

# Code-Hers



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How to I search for a  
suitable place to stay  
with my family??

# Air BnB Pro

Not sure  
where to go?

Planning for a "Stay-Cation" but don't know the perfect place that will  
give you the homely feel and also fulfill your tourist needs??

***AirBnB Pro*** is all you need.

Filter by price, property  
type, nearest tourist  
attractions and much more.

Specify everything you  
want to consider before  
booking your AirBnB.



## □ Data

Data plays an essential role as it

- helps in understanding patterns, trends
- help procure important information for our project through it.

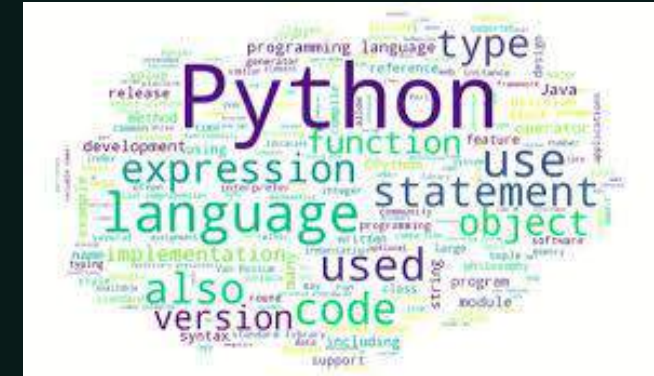
## For this project:

Data has been sourced from - <http://insideairbnb.com/get-the-data.html> for the **Amsterdam** city.

Our dataset can be found here - <https://rb.gy/6jclvb>

The data source should be reliable and provide accurate or near to perfect statistics for a good recommendation engine.





## □ Dependencies

A library is a bundle of pre-defined code made to help one accomplish routine tasks more quickly.



# DEPENDENCIES

- Numpy
- Pandas
- Seaborn
- Sklearn
- Matplotlib
- Folium
- Geopandas
- Plotly

- Cufflinks
- Nltk
- Cleantext
- Spacy
- Pickle
- Wordcloud
- Tableau

## □ Data Cleaning



One of the initial steps in a data science project.

The data cleaning steps established in this project include:

- Dropping neighborhood group - *Empty Column*
- Removing "%" from host\_response\_rate



