Capstone Project Submission

Team Member's Name, Email and Contribution:

Kollana Harish, harishkollana@gmail.com :
1. Importing Libraries
2. Loading the dataset
3. Dataset Information
4. Data Cleaning:
     Unique values For Variable Identification.
     Checking For duplicates.
     Summary of Statistics.
     Missing Values Treatment.
     Skewness and kurtosis.
     Outliner Detection & Treatment.
5. Data Analysis and Visualization: Using plots to find relations between the features
     Univariate Analysis
       Numerical Analysis
     Bivariate Analysis
     Multivariate Analysis
6. Conclusion:

Please paste the GitHub Repo link.
Github Link:- https://github.com/harishkollana/Airbnb-Capstone-Project/blob/d4b95d44084fb6e041699df824547b1c7c9f9684/EDA_Airbnb_Capstone.ipynb
Please write a short summary of your Capstone project and its components. Describe the problem statement, your approaches and your conclusions. (200-400 words)

The Airbnb platforms offer you someone's home as a place to stay instead of a hotel and there are millions of listings on their platform. These millions of listings generate a lot of data- a data that can be analyzed and used for security, business decisions, understanding of customers' and providers' (hosts) behavior and performance on the platform, guiding marketing initiatives, implementation of innovative additional services, and much more. We were provided with one such already classified label in our data set containing 49,000 observations with 16 columns.

As the first step, perform data wrangling over the raw data. We divided the complete project into 3 main parts i.e. Uni variant Analysis, Bi-Variate Analysis and Multi Variate Analysis

In Uni Variant Analysis, we performed the categorical analysis as most no of listings, host ids, top hosts, neighborhood groups, neighborhood's, room types with most listings count.

In Bi-variate Analysis, we performed no of listings in Neighborhood Group by Room types, No of hosts in location group by Neighborhood Group, Distribution of price across Manhattan, Brooklyn, Queens, Bronx & Staten Island, the highest and lowest according to neighborhood groups, neighborhoods, prices and room types

In Multivariate Analysis, we performed distribution of price on other independent variables For the expensive and cheapest as well as latitude and longitude location maps of listings according to price.