Airbnb Listings Project Summary Report

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Tableau Dashboard & sheets link :-

https://public.tableau.com/views/AirbnbDashboardsandsheetsLakshaysharma/RoomType?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link

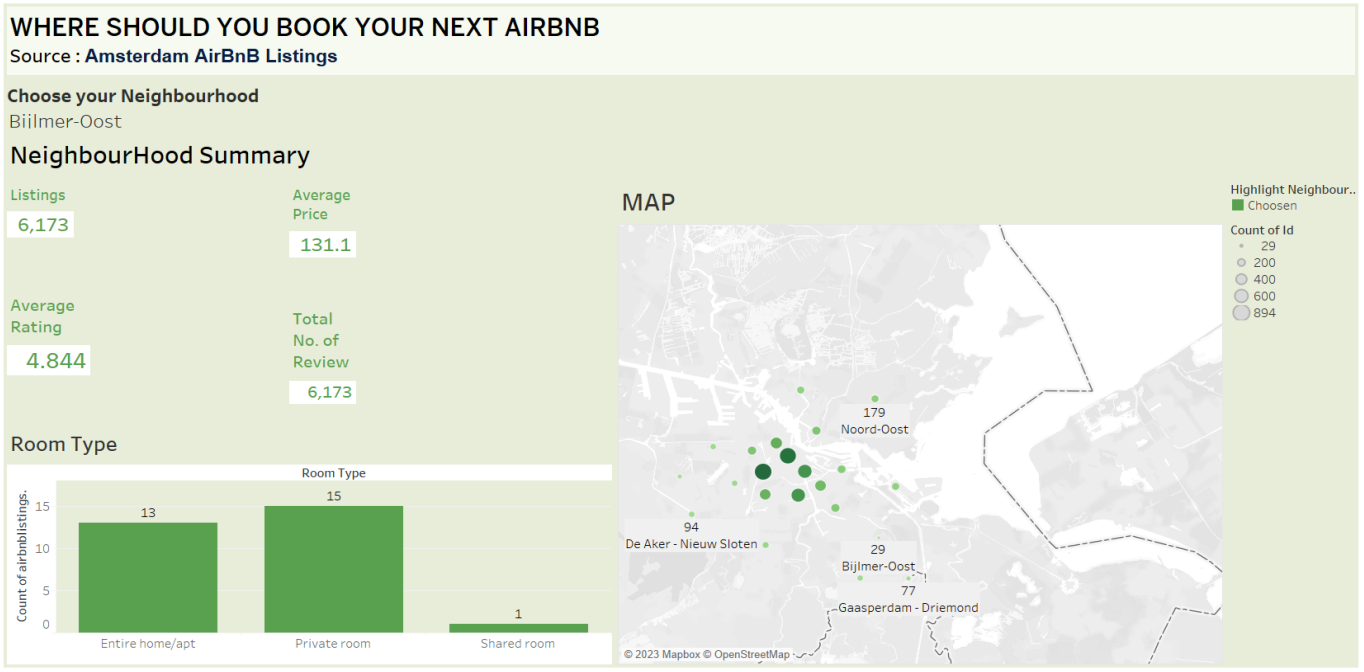
About Airbnb ?

Airbnb is an online American marketplace that allows property owners to list their properties on the platform and connect with travellers who are looking for a place to stay. Airbnb has had a significant impact on the way people travel and find accommodations, making it possible for individuals to earn income by renting out their properties and for travellers to experience more personalized and unique stays. However, it has also raised important questions about the sharing economy, regulation, and its broader societal impact

Given information(Dataset):

The Airbnb dataset contains the different fields and attributes such as Room type available in the nearest neighbourhood along with the Price of room , review of room/hotel. Average price along with the Rating given by the Customers.

