AIRBNB NYC INSIGHTS

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AGENDA

- Objective
- Data Preparation
- Findings and Visualizations
- Appendix

OBJECTIVE

- Airbnb is an online platform using which people can rent their unused accommodations.

- During the covid time, for the past few months Airbnb incurred a huge loss and has seen a major decline in revenue.

- Now that the restrictions have started lifting and people have started to travel more, Airbnb is aiming to bring up the business and ready to provide services to customers.

- Airbnb wants to make sure that it is fully prepared for this change.

- So, analysis has been done on a dataset consisting of various Airbnb listings in New York.

Data Preparation

- Cleaned data to remove any missing values and duplicates.
- Created significant columns.
- Extracted essential features and applied group aggregation.

POPULAR HOSTS

❑ Top 10 popular hosts have been filtered out using below formula.

Filter [Host Name]   ✕

General   Wildcard   Condition   **Top**

◯ None

◯ By field:

  Top ▾   10 ▾ by
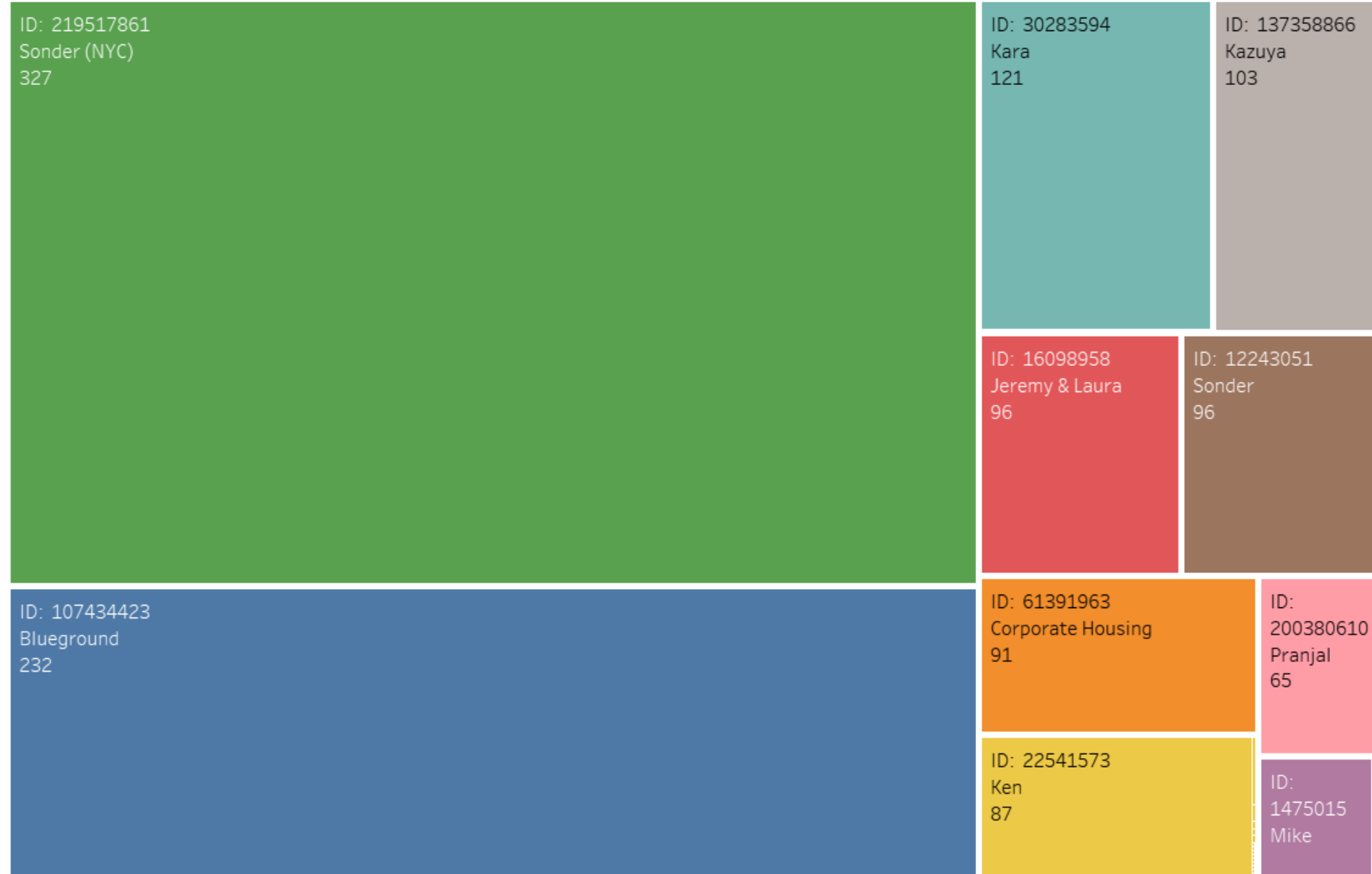
  Calculated Host Listings Count ▾   Sum ▾

