

# **Capstone Project EDA Analysis on Airbnb Booking Data Set**

#### **Presentation By:**

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#### **OBJECTIVE:**

To perform Exploratory Data Analysis on a given dataset

#### **Exploratory Data Analysis (EDA)**

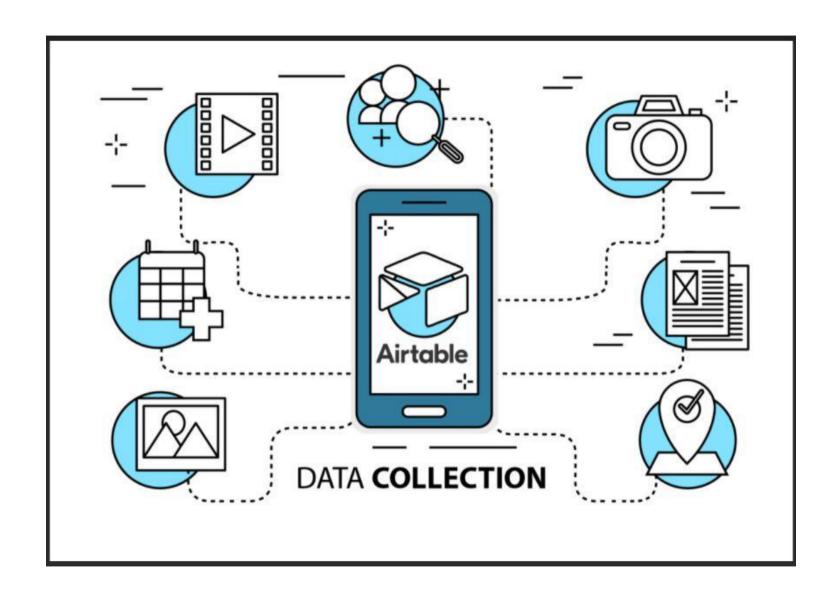
EDA is the process of investigating the dataset to discover patterns, and anomalies (outliers), and form hypotheses based on our understanding of the dataset

```
Variance
Crosstab Insights
Statistics Skills
Categorical Tools
Summarize Continuous
Exploratory
Min Data Domain
Median
Max Analysis
Inference
Outliers
Proportions
```



#### **EDA**

- •• DATA COLLECTION
- •• DATA CLEANING
- •• HYPOTHESIS
- •• DATA VISUALIZATION





## **DATA CLEANING**





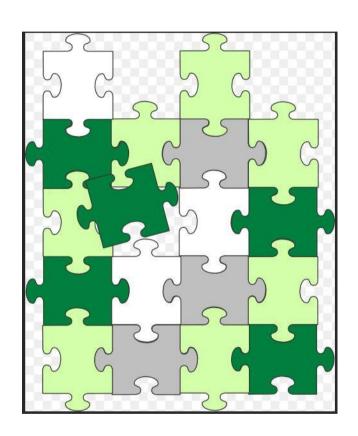
#### DEALING WITH MISSING DATA VALUES





# **Detection Of Missing Data**

id	0
name	16
host_id	0
host_name	21
neighbourhood_group	0
neighbourhood	0
latitude	0
longitude	0
room_type	0
price	0
minimum_nights	0
number_of_reviews	0
last_review	10052
reviews_per_month	10052
calculated_host_listings_count	0
availability_365	0
dtype: int64	





## Dropping of unnecessary features







# Handling Of Missing Data



host_id	0
neighbourhood_group	0
neighbourhood	0
latitude	0
longitude	0
room_type	0
price	0
minimum_nights	0
number_of_reviews	0
reviews_per_month	0
calculated_host_listings_count	0
availability_365	0
dtype: int64	