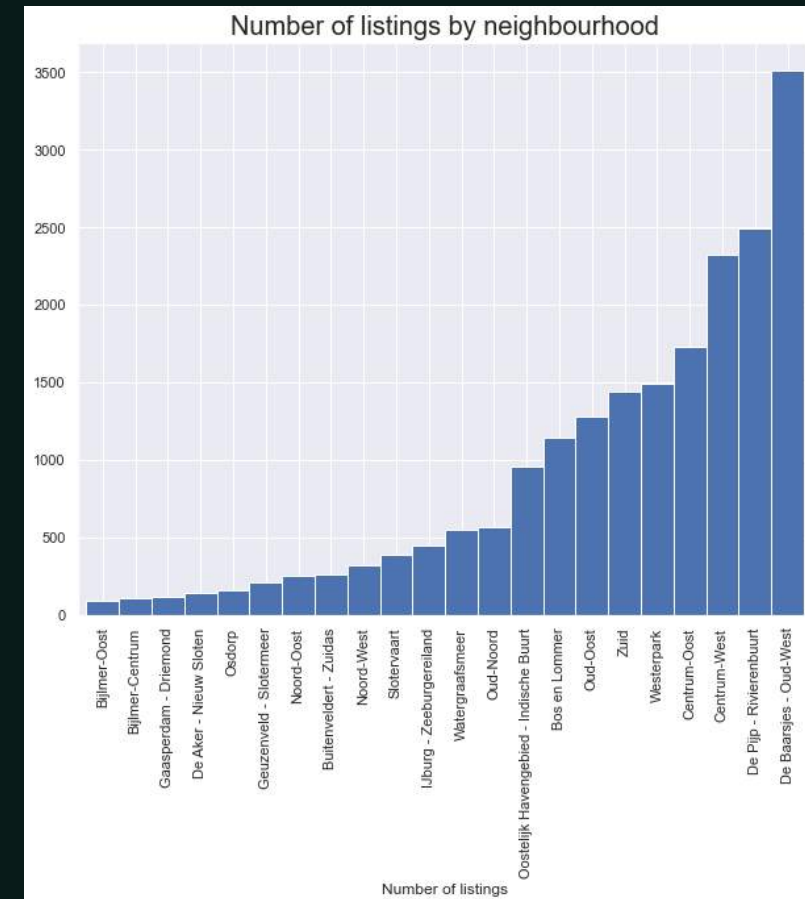
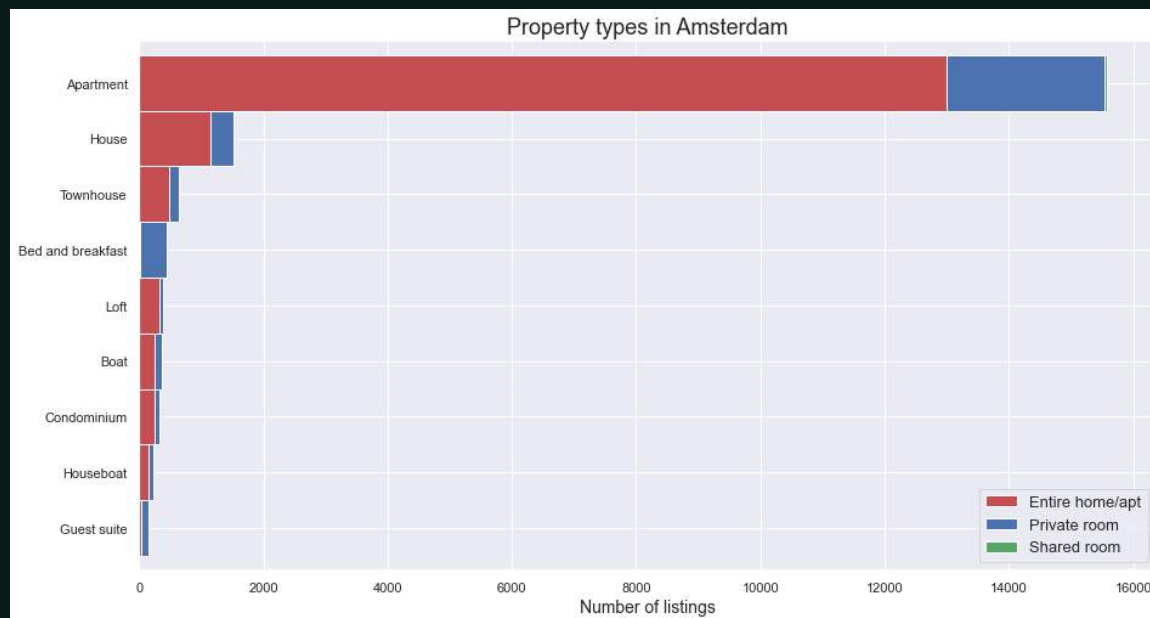


## □ EDA

- ✓ Helps in understanding data more clearly and helps draw efficient conclusions.
- ✓ Visualization plays an essential part.
- ✓ Visualization tools used are :

