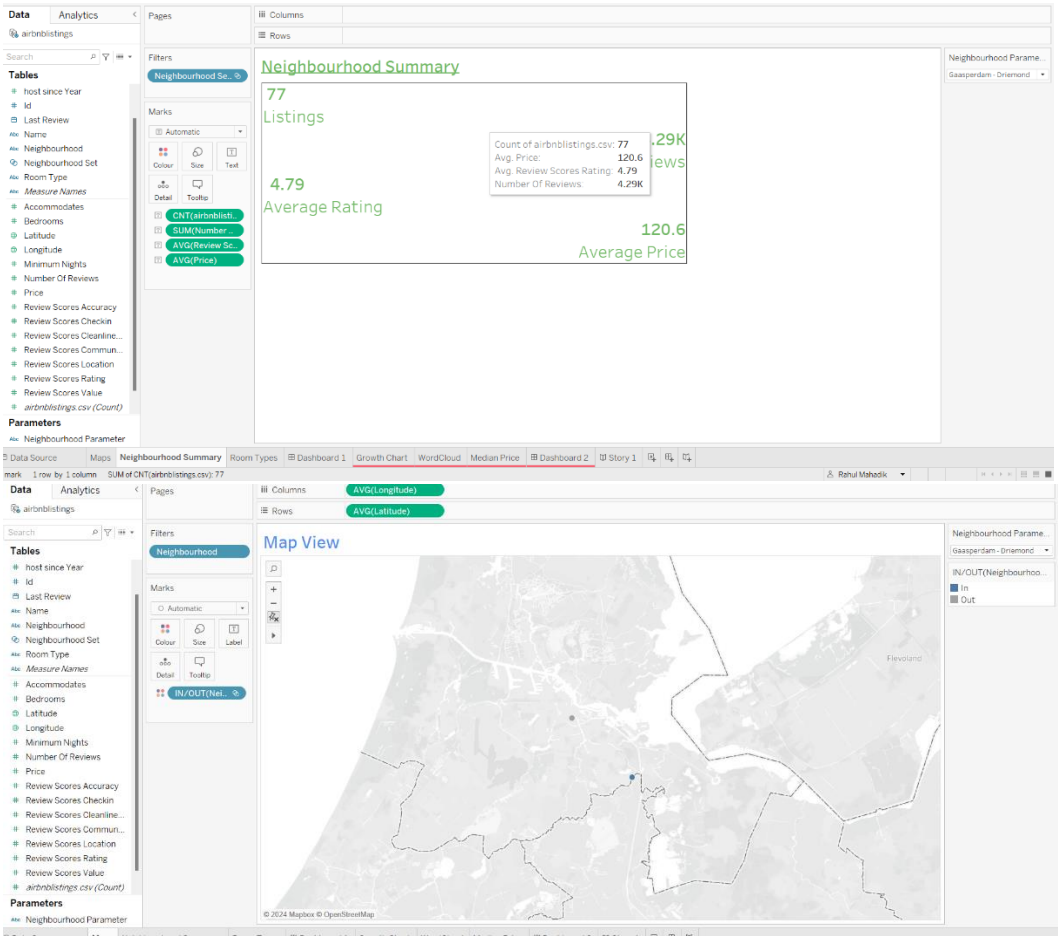
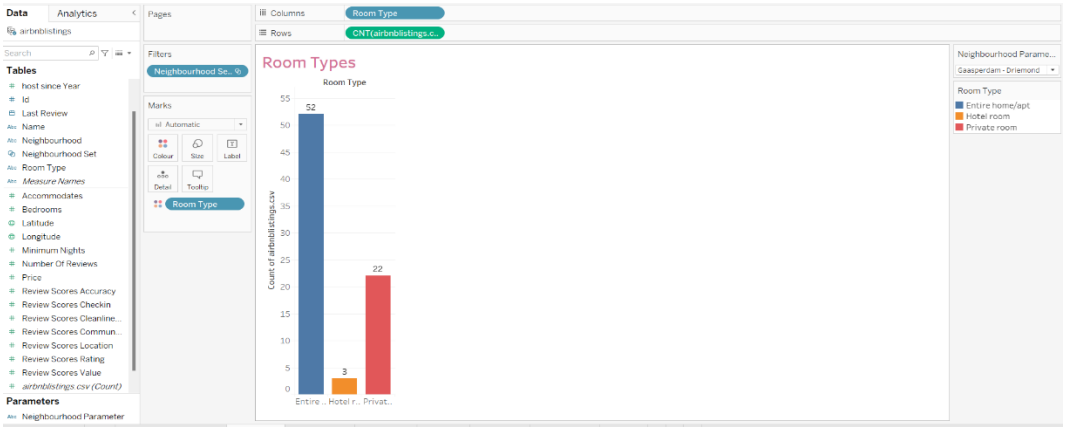
Executive Summary

