

# Capstone project 1 Airbnb data analysis

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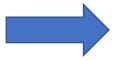


### What is Airbnb data Analysis

Airbnb is a company which is used for operate in for lodging, primarily homestays for vacation, rentals and also for tousism activity..

We can relate Airbnb just like Uber rooms and online hotel booking platform.





#### **Detailed of Airbnb booking:**

 Guests and hotels have used Airbnb to expend on travelling possibilities and present a more unique, personalized way of experiencing the world since 2009. Data analysis of listing provided through Airbnb is a crucial factor for the company. Listing which is generate a lot of data – data that can be analysing and used for security, business decision, understanding of customers and providers behaviour and performance on the platform, guiding marketing initiative, implementation of innovative additional services and much more. Today Airbnb became one of a kind services that is used and recognized by the whole world.





#### **Problem Statement:**

- We have to find the analysis Airbnb:
- We will finding out the distribution of every Airbnb listing based on their location, including their place range, room type, listing name and other related factors.
- 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.
- Data analysis on thousand of listings provided through Airbnb is a crucial factor for the company.



#### Understanding the Data

- Name
- Id
- Host id
- Host name
- neighbourhood group
- Neighbourhood
- Latitude
- Longitude
- Room type

price

minimum nights

Number of reviews

Last review

Reviews per month

Calculated per month

Calculated host listing count

availability



#### Problems:

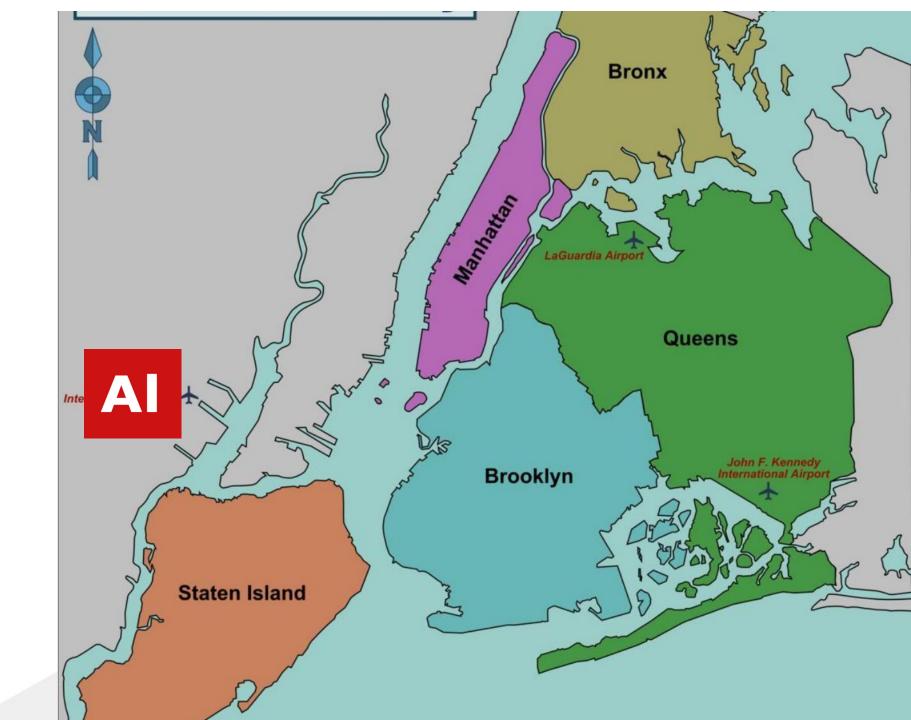
- What can we learn about different hosts and areas?
- What can we learn from predictions?
- Which hosts are the busiest and why?
- Is there any noticeable different of traffic among different areas and what id be the reason for it?
- What is the average preferred price by customer according to the location?
- Number of active hosts per location?