- Folium
- Plotly
- Matplotlib

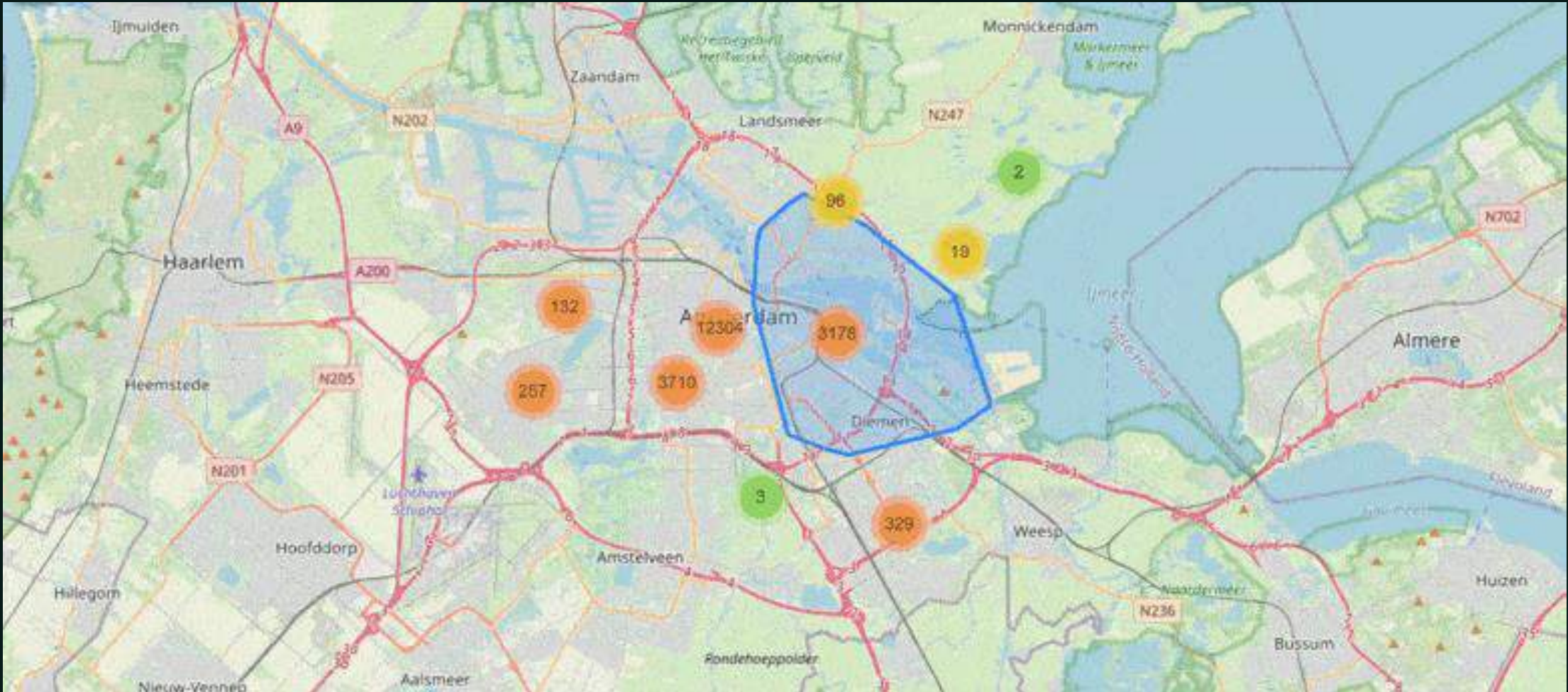
Comparison of property types of AirBnBs



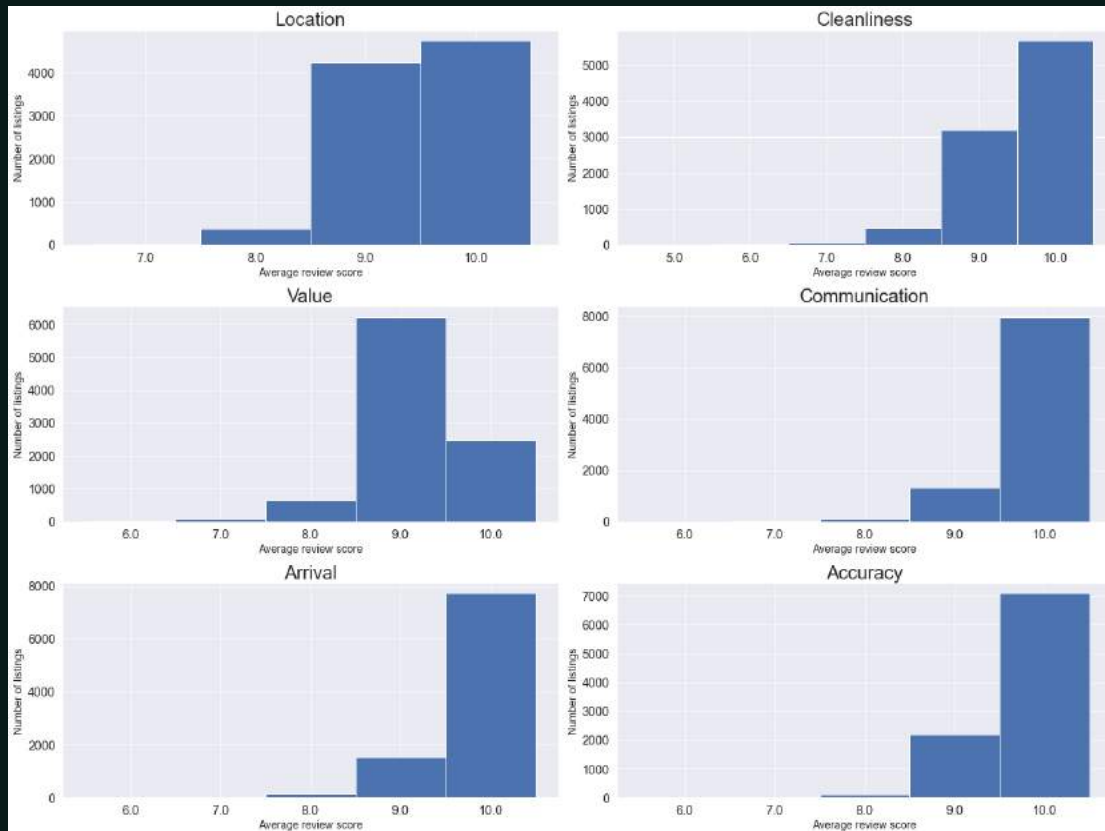
No. of listing by neighborhood



