<u>Capstone Project Submission</u>

Instructions

- Please fill in all required information
- Avoid grammatical errors

Member Name	Email id	Contribution
Nileshkumar Lavand	nklavand@gmail.com	Data Wrangling, Chart's question answering and review
Abhishek Kulkarni	abhishekkulkarni049@gmail.com	Description,summary ,Conclusion,Data handling,
Animesh Mahajan	animeshmahajan8@gmail.com	Data Loading, Outlier Treatment, Data Visualization
Prajwal Kulkarni	prajwalkulkarni342@gmail.com	Problem Statements,Solution to Business Objectives,Chart's Question and Answers

Please Paste Github repo link below

https://github.com/Nileshkl/Capstone-Project-EDA-Airbnb

https://github.com/4bhi8hek/Capstone-Project-AIRBNB-NYC-2019---EDA

https://github.com/animeshmahajan8/Capstone-Project-Airbnb-NYC-2019-EDA

https://github.com/Prajwalkulkarni342/Capstone-Project-AIRBNB-NYC-2019---EDA

Please write a short summary of your Capstone project and its components. Describe the problem statement, your approaches and your conclusions. (300-500 words).

Airbnb Bookings Analysis

Summary:

The NYC Airbnb project is a comprehensive analysis of the Airbnb market in New York City. It involves gathering and analyzing data related to Airbnb listings, hosts, and guests in order to gain insights into the trends, patterns, and impacts of short-term rentals in the city. The project aims to provide a better understanding of the Airbnb market in NYC and its implications for the housing market, tourism industry, and local communities.

Key Objectives:-

Here are the key steps for conducting an exploratory data analysis (EDA) for Airbnb Bookings analysis:

- Data acquisition: Obtain a representative sample of the data from the Airbnb company, including customer demographic information, review patterns, and availability, etc.

- Data cleaning: Remove any missing or incomplete data and ensure that the data is in a format that can be easily analyzed.

- Data visualization: Use plots and charts to visualize the data and identify trends and patterns. For example, you might create histograms to understand the distribution of various continuous data like price, number of reviews, or scatter plots to identify correlations between different variables.

- Data summarization: Use statistical techniques to summarize the data and understand the relationships between different variables. For example, you might calculate means, medians, and standard deviations to understand the distribution of continuous data like price and number of reviews. Overall, the goal of EDA for Airbnb booking analysis is to maximize occupancy rates, profitability, and guest satisfaction in the client's Airbnb rental business in New York City.

Overall, the NYC Airbnb project aims to provide a comprehensive understanding of the Airbnb market in New York City and its impact on various aspects of the city's economy and communities. The project's findings and recommendations can inform policy decisions, facilitate informed discussions, and contribute to the ongoing debate surrounding the regulation and management of short-term rentals in NYC.

Conclusion:

The 2019 Airbnb NYC project revealed the following key findings:

- Significant growth in the number of listings in New York City, indicating a booming short-term rental market.

- Manhattan emerged as the borough with the highest concentration of Airbnb listings.

- Pricing analysis showed that Manhattan consistently had the highest average nightly rates, while the outer boroughs offered more affordable options.

- Entire homes and apartments were the most common types of listings, indicating a preference for private accommodations among hosts and guests.

- However, shared rooms were also available, catering to different budget and accommodation preferences.

- Host demographics revealed that the majority of hosts in NYC were individuals who rented out their primary residences, suggesting a trend of using short-term rentals for additional income.

- The presence of hosts with multiple listings highlighted the emergence of professional hosts and potential concerns around commercialization.