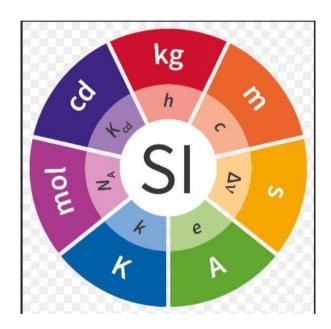
## FINDING DUPLICATE RECORDS



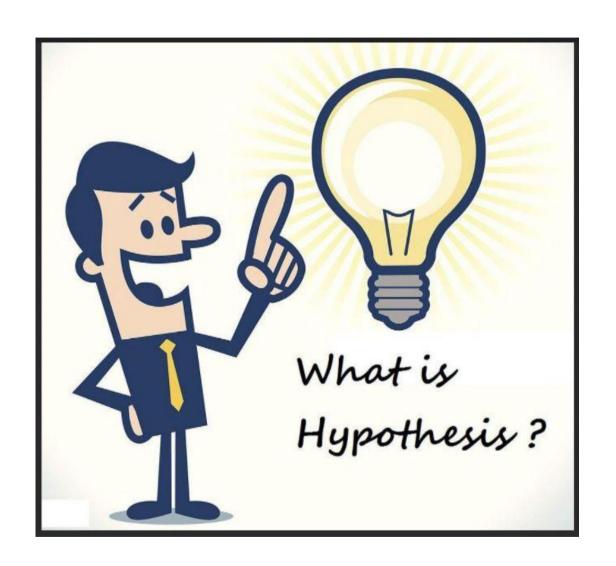


# **Data Formatting**

- Units
- Symbols
- AlphaNumeric



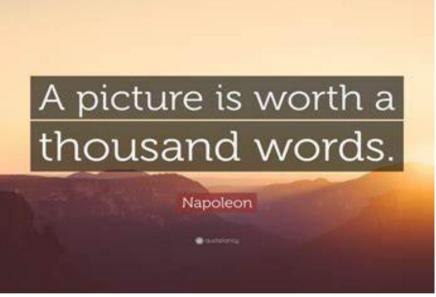
€	\$	¥	¥
EU: Euro	US: Dollar	China: Yuan	Japan: Yen
DM	Fr	£	£
Germany: Deutsche Mark	France: Franc	UK: Pound	Italy: Lira
R\$	C\$	₽	₹
Brazil: Real	Canada: Dollar	Russia: Rouble	India: Rupee
P	A\$	Mex\$	₩
Spain: Peseta	Australia: Dollar	Mexico: Peso	South Korea: Won
f	TL	Rp	SFr
Netherlands: Guilder	Turkey: Lira	Indonesia: Rupiah	Switzerland: Franc