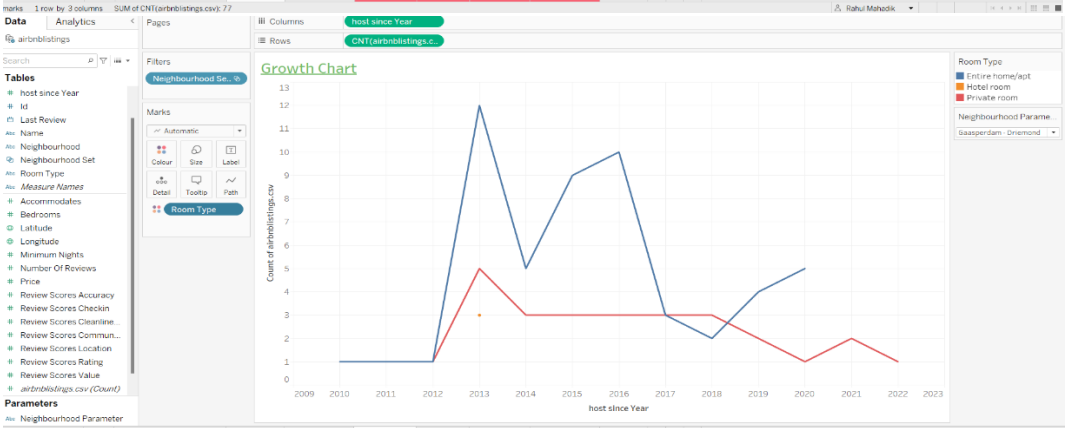
- **Tableau Public Dashboard's Link -** https://public.tableau.com/shared/XQ78M7W7G?:display_count=n&:origin=viz_share_link

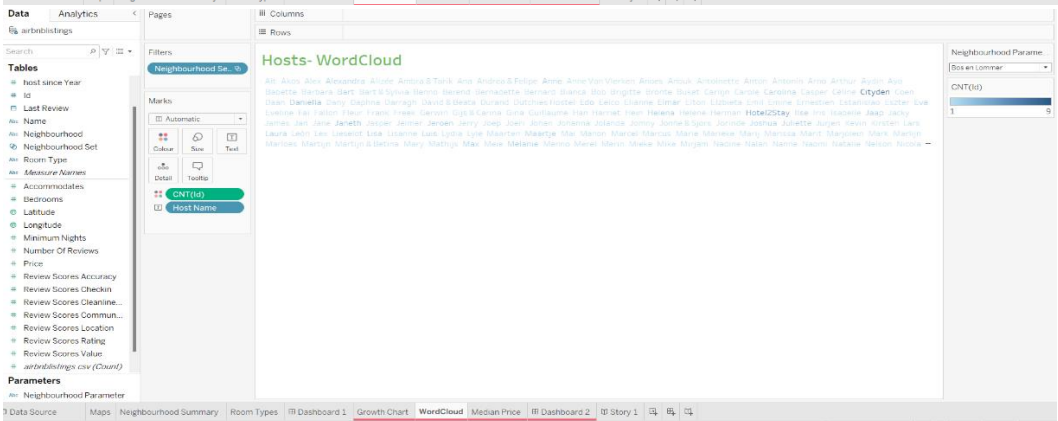
- In these 2 particular Dashboards we have mostly used the neighbourhood table as the main filter. We have also created a set of this particular table and added it to filter sometimes to link the data as we choose it from the parameter. Before creating the set we have made a parameter of the neighbourhood and have first shown it. Another parameter or table which we have used from this particular data is Room types; it really helped us in showing different room types and their probability. We have also used listings table many times which has the exact count of all the listings. Conclusively we have kind of played with different options such as colour, label, text, details, etc while making these dashboards.