## Visual Representation Of Neighborhoods On Map

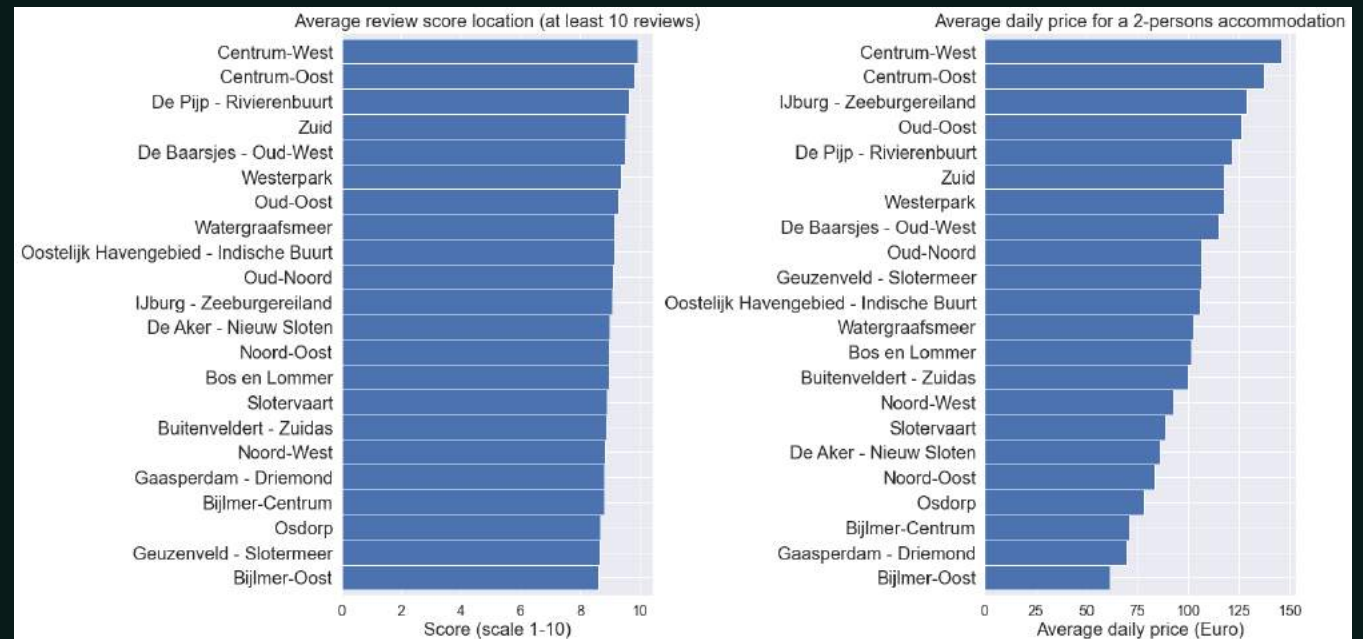


# EDA (Contd.)



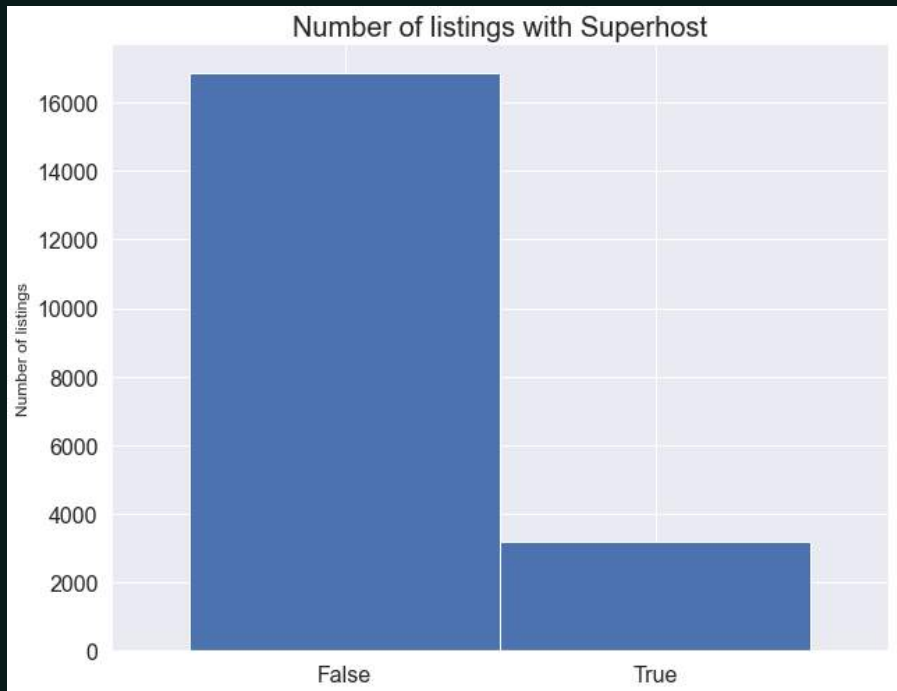
Visualizing average scores of different categories of reviews

## Side By Side Visualization Of Reviews And Average Price For a 2 Persons Accommodation





# EDA (Contd.)



No. of listing by superhost.



