

Capstone Project -1

Airbnb bookings analysis

(individual)
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Introduction:

Airbnb is a company that facilitates an online marketplace for lodging, primarily homestays for vacation rentals, and tourism activities. It basically connecting travelers with local hosts who want to rent out their homes with people who are looking for accommodations in that locality. On the other hand, this platform enables host to list their available space and earn extra income in the form of rent and it also enables travelers to book unique homestays from local hosts, saving them money and giving them a chance to interact with locals.

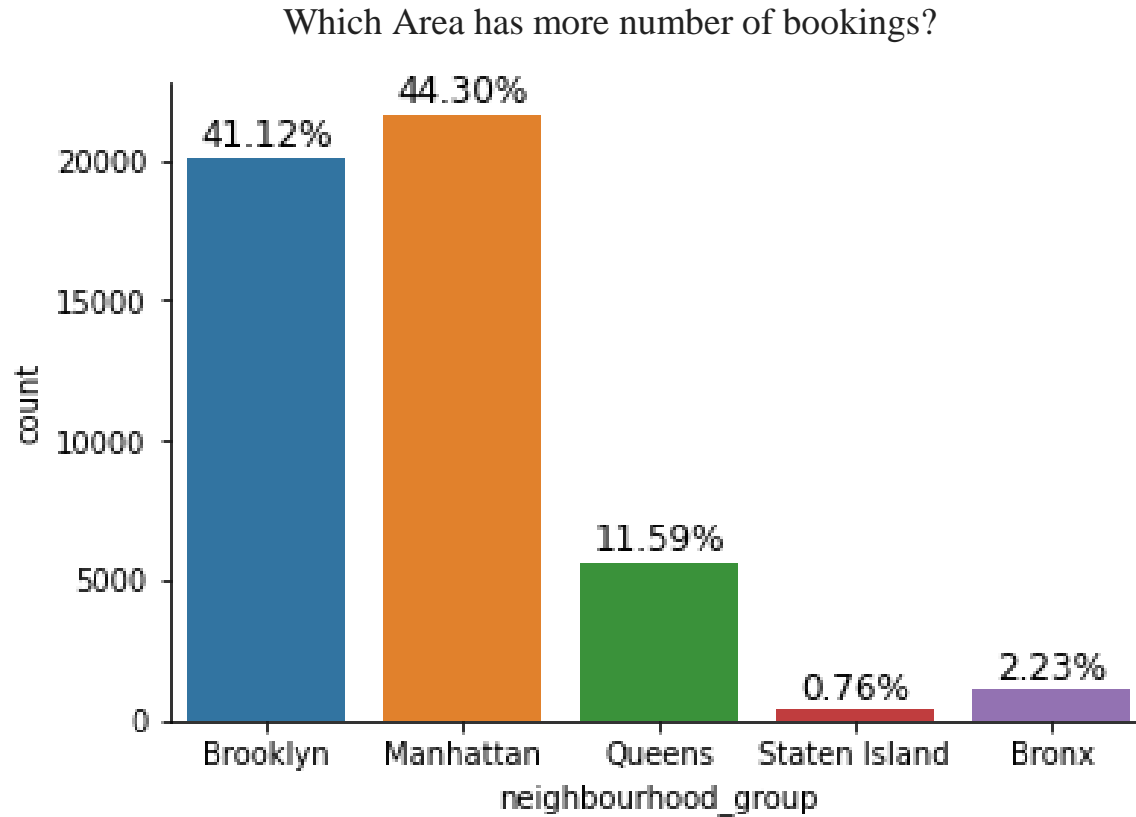
Objective: Explore and analyze the data to discover key understandings

Problem Statement:

Travel industries are having important reflection of the economy from past few decades, and Airbnb housing price ranges are of great interest for both Hosts and Traveller. In this project, we are analysing the various aspects with different use cases which covers many aspects of Airbnb listings. It helps in not only understanding the meaningful relationships between attributes but it also allows us to do our own research and come-up with our findings.