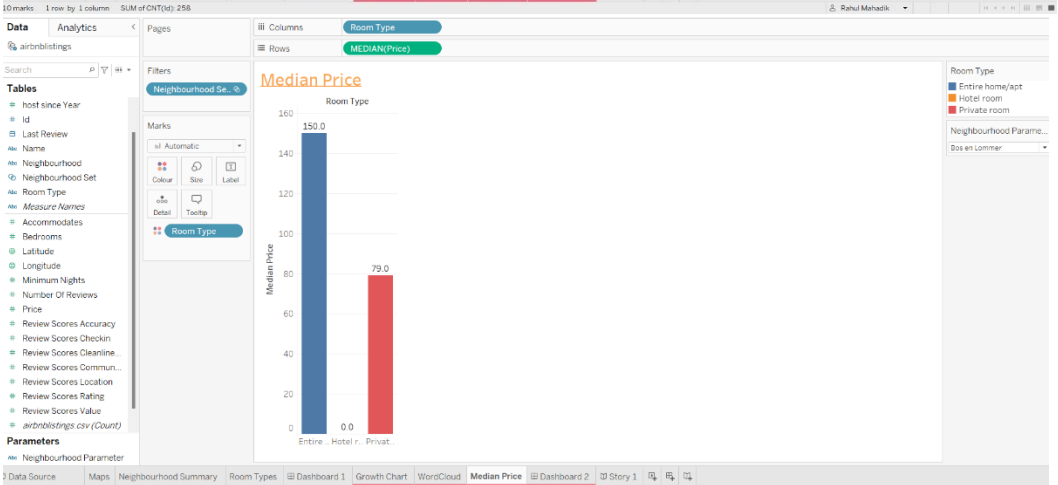
- **<u>Insights of each dashboard in Tableau; along with their snapshots-</u>**




Room Types
Room Type
Count of airbnblistings.csv
52
3
22
Entire .. Hotel r.. Privat..
Columns
Room Type
Rows
CNT(airbnblistings.c..
Filters
Neighbourhood Se..
Marks
Automatic
Colour
Size
Label
Detail
Tooltip
Room Type
Neighbourhood Parame...
Gaasperdam - Driemond
Room Type
Entire home/apt
Hotel room
Private room
Data Source
Maps
Neighbourhood Summary
Room Types
Dashboard 1
Growth Chart
WordCloud
Median Price
Dashboard 2
Story 1


Growth Chart
Count of airbnblistings.csv
host since Year
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
Columns
host since Year
Rows
CNT(airbnblistings.c..
Filters
Neighbourhood Se..
Marks
Automatic
Colour
Size
Label
Detail
Tooltip
Path
Room Type
Room Type
Entire home/apt
Hotel room
Private room
Neighbourhood Parame...
Gaasperdam - Driemond
Data Source
Maps
Neighbourhood Summary
Room Types
Dashboard 1
Growth Chart
WordCloud
Median Price
Dashboard 2
Story 1


Hosts- WordCloud
Columns
Rows
Filters
Neighbourhood Se..
Marks
Automatic
Colour
Size
Text
Detail
Tooltip
CNT(Id)
Host Name
Neighbourhood Parame...
Bos en Lommer
CNT(Id)
1
9
Data Source
Maps
Neighbourhood Summary
Room Types
Dashboard 1
Growth Chart
WordCloud
Median Price
Dashboard 2
Story 1


Median Price
Room Type
Median Price
150.0
0.0
79.0
Entire .. Hotel r.. Privat..
Columns
Room Type
Rows
MEDIAN(Price)
Filters
Neighbourhood Se..
Marks
Automatic
Colour
Size
Label
Detail
Tooltip
Room Type
Room Type
Entire home/apt
Hotel room
Private room
Neighbourhood Parame...
Bos en Lommer
Data Source
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Neighbourhood Summary
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Story 1

In the following worksheets or dashboards, we can observe the growth in the particular types of rooms in the neighbourhood. We can also see the ratings, reviews & prices to make the customer understand easily.

- **Insights & Observations from Python**

The total no of Airbnb listings in the city of Amsterdam are 6173. The average price of all the Airbnb listings in Amsterdam is 198. The average rating received by all the Airbnb listings in Amsterdam is 4.8. Comparing the distribution of prices, reviews and ratings we have observed that the highest count of no of prices lies between 0 to 500, no 5 is highest among all the scores rating & the highest no of reviews lies between 0 to 200, followed by slightly lesser than 200 to 400 reviews. Entire home/apt room type has the highest no of listings. As we see in this scatterplot the no of reviews for score ratings for 1,2,3 is 0, but it gradually starts increasing from rating 3. We can also see the rating in the following chart has been suddenly decreased in the year 2008; After 2008 there has been a slight increase in the year 2010. Between 2010 & 2016 the rating varies between 4.8 & 4.9. But after that it can be seen decreasing till the year 2022 which lies between 4.6 & 4.7. The relation between the various ratings which were provided is also shown with the help of correlation matrix and heat map. Subset of the given neighbourhoods – Westerpark, Oud-Noord, Noord-West, Zuid has also been created.

- **Summary**

1. With Tableau we have created two dashboards related to the Airbnb listings Dataset.
2. Through these dashboards we came to known about the different room types in the neighbourhood, their probability and Growth over the years.
3. Finally, we created a story which can show these 2 dashboards together, as the reader can compare these 2 dashboards with ease.
4. In python we have imported the same dataset and plotted various plots, to show the observations or the solutions to the provided questions related to the dataset.
5. We have also made an observation table so that the reader gets the insights and the observations from the dataset in a simplified manner.