No. of Listing available by date

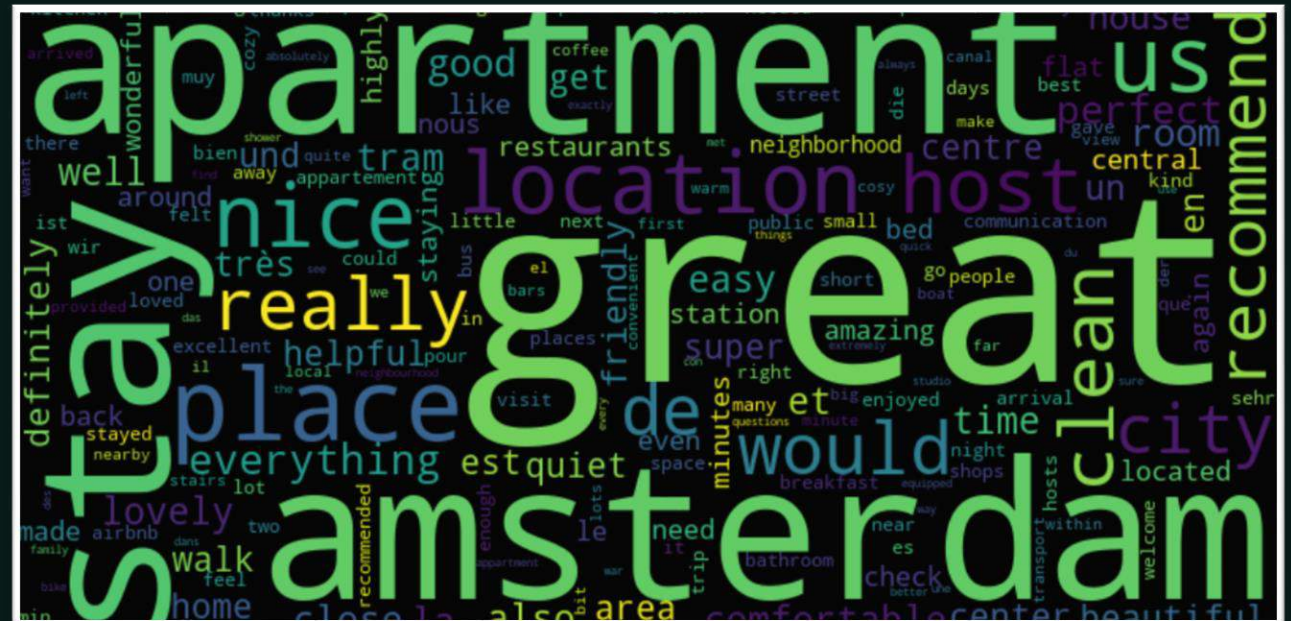
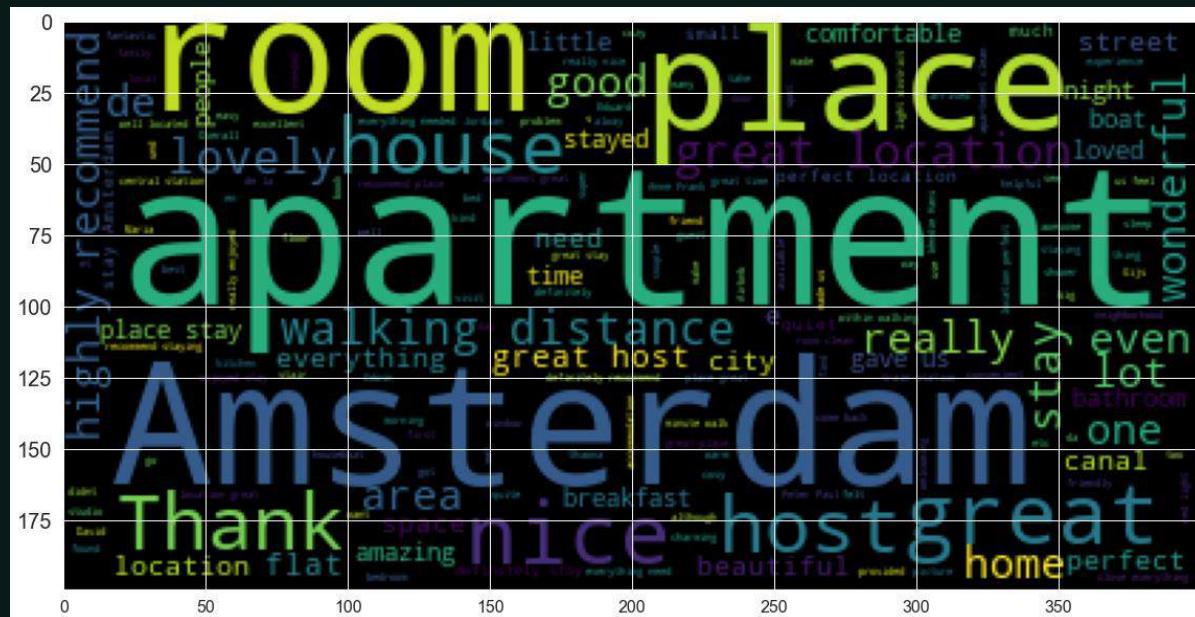


Average price of available 2 persons accommodation by date



## ❑ Word Cloud Creation

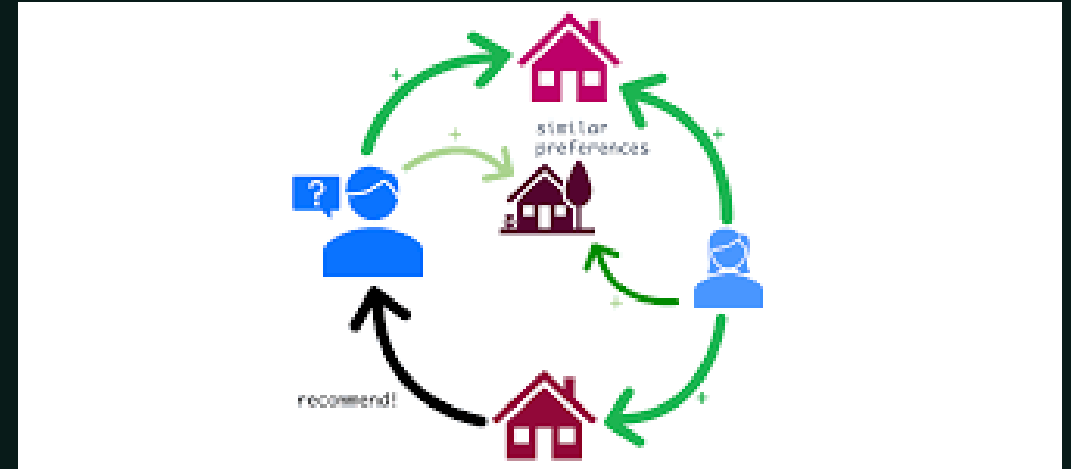
A Word-Cloud is the visual representation of words





# ❏ Recommendation System

Finally a text-based recommendation engine using NLP was built.