Feature information in details

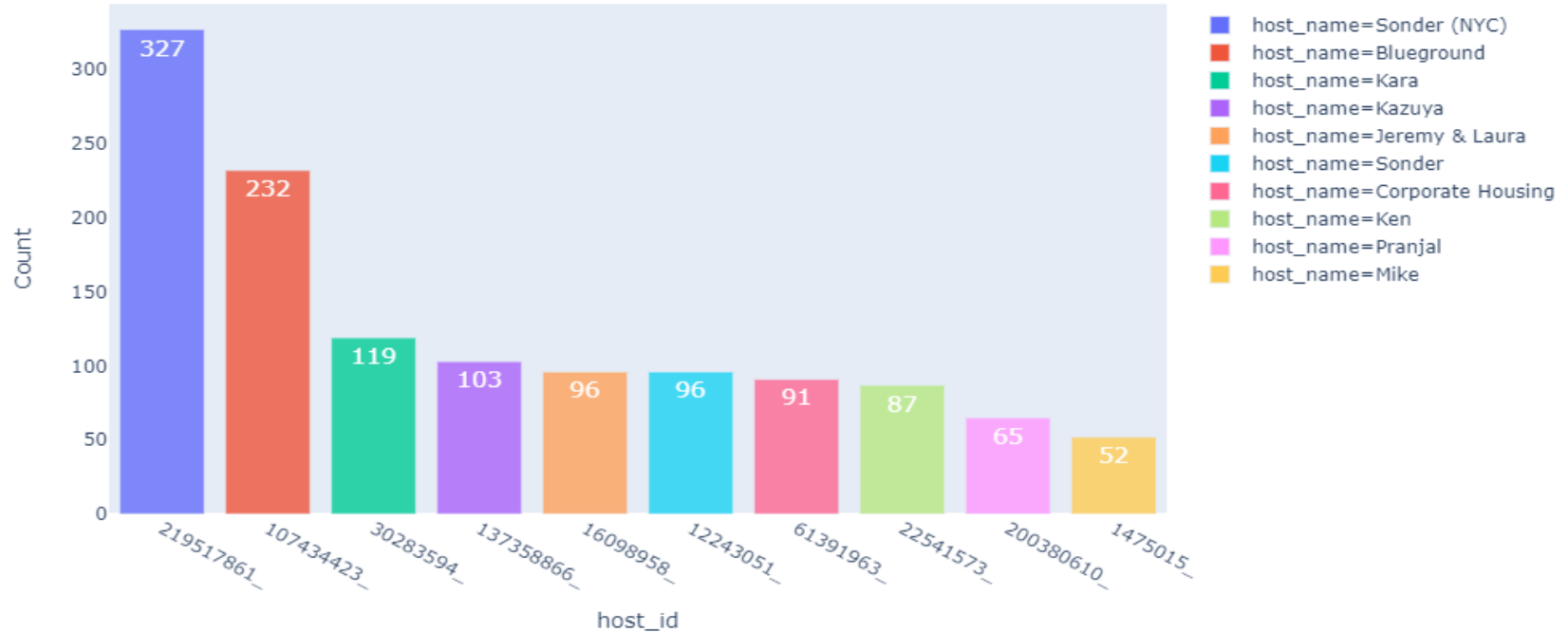
- **id** unique for every observation
- **name** name of properties
- **host_id** id for host
- **host_name** name of host
- **neighbourhood_group** it contains 5 Area ['Brooklyn', 'Manhattan', 'Queens', 'Staten Island', 'Bronx']
- **neighbourhood** it contains 221 locality names
- **latitude** it stores latitude
- **longitude** it stores longitude
- **room_type** it contains 3 unique room type ['Private room', 'Entire home/apt', 'Shared room']
- **price** per night for rental property
- **minimum_nights** you have to book how many days
- **number_of_reviews** numbers of review in particular room
- **Last_review** last_review date
- **reviews_per_month** numbers of review per month
- **calculated_host_listings_count** Total number of listings owned by the host
- **availability_365** The number of days for which a particular host is available in a year