● By formula:

  Top ▾   10 ▾ by

  SUM([Calculated Host Listings Count])

❑ Host Sonder with ID 219517861 has been booked most number of times i.e. 327.

❑ Host Blueground with ID 107434423 is the second popular host which has been booked 232 times.

❑ There are other hosts like Kara, Kazuya, Jeremy and Laura, etc that fall under top 10 hosts.

TOP 10 HOSTS

ID: 219517861
Sonder (NYC)
327

ID: 30283594
Kara
121

ID: 137358866
Kazuya
103

ID: 16098958
Jeremy & Laura
96

ID: 12243051
Sonder
96

ID: 107434423
Blueground
232

ID: 61391963
Corporate Housing
91

ID: 200380610
Pranjal
65

ID: 22541573
Ken
87

ID: 1475015
Mike

- ❑ Availability of Bedford is highest and its price is on the lower side. It is a good choice for customers.

- ❑ After Bedford, Bushwick follows the same trend.

- ❑ Financial District and Midtown availability is low but it's price is costly.

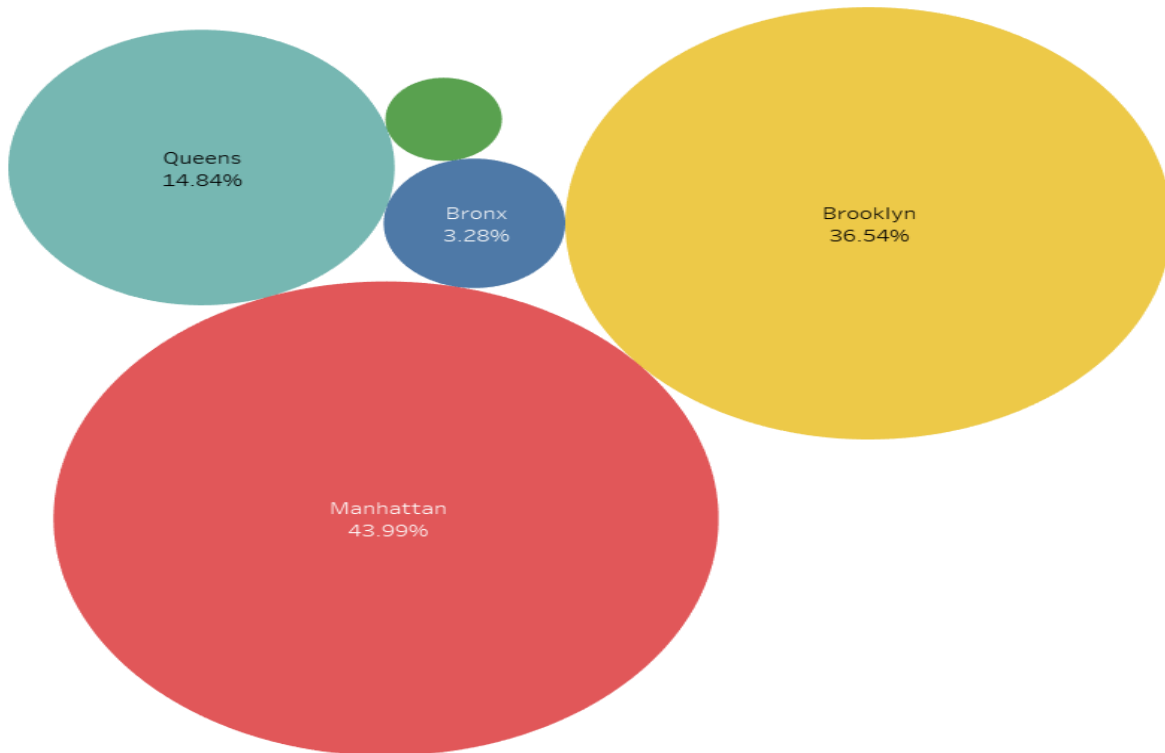- ❑ On the other hand, Williamsburg price and availability are average.