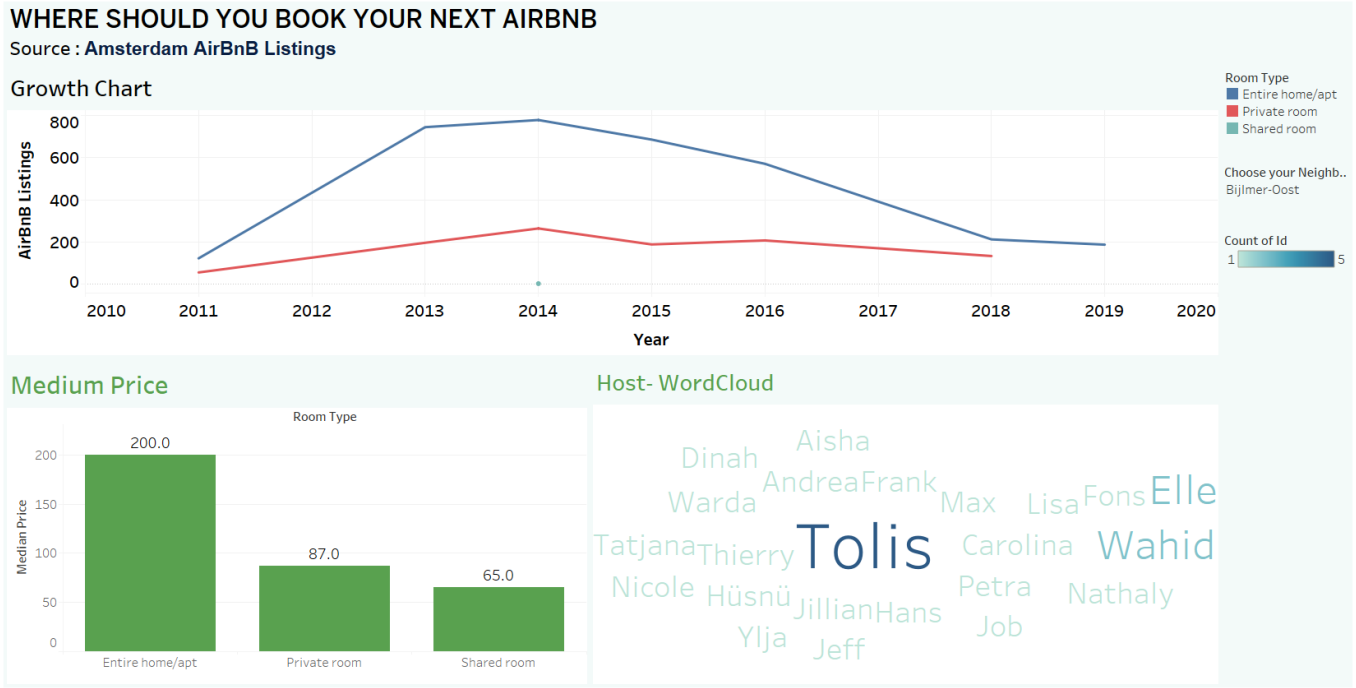
Case studies Performed on the Airbnb :



From the above dashboard , having the Room type including Entire home/app, Private Room and Shared Room also with change in the neighbourhood , we may observed the changes execute in the number of listings , Average price, Average Rating , Total no. of Review and the Map directly changes as the neighbourhood change.

In Netherlands (Amsterdam), **Gaasperdam-Driemond city observed the highest no of average price** among the all as well as the Shared room type is more in this region.

Observation made from Dashboard-2



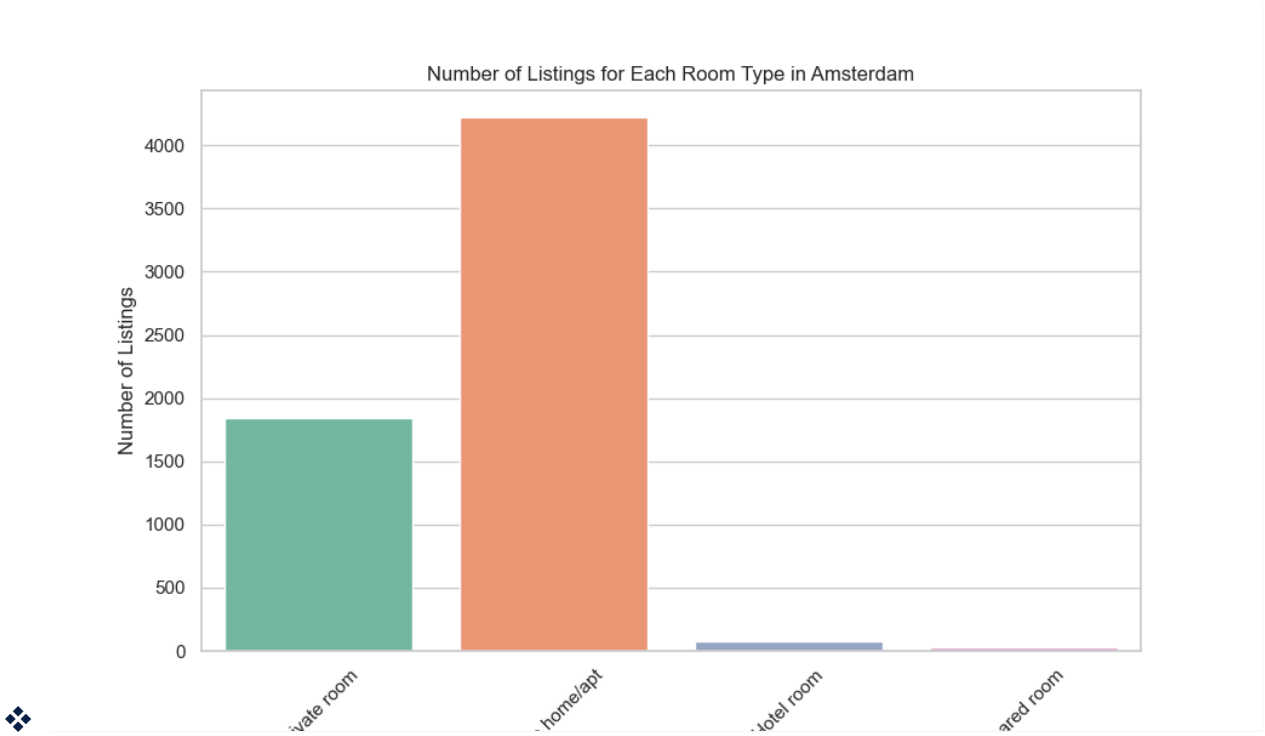
From the above dashboard , which is clearly indicating the number of people visits with respect to the years , which is divided on the room type . By this the Host name ,which have visit maximum in their neighbourhood is seems to be maximum.