#### 1.What can we learn about different hosts and areas?

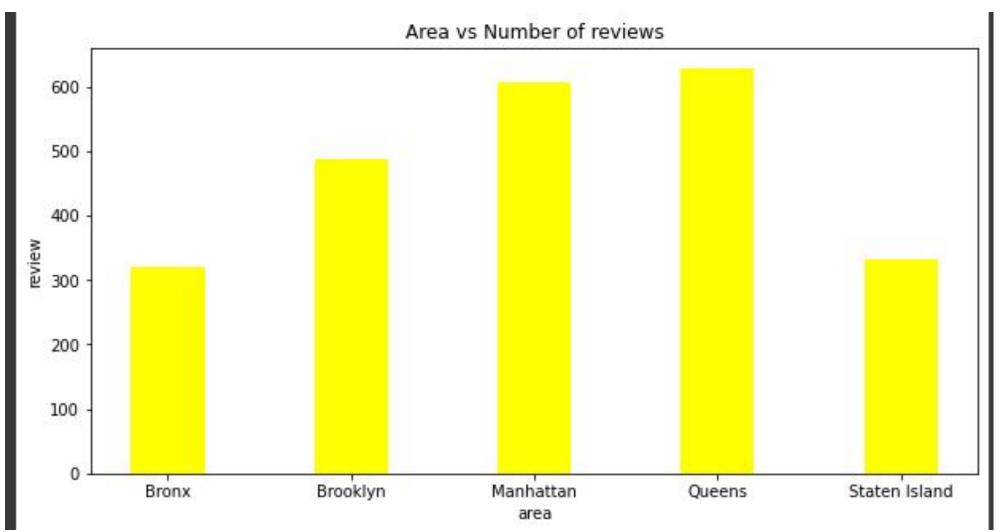
₽.		host_name	neighbourhood_group	calculated_host_listings_count	
	13217	Sonder (NYC)	Manhattan	327	
	1834	Blueground	Manhattan	232	
	1833	Blueground	Brooklyn	232	
	7275	Kara	Manhattan	121	
	7480	Kazuya	Queens	103	
Acco	rding to	the question r	nost of listing are from	Mantattan created Sonder(NYC),B	lueground,Michael,Da

