**Capstone Project Submission**

**Instructions:**

i) Please fill all the required information.

ii) Avoid grammatical errors.

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| **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 Booking Analysis**:  **Problem Statement:**  We have given a dataset regarding the hotel bookings and we have to do analysis of that and bring the valuable insights from the dataset.  **Dataset information:**  In this dataset we have 119390 rows and 32 columns:   1. We found 4 columns that has null values namely as children, country, agents, company. 2. Data is mostly related to the city hotel and resort hotels and their corresponding information 3. Data include information of the three years of 2015,2016,2017 4. The important columns in dataset are the bookings , arrival by the date or month and year ,meal , customer type, country, and so on.   **Project approaches:**  In this step I started the project with the following approaches in considering;   1. I have find the information about the dataset for example what columns and rows it contains . 2. After this I decided to clean the null values firstly because null values cam affect data analysis process and can reduce the accuracy of outcome. 3. Then I want to replace them with best possible value instead of removing them 4. After this I decided to filter data related to actual bookings and I tried to do analysis using different library like seaborn. 5. The main approach is always been play around the hotels and their related things.   **Conclusion:** We have done analysis of this data as much as we can but their isn’t end to brigs more insights so we have come up some valuable information that we can conclude from the given dataset.   1. 66.4% hotels are city hotels and 33.4% hotels are Resort hotels 2. 68% is booking rate 32% is cancelation rate both is high in city hotels 3. Lead time is more in city hotels and less in Resort hotels 4. August is busiest month in year and December is least busiest month of the year 5. Its seen that people more often to do bookings at weekends . 6. BB( bed and breakfast) is most preferred meal type in both the city and Resort hotels. 7. Portugal , Great Britain, France are the top three countries with most hotels bookings. 8. Chances of getting assigned room is more in resort hotels than the city hotels. 9. TA\TO is top performing distribution channel among rest of all. 10. Bookings are mostly done by the couples and then singles and followed by the family and friends.   Thank you! |
| **Team Member’s Name, Email and Contribution:** |
| This project is done individually  Name: Gangarde Avinash Balasaheb  Email: [avigangarde11@gmail.com](mailto:avigangarde11@gmail.com)  Contribution:   1. Data cleaning 2. Data visualization 3. PPT and presentation 4. Documentation |

**Google colab link:** **https://drive.google.com/drive/folders/1Yl9RmLKqHiun-dOnvSSEUOjyp7u2SN\_7?usp=sharing**

**Github link:** **https://github.com/avigangarde/Capstone-project-1--Hotel-booking-analysis.git**