yearly wise booking Analysis
- Length of stay v/s ADR Analysis
- Special Request Analysis
- Most Preferred meal type Analysis
- Customer Type v/s cancellation Analysis
- % of Cancellation in Hotels Analysis
- Car parking space v/s adr Analysis
- Country wise booking Analysis

2. Prabhat Pradip Manna:

- Best month to book hotel in year Analysis
- Reserved room type Analysis
- Co-relation of columns
- Hotel type Analysis

3. Shambhu Nath Jha:

- Deposit Type Analysis
- Hotel Type Analysis
- Data Cleaning

4. Asif PA:

- Most Preferred Hotel type Analysis
- Revenue of Hotels Analysis
- Month wise cancellation rate Analysis
- Customer type Analysis
- Weekend v/s week night Analysis
- Repeated guest Analysis
- Lead time v/s Cancellation Analysis
- Market Segment v/s waiting list Analysis

Github Link:

<https://github.com/PrabhatManna/Hotel-Data-analysis>

Please paste the drive link to your deliverables folder. Ensure that this folder consists of the project Colab notebook, project presentation and video.