**Capstone Project Submission**

Travelling is a key factor human being to learn and experience new thing in their life. So, we visit new place and stay little while for an experience of that environment where we like to visit. Hotel is a key factor which decided our experience will be a good or bad. As a human being we always have a curiosity that we should get a good hotel room at lowest price as possible and the service of the hotel should be also good. So, we do a **Hotel Booking Analysis** so we can understand the key factor which influence the price factor of the hotel and also understand the behavior of the customer with **Exploratory Data Analysis**.

In this EDA project the first step we perform is data wrangling over the raw data where we do various operation to form a ready to used data frame to it will be easy to handle. In 1st step include Importing various library and reading CSV file, Checking and Exploration of data frame, clearing data and adding missing/required data, then we further divided our complete project in five basic analysis.

In first analysis we do time wise and place analysis where we find which year and which month we get highest number of rooms booking happen and from which country the booking is done. So, it gives a statistical idea about how the yearly and monthly demand for booking rooms shown and Also from which country people like to book most.

In second part analysis we do hotel wise analysis like which type of hotel has highest number of booking, highest room type booked, which room type generate highest adr so we can understand how revenue come from room and analysis in each hotel type booking in yearly basic.

In third part of analysis we have done various distribution of various channel wise analysis like number of rooms booking, finding most common market segment to booking hotels, number of rooms booking by top 10 agents, which type of meal preferred by the peoples.

In the fourth part we do check a relationship between market segment and cancellation so we get an idea from which segment/channel we get highest number of booking and how the cancellation of booking happened in each segment. This analysis gives a clear idea of booking cancelation ratio for each segment.

In fifth part of analysis we can clearly see that there are various co-relations between data like Total stay length and lead time have little correlation. It means that longer hotel stays people generally plan little before the for hotel so adr also likely to increase.

**Contributor Role: -**

**N Santosh Ku. Choudhury**

* Data Wrangling
* Checking data frame
* Data frame Exploration
* Finding most common segment prefer for hotel booking.
* Which moth highest booking happened?
* Visualizing each Hotel type wise yearly bookings.
* What is the relationship between market segment and cancellation?
* Correlation of the columns.
* Which top 10 Country have most babies during their visit?
* Which type of Meal is mostly preferred by the guests during their visit?
* Draw the box plots of the two columns

**Kuresh Chandra tripathy: -**

* Data Wrangling.
* Mounting and read the data frame
* Clearing and Processing Data frame
* Which Year most room booking happen?
* Country with Highest Number of Booking
* Map wise room booking density graph.
* Which type of Hotel has highest number of booking?
* Which room type booked in highest Number?
* Number of rooms booking by top 10 Agent
* Which room type generates highest adr?
* Find is the most common market segment prefer to book hotels?
* How long do people stays at the hotel?

#**GOOGLEDRIVELINK-https://drive.google.com/drive/folders/18ZNFo4WjPeAixPgLxzZm0BgZJ1wTmF0v?usp=sharing**

**#GITHUBLINK-** **https://github.com/SANTOSH7077/HOTEL\_BOOKING.git**