Observation: Manhattan has more number of bookings

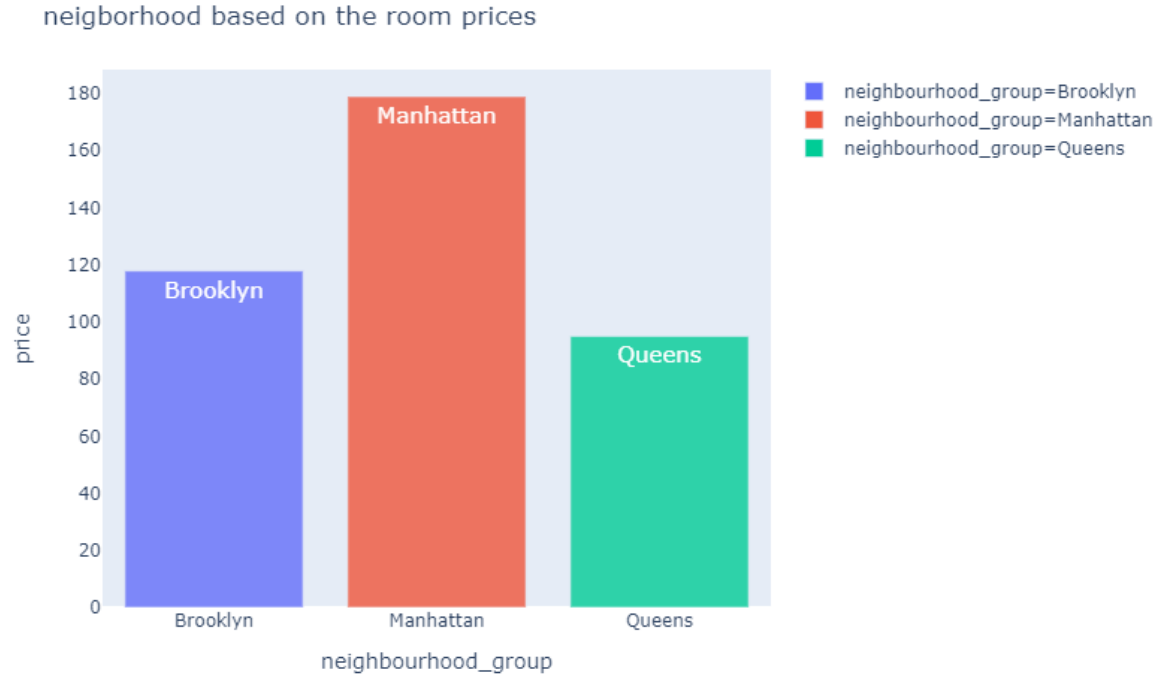
Which hosts are the busiest and why?

property has been Booked for more number of times



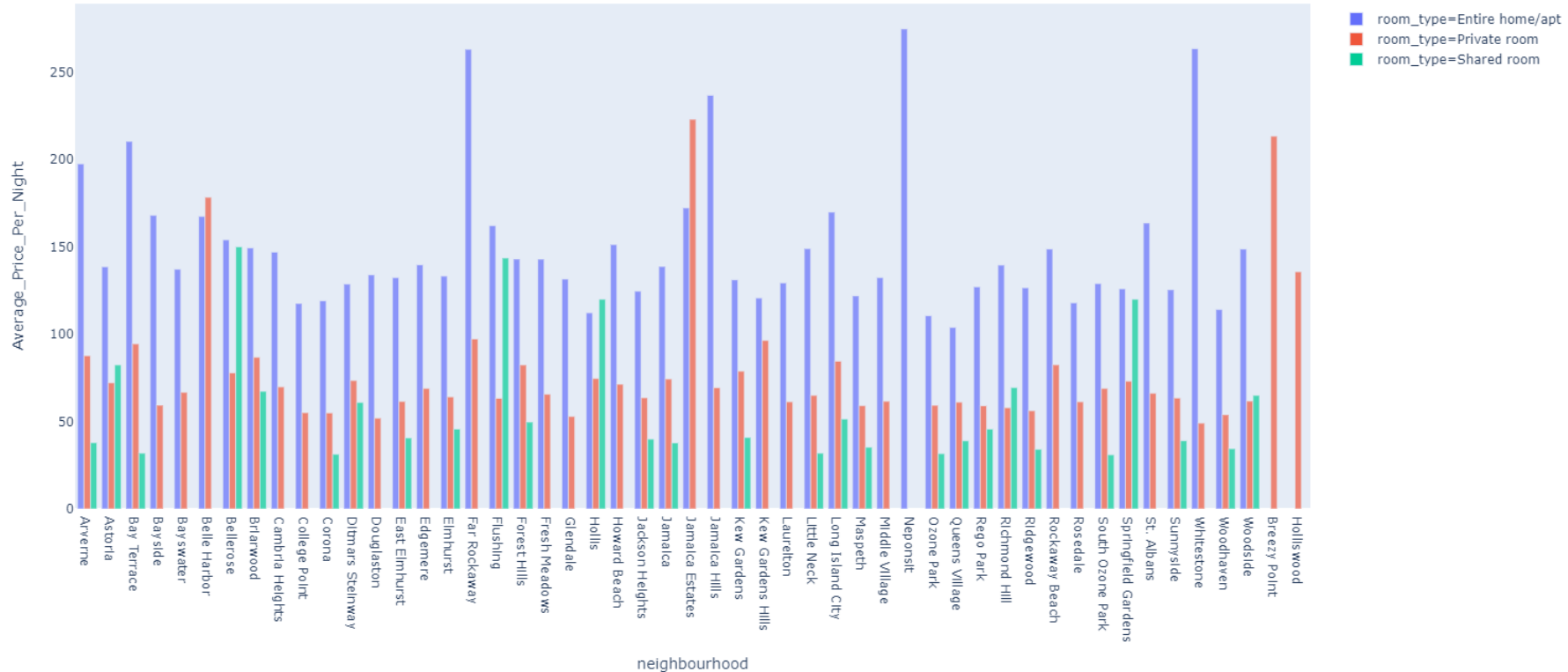
Observation: Sonder(NYC) is busiest host Because his rental place has been Booked for more number of times

