

# Capstone Project Submission

## Instructions:

- i) Please fill in all the required information.
- ii) Avoid grammatical errors.

### **Team Member's Name, Email and Contribution:**

Contribution Role :

**1. Nikunj Sonule ([nikunj.sonule10@gmail.com](mailto:nikunj.sonule10@gmail.com)) :-**

**1. Data Cleaning and Data Preprocessing**

**2. General and Business Analysis**

- All neighbourhood groups
- Availability of number of days for room when listing is available for booking
- Room type
- Neighbourhood group based on latitude and longitude
- Price exploration
- Price based on availability 365
- Relation between neighbourhood group and availability of number of days for room
- Property owned by each neighbourhood group
- Property distribution on room type
- Correlation of data

### **Please paste the GitHub Repo link.**

Github Link :- <https://github.com/nikunjsonule/Airbnb-Booking-Analysis>

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

Airbnb data analytics is a qualitative and quantitative processes and techniques used to enhance productivity, marketing strategies, occupancy rates, and yield. Just like many other companies it also follow certain similar ways but some different too. The Airbnb data is first extracted and then categorized to identify and analyze behavioral data and patterns; the techniques used can vary depending on the business requirements, which have different independent variables such as room\_type, availability\_365, minimum\_nights etc. and using this dataset in EDA project I found some relevant analysis which would help Airbnb to perform better.

As the first step, I perform data cleaning over the dataset. Further taking some General and business analysis I took some problem statements to study and analysis the data.

In General and business analysis focusing on the problem with business related strategy. Through this I found analysis related to property like property owned by each neighbourhood groups and distribution on room type.

The main category we can draw attention towards business was data related to price, availability\_365, minimum\_nights. This can make a lot understanding of people what they actually prefer. By taking this issue I also took analysis to it like price exploration (in what price people prefer more), price based on availability\_365, and each neighbourhood group with available of number of days for room while booking. This analysis would help to find certain amount price in each location.

The estimation of problem related to region can solve by latitude and longitude data. We can view in analysis of neighbourhood group based on latitude and longitude. Staten Island is quite away from all those groups and its not much prefer by people too. Airbnb provide with room type – private, entire home/apt and shared room. It's nearly 2.4 % people like shared room rather private and entire home/apt are on more scale demand in guest.

At last I have work with correlation of data were we can understand each relation of data with each other. These can help us a lot while dealing with certain numerical data which can be more important for further analysis.

That's how I have accomplished my project work in Airbnb Booking Analysis project.

Throughout analysis giving importance to price data, every business strategy can reveal by particular region how Airbnb can attract people by their services. Airbnb Booking Analysis helps industry for marketing strategy, building customer loyalty, and enhancing productivity. By gathering data on the opinion of customers, you can not only make your business reliable and convenient to them but also increase your market share. This what it makes Airbnb more popular by one of a kind service that is used and recognized by the whole world.

**Drive link :-** <https://drive.google.com/drive/folders/1QlpYnJyAdJ-2uRIAcJffvFgSu4E8rIeB?usp=sharing>