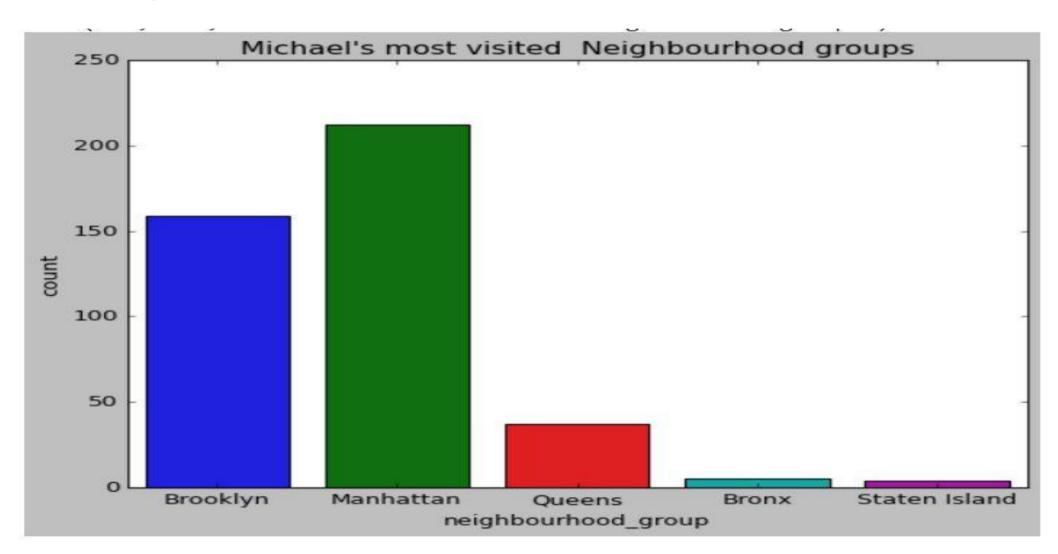
#### **DATA VISUALIZATION**





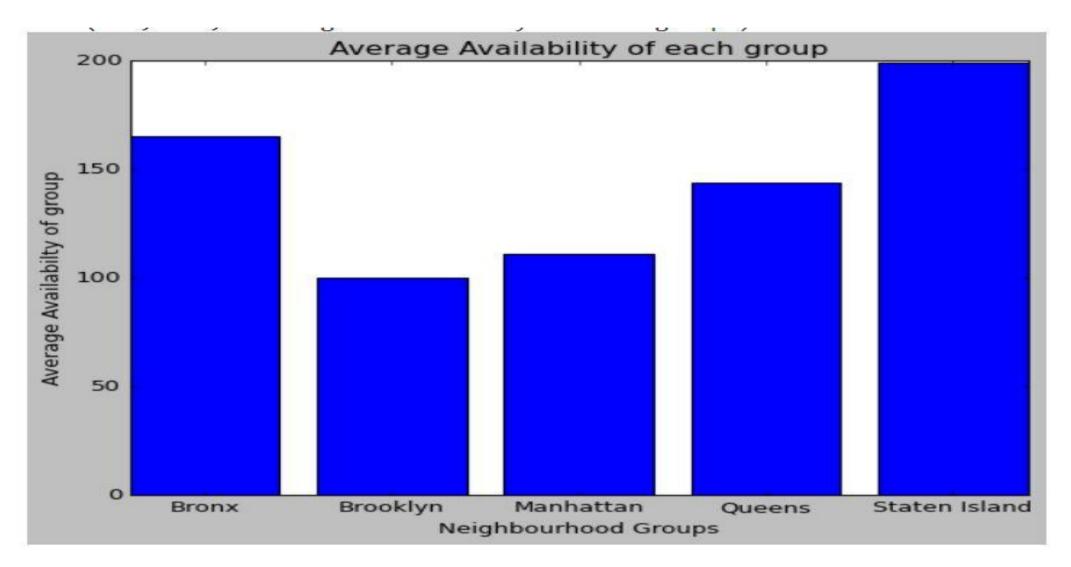
# Al

## 1. Analysis over Host and Areas:



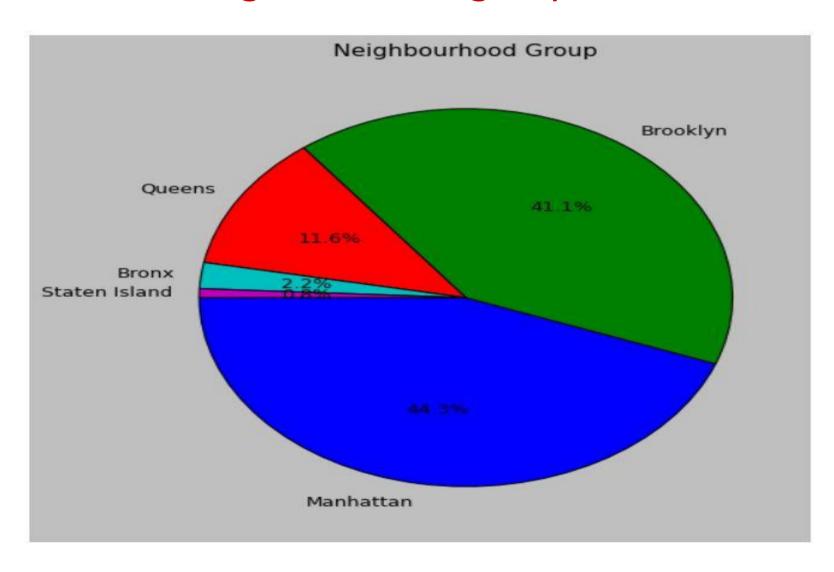
# Al

## 2. Neighbourhood Group vs Average Availability:



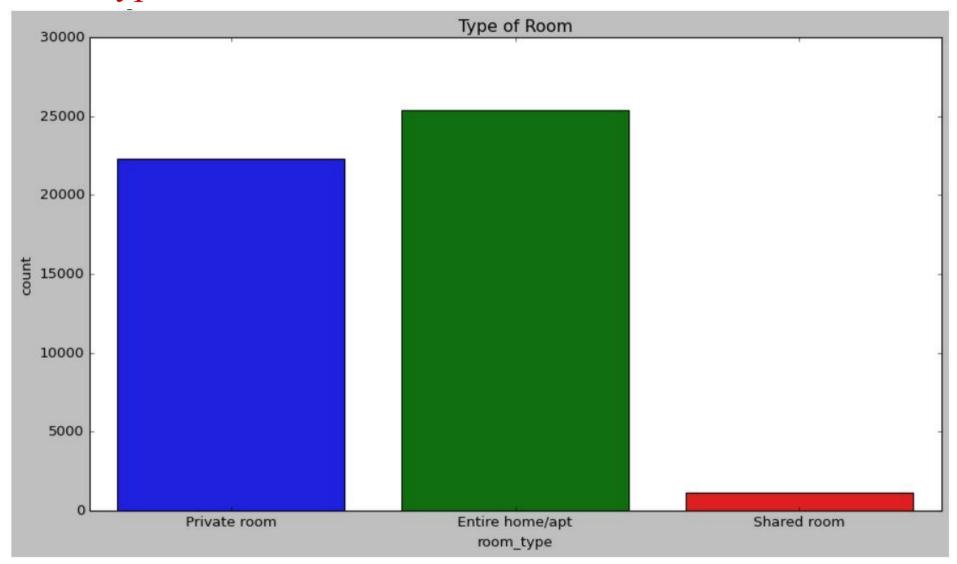


## 3. Count of each neighbourhood group



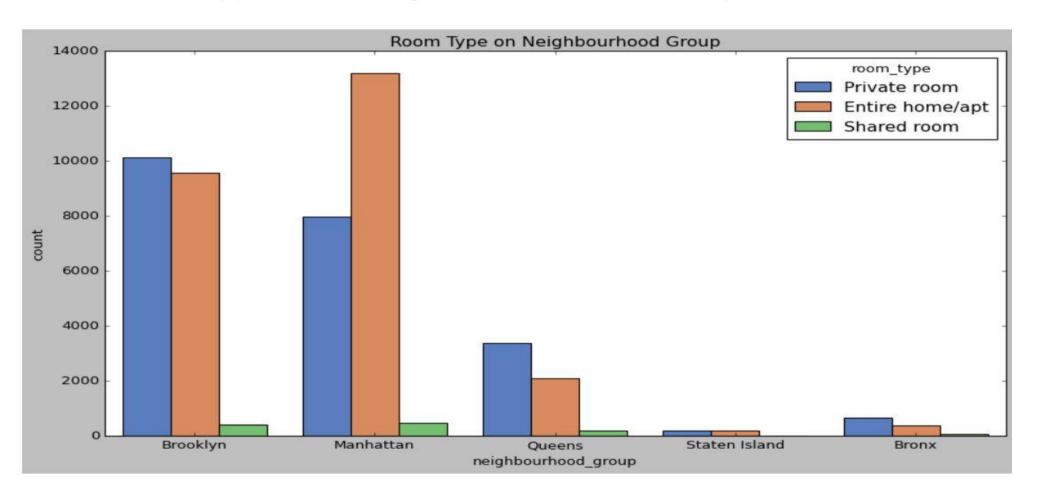