## Map of New York City(NYC)



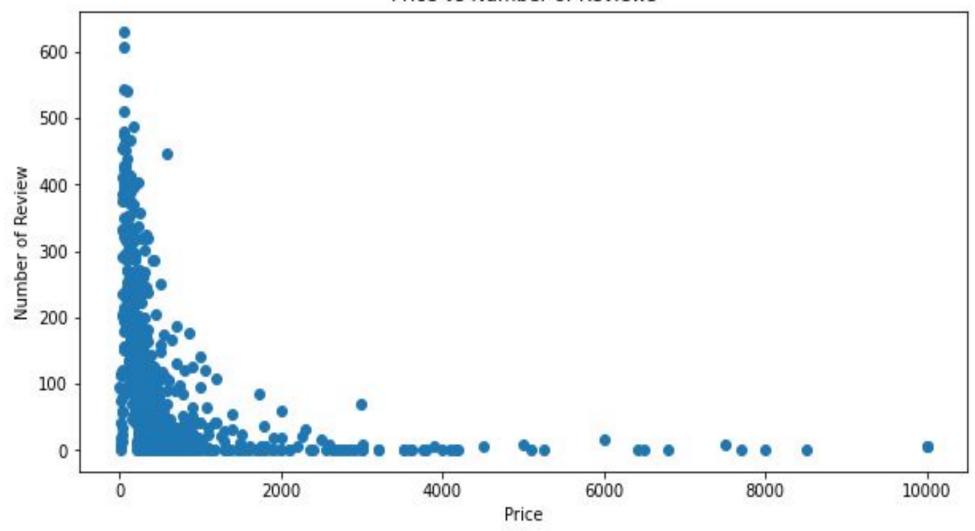


#### 2. What can we learn from predictions?



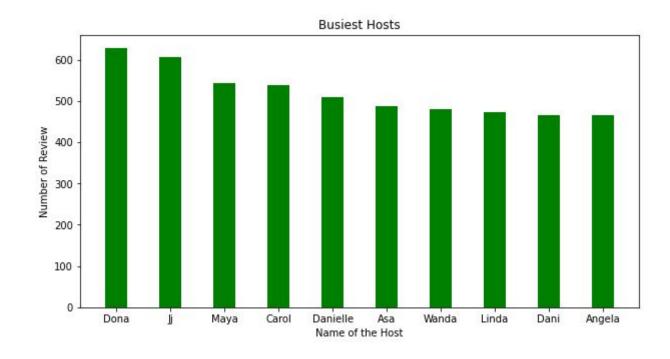


#### Price vs Number of Reviews





#### 3. Which hosts are the busiest and why?



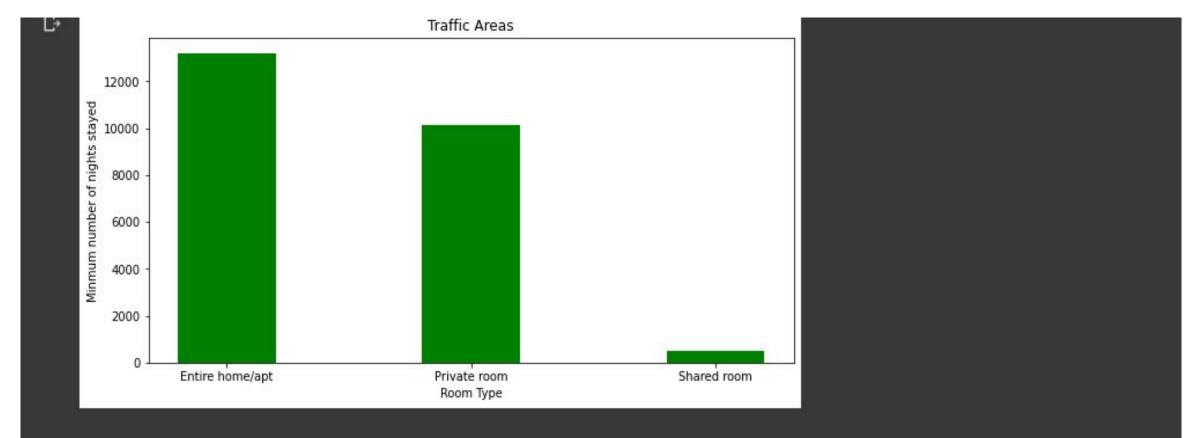
#### Busiest hosts are:

- 1. Dona
- 2. ji
- 3. Maya
- 4. Carol
- 5. Danielle

because these hosts listed room type as entire home and Private room which is demanded by most of people.

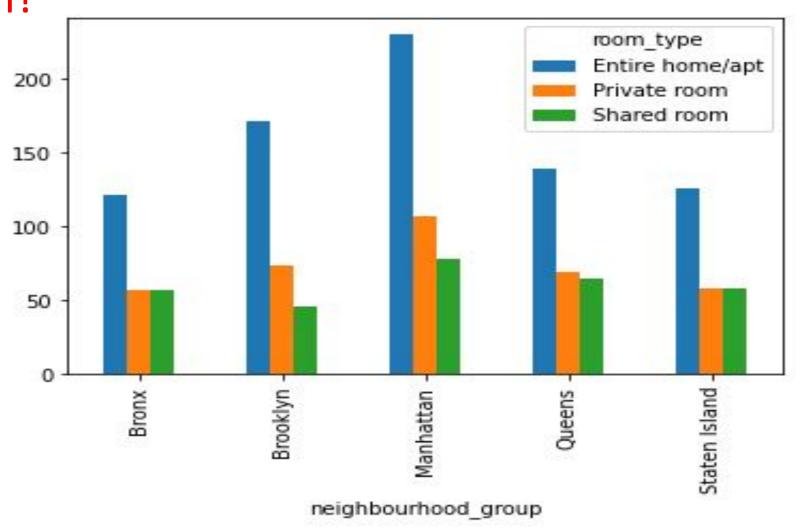
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## 4.Is there any noticeable difference of traffic among differen areas and what could be the reason for it?



This above Analysis stays that people are preferring entire home/apt or private room which are present in Manhattan, Brooklyn, Queens and prople are listing in less price

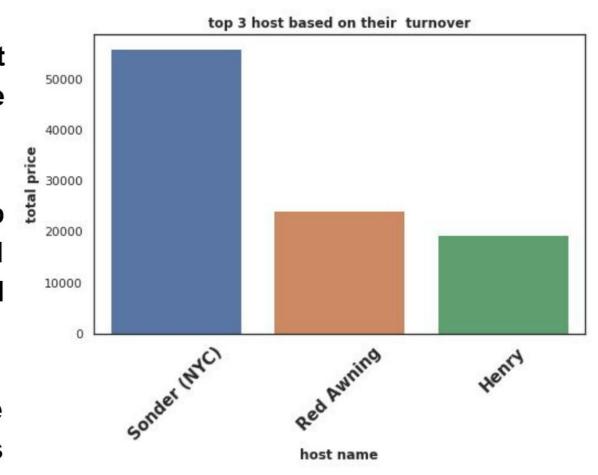
5. What is the average preffered price according to the location?





