# **Executive Summary**

### Introduction:

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.

Dataset is giving which contains Neighbourhood name, listing of hotels, Reviews, Rating of hotels, Price of stay. From the help of Tableau and Python, I am going to present my overall summary of my analysis.

# Data Observation from tableau:

From the map view, we can observe the neighbourhood of the all the hotel in the nearby area.

From List of summary we can observe the Listing, Reviews, Average Rating & Average Price.

From the Room Type, we can observe the bar chart between types of room and listing of room on airbnb.

# **Complete Over-View:**





#### 1. Geographic Distribution of Listings:

Map View: The map view on the dashboard can provide an immediate overview of where Airbnb listings are concentrated. This helps users identify popular neighbourhoods or areas with a high density of available accommodations. Hosts can use this information to understand the competitive landscape in different regions.

Insights: Users can see clusters of listings in certain neighbourhoods, indicating areas that are in high demand. Hosts can focus their marketing efforts and pricing strategies in these popular locations.

### 2. Room Type Availability:

Room Types: The dashboard can display the distribution of different room types available, such as entire homes/apartments, private rooms, and shared rooms. Users can see how listings are categorized by room type.

Insights: Guests can quickly identify the types of accommodations available in a given area. For instance, they can see if a neighbourhood primarily offers entire homes or if private rooms are more common. This information helps guests select accommodations that match their preferences and needs.

#### 3. Pricing Variations:

Room Types and Price: The dashboard can include a visualization that shows the average or median price for each room type in different neighbourhoods on the map.

Insights: Hosts and guests can understand the price variations for different room types across various neighbourhoods. This information can help guests choose accommodations that fit their budget, and hosts can set competitive prices based on room type and location.

#### 4. Room Type Popularity:

Room Type Popularity: A bar chart or pie chart can indicate the popularity of each room type within a specific neighbourhood.

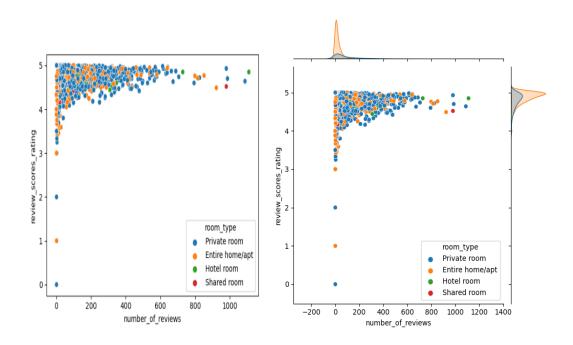
Insights: This information can guide both hosts and guests. Hosts can adapt their listings based on the demand for specific room types in a particular area, and guests can choose accommodations that match their preferences and the local availability.

#### 5. Host and Guest Behaviour"

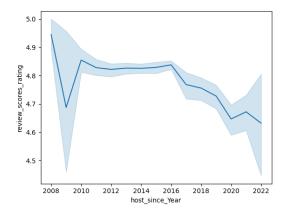
Room Type and Guest Ratings: The dashboard can also include a visualization of guest ratings for different room types.

Insights: This can help both hosts and guests understand how different room types are perceived in terms of guest satisfaction. Hosts can work on improving the quality of certain room types, and guests can make informed decisions based on reviews.

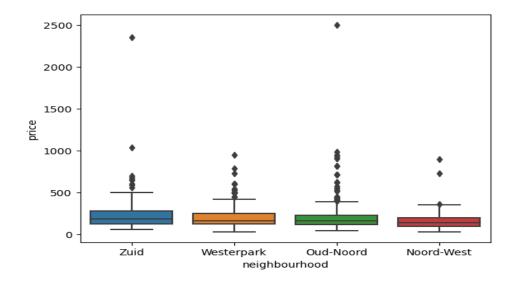
# **Data Observation from Python:**



As we can observe from the both the plots as "Private Room" have review above 4 out of all the room types. After that Entire home have the second highest review than Hotel room and least review have shared room.



From the above plot we can see that from 2010, rating is keep on decreasing and in the 2022 rating comes down to below 4.7 which is concern. They must have to take some action and improve it.



From the above boxplot, we can observe that First, Second & Third Quater for neighbourhood almost lie between 200-300. But the outlier for Zuid and Oud Noord lie between 2400-2600.

# Conclusion:

Information provides valuable insights into the geographic distribution of Airbnb listings, the availability of different room types, pricing variations, room type popularity, and host and guest behaviour. This information empowers hosts to optimize their listings and pricing strategies, while helping guests make well-informed choices when booking accommodations that align with their preferences and budget.