Capstone Project Submission

Team Member's Name, Email and Contribution:

Contributor Roles:

1. **Chandan Prasad**
   (Email: - fbchandanp@gamail.com)
   - ➤ Data Wrangling
     - Handling null values
     - Dropping irrelevant columns and rows
     - Parsing date in string to Datetime format
     - Adding new feature columns
   - ➤ Data Visualization
     - Analysis the average booking rate of different Market Segments and plotting the chart
     - Analysing reservation status from different distribution Channels of hotels and plotting the chart

2. **Nikhil Solanki**
   (Email: - nikhilhsolanki@gmail.com)
   - ➤ Data Wrangling
     - Handling null values
     - Dropping irrelevant columns and rows
     - Parsing date in string to Datetime format
     - Adding new feature columns
   - ➤ Data Visualization
     - Correlation between different booking criteria and plotting the chart
     - Analysing the booking trend round the year and plotting the char

3. **Prerna Kashyap**
   (Email: - kashyapprerna2112@gmail.com)
   - ➤ Data Wrangling
     - Handling null values
     - Dropping irrelevant columns and rows
     - Parsing date in string to Datetime format
     - Adding new feature columns
   - ➤ Data Visualization
     - Analysing and booking percentage of different type of hotels and plotting the chart
     - Analysing and the preferred stay length in each hotel and plotting the chart

4. **Meet Dave**
   (Email: - meetdave3002@gmail.com)
   - ➤ Data Wrangling
     - Handling null values
     - Dropping irrelevant columns and rows
     - Parsing date in string to Datetime format
     - Adding new feature columns
   - ➤ Data Visualization
     - Analysing the overview of guest's visit over different years and plotting the chart
     - Analysing the price trend round the year and plotting the chart

5. **Lalith Kumar P S**
   (Email: - pslalitkumar@gmail.com)
   - ➤ Data Visualization
     - Analysing and the home country of majority of guests
     - Analysing and the hotel preference of tourist from Top 5 Countries

Please paste the GitHub Repo link.

Github Link:- https://github.com/Link/to/Repo

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

Hotel industry is a very volatile industry and the bookings depend on variety of factors such as type of hotels, seasonality, days of week and many more. This makes analyzing the patterns available in the past data more important to help the hotels plan better, in this project we were provided dataset with different types information such as hotel types, market segments, distribution channel, average daily rates, reservation status and etc.

As a first stage we have performed Data Exploration and Inspection over the raw data, furtherly we have done the Data Cleaning by removing null values, dropping irrelevant columns and rows, converting date in string to Datetime format and adding new feature columns

We have used updated clean data to analyze the factors affecting the hotel bookings and for hotel business These factors can be used for reporting the trends and prediction the future bookings and growth of business

We will be tackling business problems in different type of scenarios such as

· Booking percentage of different type of hotels

· Home country of majority of guests

· Hotel preference of tourist from Top 5 Countries

· Overview of guest's visit over different years

· Booking trend round the year

· Price trend round the year

· Average booking rate of different Market Segments

· Reservation status from different Distribution Channels

· Correlation between different booking criteria

· What is most preferred stay length in each hotel?

We will be used various lenses to look through the data to analyze patterns associated with each segment such as:

· The type of hotel

· Day of week

· Type of customers

· Type of rooms

Finally, we will have predicted the future bookings either based on time series analysis.

Using the results from the above analysis, business can make key decisions regarding the customer experience they desire to deliver.