**Capstone Project Submission**

**Instructions:**

i) Please fill in all the required information.

ii) Avoid grammatical errors.

**Please write a short summary of your Capstone project and its components. Describe the problem statement, your approaches and your conclusions. (200-400 words)**

## **Introduction**

Airbnb is a $75 Billion online marketplace for renting out homes/villas/ private rooms. The website charges a commission (3 to 20 percent, ) for every booking. Even though the prospects are sound, but there are critics who argue that this has driven up rent, and caused damage to the local communities living in the vicinity.

The data used in this analysis is the outcome of the quest to answer the question – How is Airbnb affecting the neighborhoods? Inside Airbnb is an activist project, which has curated this dataset, to measure the impact of rentals housing on neighborhoods and communities.

For this project we are analyzing Airbnb’s New York City(NYC) data of 2019. NYC is not only the most famous city in the world but also top global destination for visitors drawn to its museums, entertainment, restaurants and commerce.

Our main objective is to ﬁnd out the key metrics that inﬂuence the listing of properties on the platform. For this, we will explore and visualize the dataset from Airbnb in NYC using basic exploratory data analysis (EDA) techniques

Data analysis on thousands of listings provided through Airbnb is a crucial factor for the company.

* We will be ﬁnding out the distribution of every Airbnb listing based on their location, including their price range, room type, listing name, and other related factors. What is the average preferred price by customers according to the location?
* Number of active hosts per location (Where most of the hosts focused to own property?)
* Where the customer pays the highest and lowest rent according to location?
* Most popular/demanded host of Airbnb in New York
* Find the total count of each room type
* Room types and their relation with availability in different neighborhood groups?
* Which are the top 25 most used words in listing names?
* Find top 10 hosts with most listings
* Find the top three hosts based on their turnover
* Find total no. of nights spend per location
* Total no. of nights spends per room types
* Top 10 highest listing neighborhood

**Challenges Faced**

* Reading the dataset and understanding the meaning of some columns.
* For answering some of the questions we had to understand the business model of Airbnb that how they work.
* Handling NaN values, null values and duplicates.
* Designing multiple visualizations to summarize the information in the dataset and successfully communicate the results and trends to the reader.

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| **Team Member’s Name, Email and Contribution:** |
| Name -Avinash Patni  Email Id – [avinashpatni0000@gmail.com](mailto:avinashpatni0000@gmail.com)  Contribution -All project is made by myself. |
| **Please paste the GitHub Repo link.** |
| GitHub Link:- https://github.com/avinashpatni000/airbnb-capstone-projects |
| **Google Drive Link –**  Drive link - https://drive.google.com/drive/folders/1TDZeWtd2jdSVHaHj3V4WKq8rAUeTzqEw?usp=sharing |
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