Observation from the Dataset:

1. We have observed that there are total 6173 number of listing so far.
2. The average price of the hotel in the selected neighbourhood is nearly about $198.
3. Also the Rating in the Amsterdam is observed to be 4.8/5 . So we can just that people can visit here .

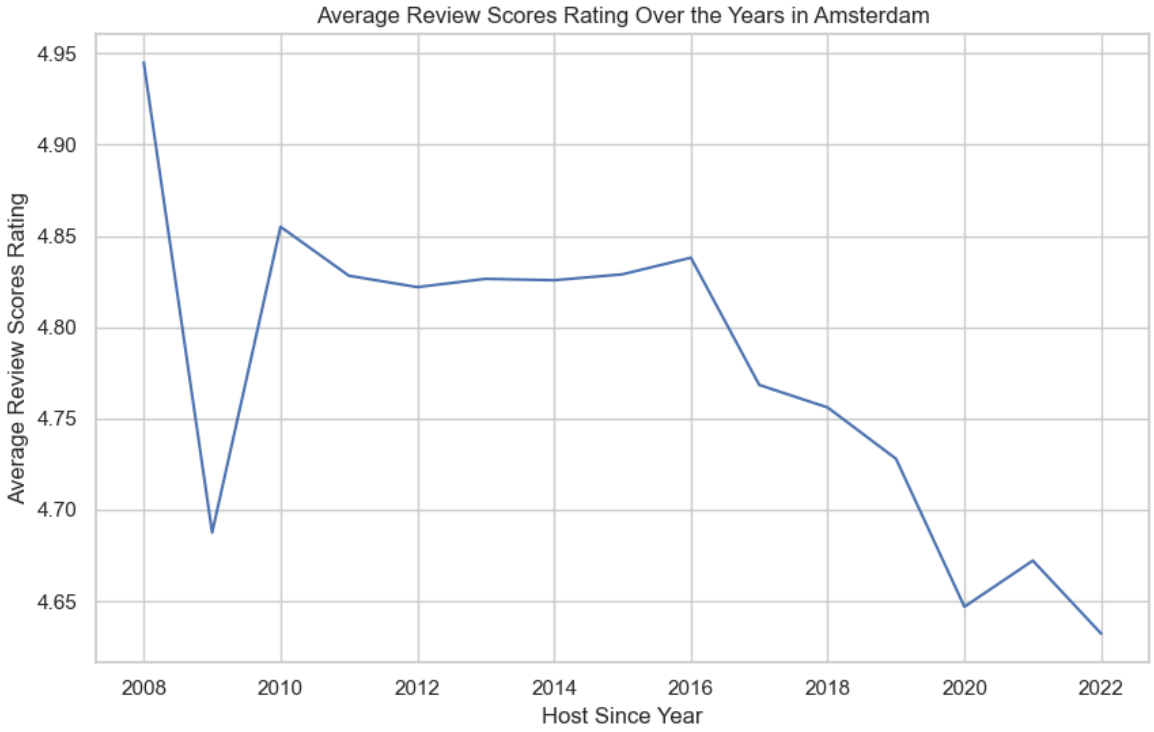
4. It has clearly observed that the Home/Apartment in the Amsterdam are maximum as followed by private Room , whereas Shared room are very less available in the city.

```
|: # Create a countplot to show the number of listings for each room type
plt.figure(figsize=(10, 6))
sns.countplot(data=df, x='room_type', palette='Set2')

# Add labels and a title
plt.xlabel('Room Type')
plt.ylabel('Number of Listings')
plt.title('Number of Listings for Each Room Type in Amsterdam')

# Rotate the x-axis labels for better visibility if needed
plt.xticks(rotation=45)
plt.savefig(r'C:\Users\laksh\OneDrive\Desktop\UPGRADE\TABLEAU\AirBnB listings Project\Roomtype.png')
# Show the plot
plt.show()
```

