**Capstone Project 1- Summary**

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| Team Supernova  **Team Member’s Name:**   * Affan Ahmad Abdul Wahid * Rithun Rajendran M.K * Prajwal Bharadwaj * Shreyash Kumar * Md Ashique Ali |
| Topic: **Hotel Booking Analysis** |
| **Summary**  This project was done by a team of 5 members. We first individually proceeded on this project as we wanted to get different questions and ideas regarding the project. Our primary aim as a team was to solve at least 4 to 6 questions individually. We then meet as a team and pick 2 to 3 questions from all the team members individual analysis and merge them in our team collab .  In our project all the data was in one csv file. The information we got about the size of data was that it has 119390 rows and 32 columns. The first thing we did was Data cleaning in which we do two things, Removing duplicates and Handling of missing values. In our data four columns have missing values so we fill those null values. We then convert the data type of a few columns according to our need. After that we added two more columns from our side as we needed them in our analysis. Those columns are “total stay” and “total people”, which are summation of a few columns related in the same sense. We then do analysis on the data and data visualization which help us to discover trends , patterns and help us to draw some conclusions.  Conclusions:  1: The arrival of peoples in 2016 is double compared to 2015 but has gradually decreased in 2017and in the monthly arrival we can see that the augest month has the maximum no.of peoples arrived and January has the least peoples arrived. As shown in the graph the second day is having maximum arrival and 31st as the least.  2: Portugal, United kingdom , France, Spain and Germany are the top countries from most guests come, from which portugal has the highest number of peoples. More than 80% come from Portugal, United kingdom , France, Spain and Germany.  3:'A' type room is preferred by majority of people which booking rooms  4:TA/TO has the highest cancellation percentage .In city hotel it is 35% and in resort hotel it is 28%  5: From this question we can take a result that most common type of meal is BB and Least common is undefined.  6:From above two graph, in the first graph the adult with pair has most reservations and in the second graph adults with zero children is having most booking, so we can conclude that the adults without children has more booking  7: The percentage of booking of City hotel is 60% and the percentage in Resort hotel comes down to 36%.  8: Agent '9.0' has the most no.of booking above 30000 bookings and agent' 8.0' with least no.of bookings.  9:3.86 is the booking percentage of repeated guests and the percentage of new guests is 96.14  10: Most common stay length is less than 4 days and generally people prefer City hotel for short stay, but for long stays, Resort Hotel is preferred.  11: Both hotels have very small percentage that customer will repeat, but Resort hotel has slightly higher repeat % than City Hotel.  GithubLink:https:https://github.com/affanahmad528/Hotel-Booking-Analysis |