



# Data Analysis Project on New York City Airbnb Open Data-set

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# About Airbnb

- Airbnb, Inc. is San Francisco, California based company which act as a broker and provides an online marketplace for short-term homestays.
- The company charges a commission from each bookings.
- Airbnb providing it premium service and experience to customers since 2008. Today Airbnb has millions of listings. These listings generates lot of data.
- Analyzing this data become crucial factor for the company. This data can be use for business decisions, marketing, implementations of initiatives, additional services and much more.
- Since 2008, guests and hosts have used Airbnb to expand on traveling possibilities and present more unique, personalized way of experiencing the world.



# About Dataset

- This dataset has round 48895 listings and 16 Columns.
- Given dataset contains null values as well which we have to consider while doing analysis. Last\_review and reviews\_per\_month has more null values.
- There are 5 neighbourhood group in which all listings located.
- Nearly 80-85% of listings located in Manhattan and Brooklyn.
- In Manhattan booking price is bit higher as compared to other neighbourhood groups.
- There are 3 kind of room type (i.e Shared Room, Private Room, Entire home/Apt).
- Out of which Shared room are least preferred by the customer even after having less price for booking.



# Analysis questions

- \* **Count of reviews per month**
- \* **Show total room types**
- \* **Find the total number of shared rooms, private rooms, entire home/apt**
- \* **Create a slicer for dates to show last reviewed information**
- \* **The prices for each neighborhood group**
- \* **Create a table for host to check the count of properties been listed for each neighborhood group.**



# Questions

- 1. In which Neighborhood group there is maximum number of properties listed ?
- 2. Which host has maximum number of properties listed ?
- 3. Which host has maximum properties listed in neighborhood groups having maximum properties listed ?
- 4. What is the average price in different properties listed ?
- 5. What may be the reason of having high price in that neighborhood groups ?
- 6. What is the most preferred room type in the every neighborhood groups ?
- 7. Total availability of properties having different room type?
- 8. Which one is the busiest host ?
- 9. Which property has maximum number of reviews ?



# AirBnB Data Analysis

Average of price

**\$142.4**

Max No Of Properties Listed

**Manhattan**

Max No Of Properties Listed

**Michael**

host_name	Count of calculated_host_listings_count
Michael	335
David	308
John	250
Alex	229
Sonder (NYC)	207
Sarah	179
Maria	173
Daniel	170
Jessica	170
Anna	160
Chris	157
Mike	157

28-03-2011



08-07-2019



Count of Reviews  
Per Month

**38.7K**

Most Reviewed Property

**Room near  
JFK Queen  
Bed**

Bussiest Host

**Michael**

neighbourhood_group	Count of calculated_host_listings_count
Manhattan	16579
Brooklyn	16405
Queens	4540
Bronx	865
Staten Island	311

room_type	Count of reviews_per_month
Entire home/apt	20276
Private room	17581
Shared room	843

Entire home/apt is the most  
preferred Room type.

room_type	Count of availability_365
Entire home/apt	20276
Private room	17581
Shared room	843
Total	38700

Total availability of room =48726



# Analysis

28-03-2011 08-07-2019

## Room Types

Entire home/apt

Private room

Shared room

room_type	Count of room_type
Entire home/apt	20276
Private room	17581
Shared room	843

neighbourhood_group	Sum of price
Bronx	\$68,977
Brooklyn	\$19,92,755
Manhattan	\$29,86,757
Queens	\$4,34,994
Staten Island	\$28,122

## Count Of Properties by Neighborhood group

host_name	Bronx	Brooklyn	Manhattan	Queens	Staten Island	Total
Michael	5	127	176	24	3	335
David	3	115	148	38	4	308
John	3	89	127	28	3	250
Alex	4	99	110	13	3	229
Sonder (NYC)			207			207

## Count of number\_of\_reviews by Month



# Business Benefits of the analysis

- By analyzing the given data set customer can make several decision about their journey and the location.
- Customer could take idea about expenses for the accommodation and which room to prefer in the particular area during journey.
- Finding the perfect location for night stay and the most preferred airbnb property according to previous customer reviews will be easy.
- This report can attract the customer who wanted to plan a trip but not visited that place before by checking about the location and number of option available for the home stays.
- This report may increase reputation and company revenue growth along with the other businesses by increasing tourism.