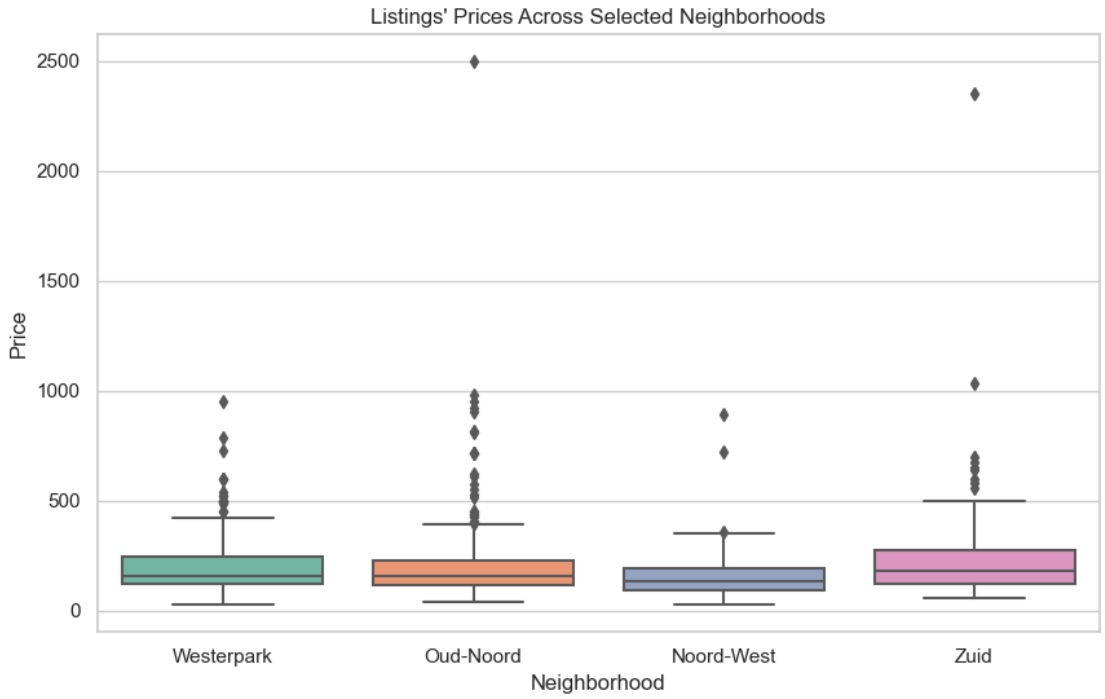


- Also the Average Review Scores Rating Over the Years in Amsterdam observed to be in the downfall from year 2016.This is because of the financial crises happen in 2008 as before it , the Average review score rating in Amsterdam is high . **Here below** is the line chart graph which clearly indicate the downfall of the Average review scores rating over the years in Amsterdam.

```
In [16]: ### Write your code for lineplot here

# Create a lineplot to visualize the average review_scores_rating across different years
plt.figure(figsize=(10, 6))
sns.lineplot(data=df, x='host_since_Year', y='review_scores_rating', errorbar=None)

# Add labels and a title
plt.xlabel('Host Since Year')
plt.ylabel('Average Review Scores Rating')
plt.title('Average Review Scores Rating Over the Years in Amsterdam')

# Show the plot
plt.show()
```



- And we have observed that the neighbourhood such as Wester Park, Oud-Noord, Noord-West, Zuid , when comparison is done it observed that the Price near this neighbourhood are less than $500 below as shown below:



Recommendation:

1. There are maximum numbers of Entire Share/ Appt. room in the cities , we need to maximize the Private room and hotels in the city for the better of the customers
2. As we observed the downfall observed after 2016 in the Review score rating over the past year. To Maximise the Review score rating ultimately we need to provide good facilities and check the other stakeholder which involves in this case which affect the Rating score over the past years

Future Direction/Scope:

We want to expand our analysis to multiple cities and compare patterns and trends amongst these cities. From the insights we have derived, we

would also like to build predictive models using different features from the dataset. Lastly, we hope to implement the visualizations and

techniques used in this project to many other Fields and datasets