## Steps Taken In This Process :

Conversion Of  
Text To Word Vectors



Training of a Classifier Model



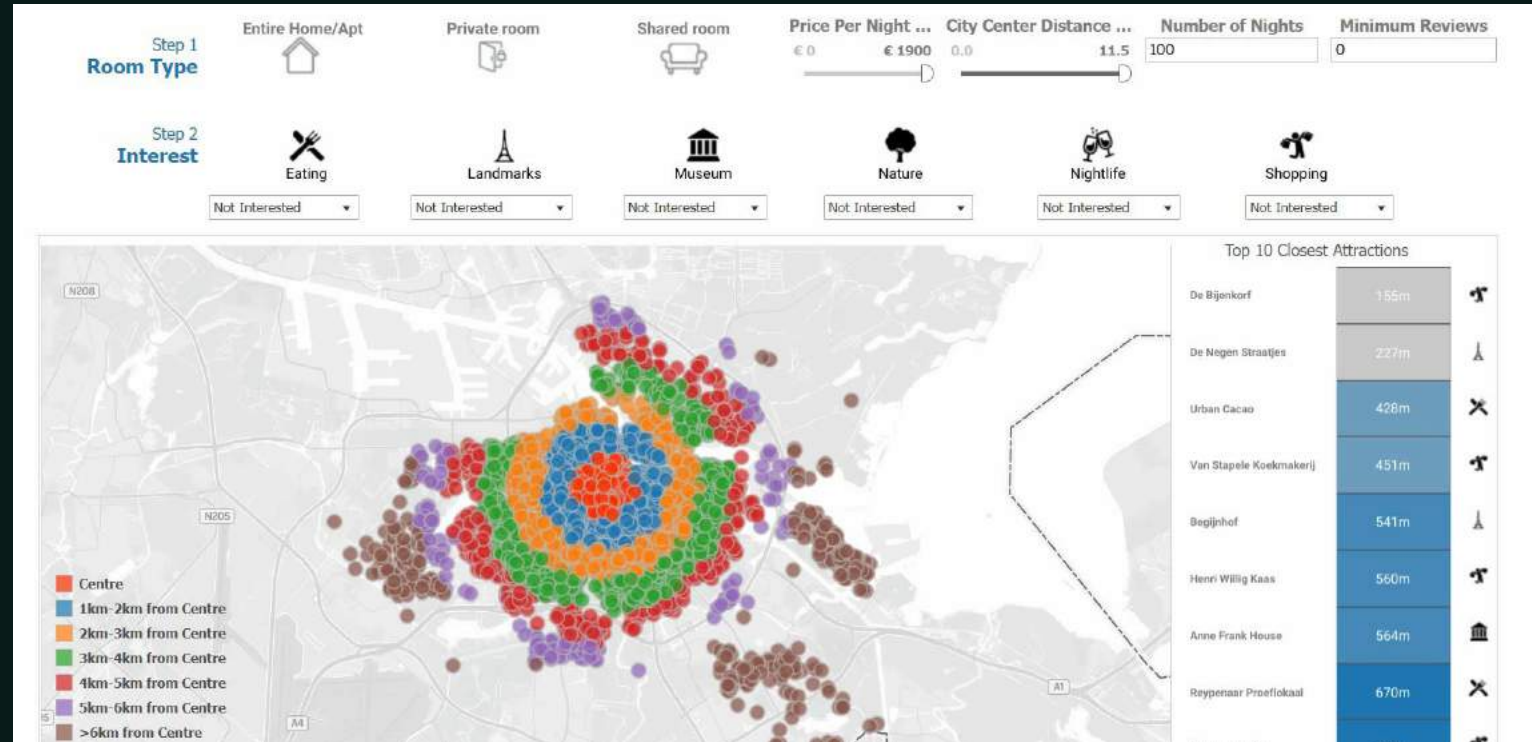
Creating Recommendation  
System





# Dashboard

- Helps the user to easily choose and narrow down the favorable stay
- Contains maps and toggles letting the user to choose the restaurants museums and much more
- Also suggests the 10 near attractions
- Allows the user to choose the property type according to price inputs





THANK YOU!