I'm chosen Queens Neighbourhood to live there for 20 days.
Whether it will be cheaper to stay there compare to other neighbourhoods.



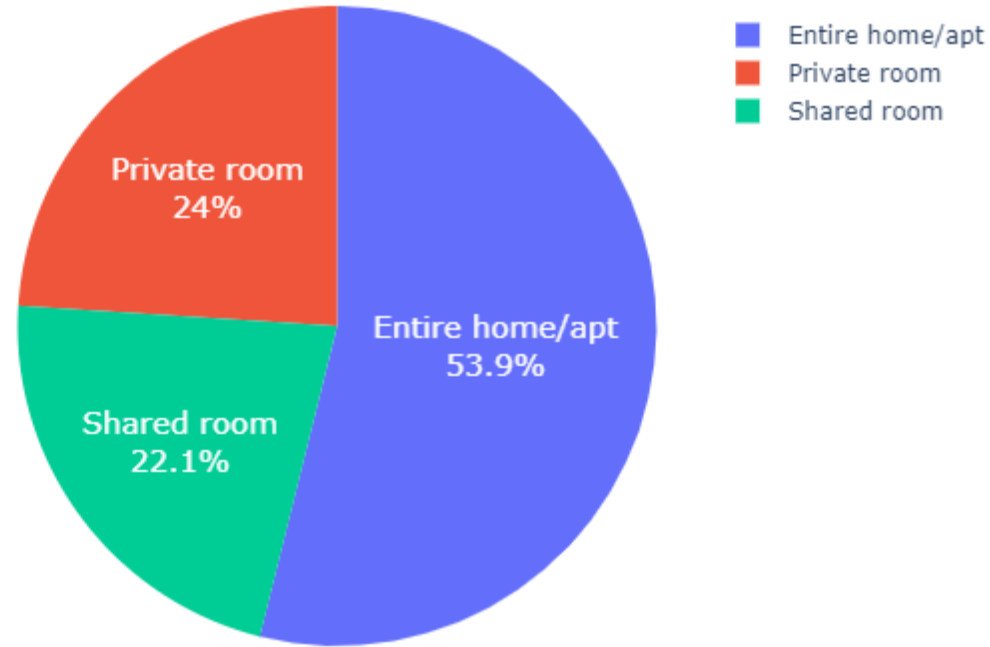
Yes, The Queen neighbourhood is cheaper to stay compare to other neighbourhood based on the room prices.

Queens Room type and its places to visit at affordable Cost



Observation: The Neighbourhood of South Ozone Park with Shared room type is best place to visit at affordable cost. Because we can see from graph the average price for that room type is 31\$

Luxury Rooms in Staten Island and its Room type



Observation: The Entire home/apt room type is luxury compare to other room type. In here the average cost is 139.9 \$ per night to stay in there.



Observation:

As we can see red color dots with higher price and we can see Manhattan region has more expensive room.



Observation:

As we can see red color dots with busiest area and More busiest area are nearby airport.

Conclusion:

In this EDA project, different use cases are analysed for the given dataset to make better business decisions and help analyse customer trends and satisfaction, which can lead to new and better products and services.

All observation are based on EDA.

Thank you!