Capstone Project Submission

Instructions:

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

Team Member's Name, Email and Contribution:

- 1. Name → Meenakshi
 - Email → meenakshicuul@gmail.com

Role:

- Finding out which is the busiest month for both hotels?
- Finding out which is the most occupied month for City hotel and Resort hotel?
- Analysis of the percentage of cancelled and non-cancelled bookings.
- Finding out which type of hotel is more likely to be cancelled?
- Analysis of the effect of meal type on cancellations.
- Finding out the percentage of bookings for each year.
- Finding out the total number of bookings by market segment.
- Analyzing how the Price Per Night (ADR) varies over the year by hotel type.
- Finding out how many night were spent by guests at the hotel by market segment.
- Finding out the most booked accommodation type (Single, Couple, Family).
- 2. Name → Gopal Ji Gupta
 - Email → gopaljigupta45@gmail.com

Role:

- Finding out what is the best time of the year to book a hotel room and which is the busiest month of the hotel?
- Analysis of the optimal length of stay to get the best daily rate.
- Finding out which market segment makes the highest number of Bookings?
- Analysis of the effect of deposit type on cancellations.
- Analysis of special requests made by customers travelling with a child or baby.
- Finding out how often repeated guests cancel their booking as compared to others?
- Analysis of total number of bookings by Customer type?
- Analysis of number of cancellations by market segment and the relationship between cancellation and repetition of customers
- Analysis of the days on the waiting list by market segment and distribution channels.
- Analysis of number of booking changes on cancellations.
- 3. Name → Huzaifa Khan
 - Email → huzaifakhan2974@gmail.com

Role:

- Checking which country has the highest number of bookings.
- Finding out the busiest month of the hotel.
- Finding out which hotel has the highest number of cancellations.
- Finding out the most preferable meal.
- Analyzing how long the guest stays at the hotel on weekends and weekdays.
- Analyzing the bookings by customer type.
- Analyzing the total number of bookings and cancellation according to the market segment.
- **4.** Name → Arbaaz Malik
 - Email → malikarbaaz267@gmail.com

Role:

- Finding out the types of hotel and analyzing the type of hotel which is having the highest number of cancellations.
- Finding out the busiest month of the hotel
- Analyzing the countries with highest bookings.
- Analyzing how cancellations vary according to month.
- Finding out the most preferred meal by the customer.
- Finding the relation between repeated customers and cancellation.
- Finding whether the guest stays over a weekend or weekdays.
- Exploring the number of special requests in general.
- Analyzing the bookings by market segment and distribution channel.

Please paste the GitHub Repo link:

Github Link: https://github.com/meena25091992/Meenakshi-Hotel-Booking/

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 very important to help the hotels plan well. Using the historical data, hotels can perform various campaigns to boost the business.

The data set contains booking information for a city hotel and a resort hotel, and includes information such as when the booking was made, the number of adults, children, and/or babies, and the number of available parking spaces, among other things. From it, we can understand the customer's' behavior and it might help us make better decisions.

The process of our analysis will be by the following step: Understanding the Datasets, Data preparation, Data Cleaning, Define our Business question, analyze the data, and visualize the data, conclusion and insights drawn.

We have analyzed some key metrics for hotel bookings like:

- The number of cancellations
- Most preferred hotel
- Busiest month of the hotel
- Number of nights stays by guest on weekday vs. weekends
- Most affected meal on cancellation of bookings
- Highest bookings market segment
- Year-wise bookings of the hotel
- Booking types(family, couples, single)
- Room price vary per night over the year
- Hotels available for booking

In this project, we have analyzed the busiest or most occupied month by customers and we concluded that August is the busiest month which is having highest number of bookings and January has least no. of bookings. We have further analyzed that City hotel have more no. of cancelled bookings and having highest no. of bookings. Also, Online TA is the most preferred booking segment. We have tried using the data available to analyze the factors affecting the hotel bookings. These factors can be used for reporting the trends and predict the future bookings.