Availability vs Price for Top 10 Neighbourhood
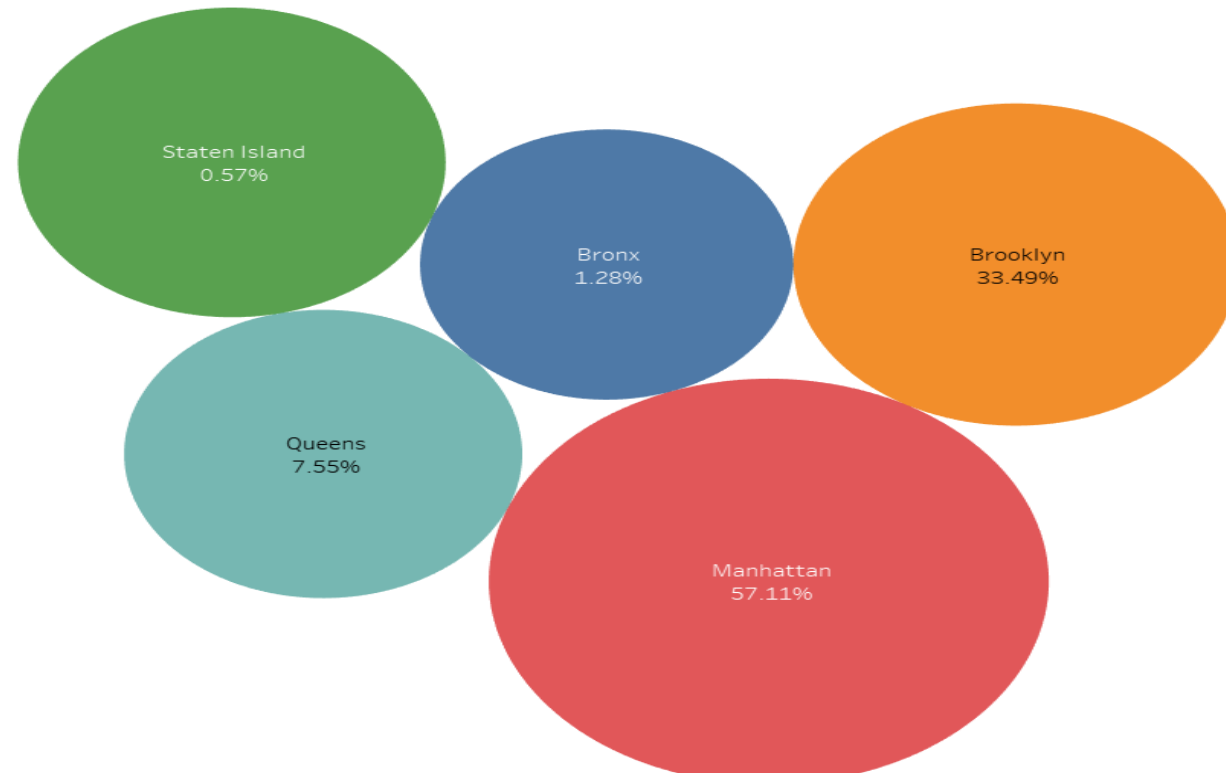
Total Availability & Average Price of Neighborhood Groups