#### ♦ Top three hosts based on their turnover

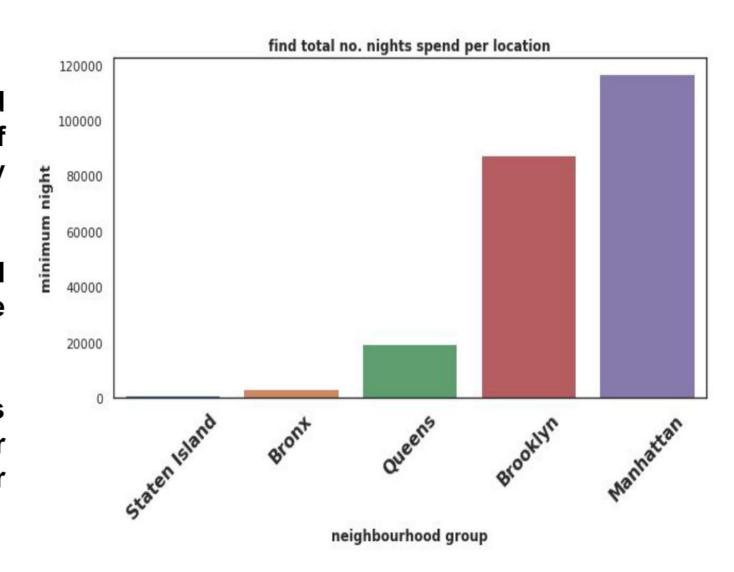
- Here we are trying to find top three host based on their turnover and compare between those three hosts.
- We can state that Sonder(NYC) is the top host based on his high turnover.Red Awning and Henry secured 2nd and 3rd position respectively.
- Total turnover of Sounder(NYC) is more than 50000\$. Red Awning and Henry is quite behind from the 1st place.



#### Find total no. nights spend as per location

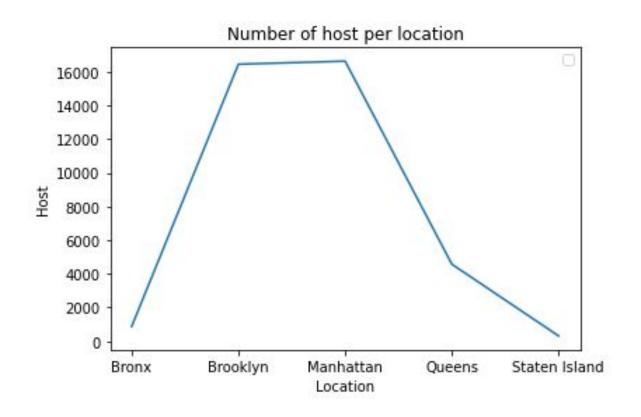


- The locations are categorized based on its total number of minimum nights spend by customer.
- From here we can get an overall idea of which location the customer prefers more.
- We can state that more customers prefer Manhattan and Brooklyn for night stay as compared to other locations.





#### 6. Number of active hosts per location?







- 1.In that particular neighbourhood only peoples who prefer to stay in entire home or apartment they are going to stay bit longer.
- In compared to home and apartment peoples who prefer to stay in private room .they don't stay longer.
- Most people prefer to pay less price.
- If there are more number of reviews for particular neighbourhood group that means that price is a tourist place.
- Those peoples are traveller who don't stay more then one night.
- There are some entries in dataset which have minimum nights but it respective price is zero.
- We replace the price value with mean value of price which has less than 100\$.



#### **Analysis Summary:**

- Manhattan is the most focused place for hosts to do their business.
- For the three type room type(i.e. Entire home, shared room and private room) average price of entire home.
- Customers pay highest amount in Brooklyn, Queens and Manhattan that is \$10000 and lowest amount is \$10.
- Top three host base on their turnover are Sonder(nyc), Red awning, Henry and best host is Sonder(NYC).



## Thanking you...

By team: Data Enthusiast