**Capstone Project Submission**

**Instructions:**

i) Please fill in all the required information.

ii) Avoid grammatical errors.

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| **Team Member’s Name, Email and Contribution:** |
| **Member 1** **->** Jagdish Mahato (Team leader)  **Email id ->** [jagdishmahato379@gmail.com](mailto:jagdishmahato379@gmail.com)  **Contribution-:**   * Data wrangling on the dataset. * Analyzed and calculated where customers spend most number of nights. * Which room types were preferred by the customers? * Top 10 hosts with most number of listings with their ID. * Studies upon the availability of different rooms during the year.   **Member ->** Akash Jaiswal  **Email id ->** [Akashjaiswal9821@gmail.com](mailto:Akashjaiswal9821@gmail.com)  **Contribution-:**   * Data wrangling on the dataset. * Studied an analyzed about hosts and locations. * founded demanding hosts with their prices with respect to different locations. * Looked into different neighborhood groups what they are offering at what price with a checklist on their reviews. * Types of rooms which are preferred by the people.   **Member ->** Kanika Raj  **Email ID ->** [rajkanika214@gmail.com](mailto:rajkanika214@gmail.com)  **Contribution-:**   * Data wrangling on the dataset. * I have analyzed and explored dataset and done some analysis for location, type of services and top listing in dataset such as: total no. of nights spend on different location by the customer * Analysis on the type of services by Airbnb. * I have examined the top ten location based on their no. of nights and services.   **Member ->** Abhishek Rana  **Email ID ->** [aabhishekrana4305@gmail.com](mailto:aabhishekrana4305@gmail.com)  **Contribution-:**   * Data wrangling on the dataset. * Calculated Average price that customer is paying according to the location. * Analyzed the places where hosts are interested to their business. * Analyzed room type with highest and lowest number of listings. |
| **Please paste the GitHub Repo link.** |
| **GitHub Links: -**  **Jagdish ->**  **Kanika ->**  **Akash ->**  **Abhishek ->** |
| **Please write a short summary of your Capstone project and its components. Describe the problem statement, your approaches and your conclusions. (200-400 words)** |
| **About Airbnb and Dataset-:**  Airbnb, Inc. is an American company that operates an online marketplace for lodging, primarily home stays for vacation rentals, and tourism activities. Based in San Francisco, California the platform is accessible via website and mobile app.  **Airbnb is one kind of service that connects the guest and host to share their property. Basically, property owner wants to utilize their property in the right direction so that for host it can be an income source and for guest, it can be a destination for a stay. The problem for Airbnb is there are tons of data generated through the hosts and guests as well. So, to find the right direction according to marketing and find the correct business-driven solution we did the data analysis on 49,000 observations. Through which we identify many solutions related to pricing, location, and room types that we mentioned in this project.**  **Dataset given was of New York city 2019 which consists of 49000 rows with 16 different columns such as host\_id, neighbourhood\_groups, Reviews, Room\_types etc.**  **Various things that we learned during this project are the following-:**   * Basic inspection of the raw data. * Handing the duplicate, error and NaN values present in the dataset, i.e., cleaning the data. * Using different Python functions and libraries to clean and manipulate data. * Data wrangling to come up with different insights on the data. * Designing multiple visualizations to summarize the information in the dataset and successfully communicate the results and trends to the reader. * Different Python libraries used to complete this EDA: * Pandas * NumPy * Matplotlib. Pyplot * Seaborn   **Visualizations used-:**   * Box plot chart * Bar graph * Pie chart * Scatter plot * Line graph |