❑ The Availability of listed properties in Manhattan is around 43.99% and Brooklyn around 36.54%, which is highest among all neighbourhoods.

❑ The average price of listed properties in Manhattan is around 57.11% and Brooklyn around 33.49%, which is highest among all neighbourhoods.

❑ The properties in Manhattan are the most expensive than any other area while those in Bronx and Staten Island are the least expensive.

❑ Premium properties in Bronx and Staten Island should be targeted as the rates are already reasonable.

❑ Non premium properties in Manhattan and Brooklyn should be targeted with reasonable approach that will get more customers.

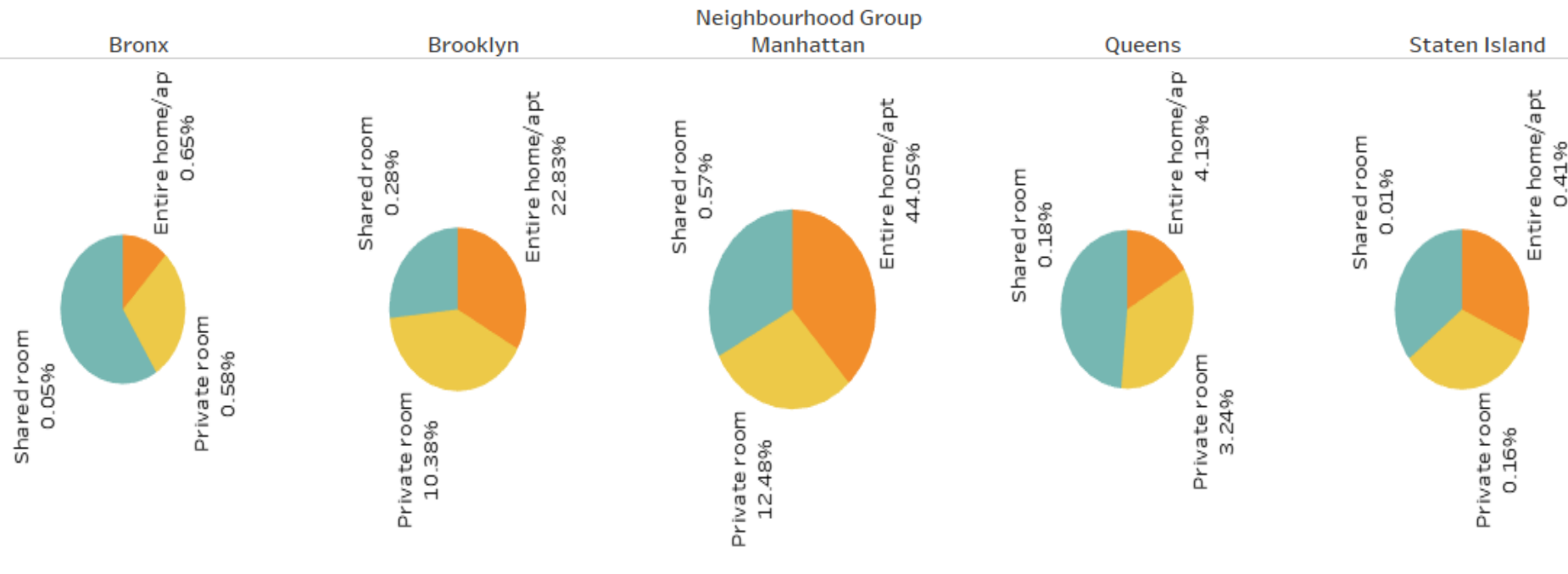Total Availability of Neighborhood Groups