## Al

#### 4.Room Type



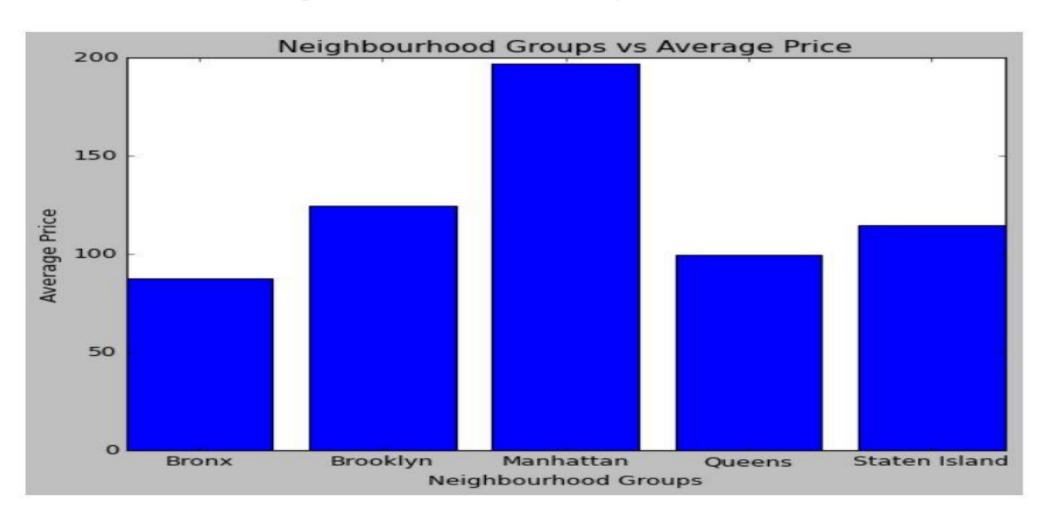


# 5. Room Type on Neighbourhood Groups:





## 6.Price on Neighbourhood Groups





#### **CONCLUSION**

We believe that we have conclude our objective on this particular dataset.

#### Overview of tasks performed:

- Data Cleaning
- Hypotheses
- Data Visualization to support hypotheses