Queens 14.84%
Bronx 3.28%
Brooklyn 36.54%
Manhattan 43.99%

Average Price of Neighborhood Groups

Staten Island 0.57%
Bronx 1.28%
Brooklyn 33.49%
Queens 7.55%
Manhattan 57.11%

Room type with respect to Neighbourhood group
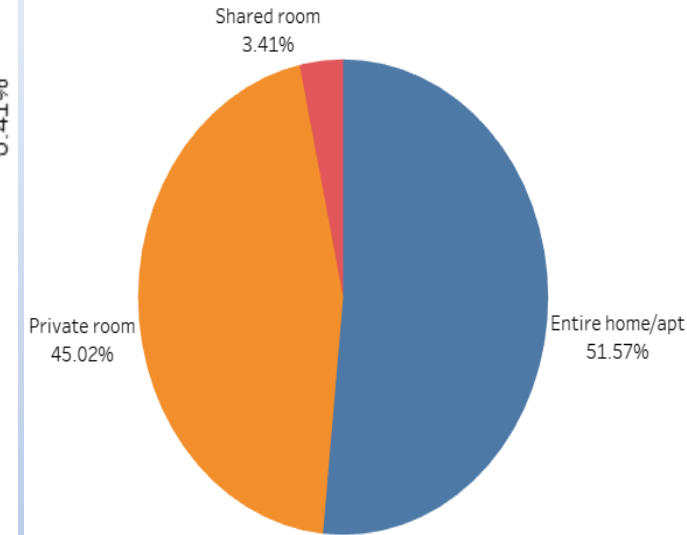
- ❑ There are three types of rooms - Entire home/Apartment, Private room & shared room.

- ❑ Overall, customers appear to prefer private rooms (45%) or entire homes (52%) in comparison to shared rooms (2.4%).

- ❑ Airbnb can concentrate on promoting shared rooms with discounts to increase bookings and also acquire more private listings.

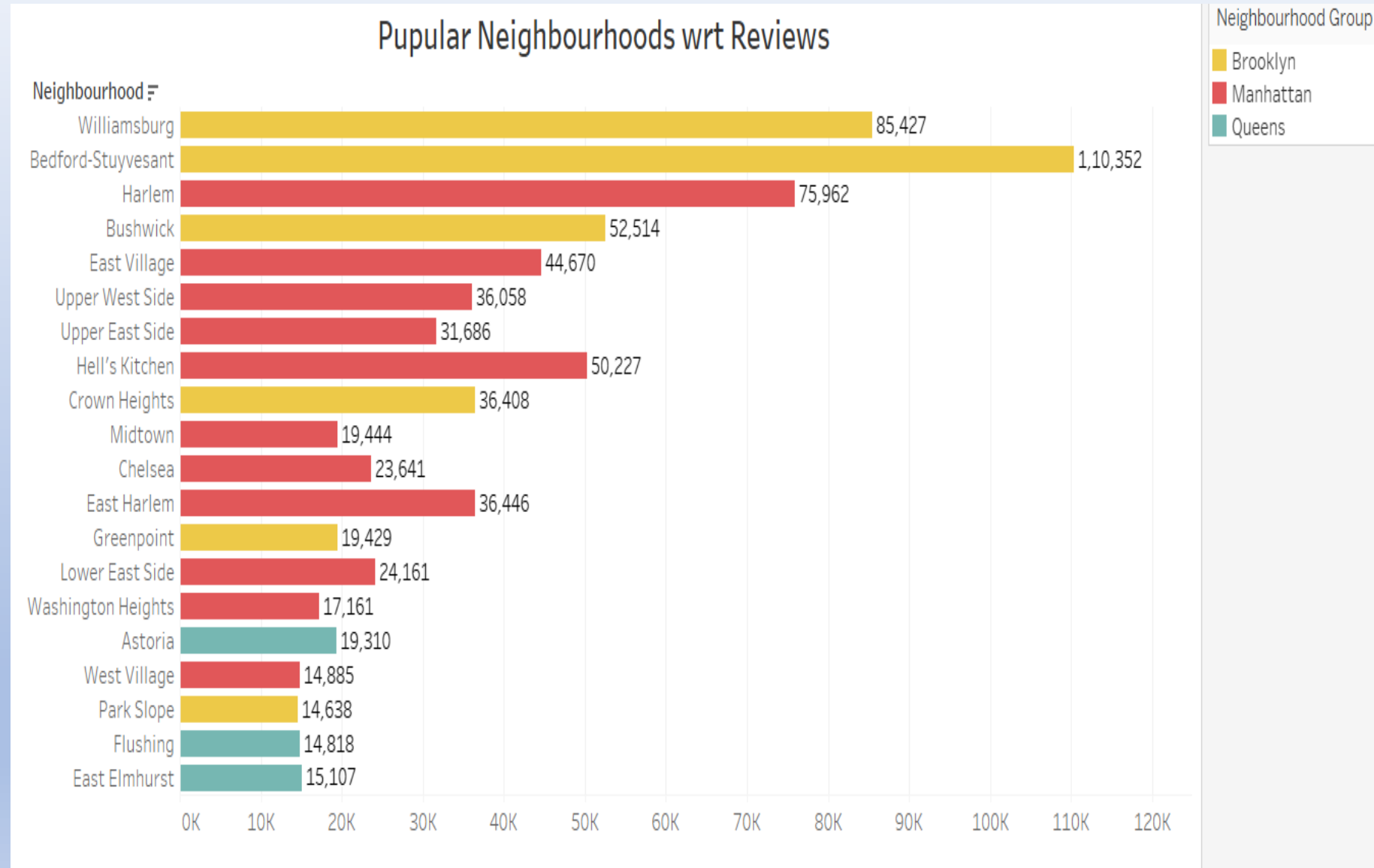# Popular Neighbourhoods wrt Reviews

- ❑ We see that Bedford-Stuyvesant from Brooklyn is the highest popular with 1,10,352 no of reviews in total followed by Williamsburg with 85,427.

- ❑ Harlem from Manhattan got the highest no of reviews followed by Hell's kitchen.

- ❑ The higher number of customer reviews imply higher satisfaction in these localities.

Pupular Neighbourhoods wrt Reviews

Neighbourhood Group
- Brooklyn
- Manhattan
- Queens

Neighbourhood	Reviews
Williamsburg	85,427
Bedford-Stuyvesant	1,10,352
Harlem	75,962
Bushwick	52,514
East Village	44,670
Upper West Side	36,058
Upper East Side	31,686
Hell's Kitchen	50,227
Crown Heights	36,408
Midtown	19,444
Chelsea	23,641
East Harlem	36,446
Greenpoint	19,429
Lower East Side	24,161
Washington Heights	17,161
Astoria	19,310
West Village	14,885
Park Slope	14,638
Flushing	14,818
East Elmhurst	15,107

APPENDIX

- Performed an extensive analysis of the New York Airbnb Dataset.

- We cleaned the dataset using Python.

- Extracted essential features and applied group aggregation.

- Generated charts and visual representations using Tableau.

Microsoft Word Document

Column	Description
id	listing ID
name	name of the listing
host_id	host ID
host_name	name of the host
neighbourhood_group	location
neighbourhood	area
latitude	latitude coordinates
longitude	longitude coordinates
room_type	listing space type
price	
minimum_nights	amount of nights minimum
number_of_reviews	number of reviews
last_review	latest review
reviews_per_month	number of reviews per month
calculated_host_listings_count	amount of listing per host
availability_365	number of days when listing is available for booking