Coursera Battle of the Neighborhoods

Opening a burger joint in Hamburg

1. Discription of the business problem and a discussion of the backround

Backround:

The client now wants to open a burger joint in Hamburg, that should be placed near the Hafencity. Since 2016, the Elbphilharmonie (nickname "Elphi"), an amazing concert hall is eventually finished and attracts many tourists in Hamburg's still changing new built Hafencity

Business Problem:

- The burger joint should also have special USPs to strengthen its position in the market.

- A market analysis has shown that a higher quality of the ingredients combined with a higher selling price is a profitable strategy in the burger segment. Fewer people go to the classic fast food burger chains such as Mc Donald's or Burger King, but customers experience an increasing need for a luxurious Burger event that interferes a certain amount of coziness during the meal.

2. A description of the data and how it will be used to solve the problem

Based on the criteria thatt we consider important, factors that will influence our decisions are:

- Number of existing burger joints in the neighborhood and type of restaurants

- Distance of neighborhood from city center and Hafencity

A further data exploration will be necessary and should rely on the following data sources:

- number of existing burger joints and location in every neighborhood will be obtained using Foursquare API

- The coordinates of Hamburg center will be obtained using Nominatim geocoding of well known Hamburg location (Rathaus (Townhall) and the Hafencity)
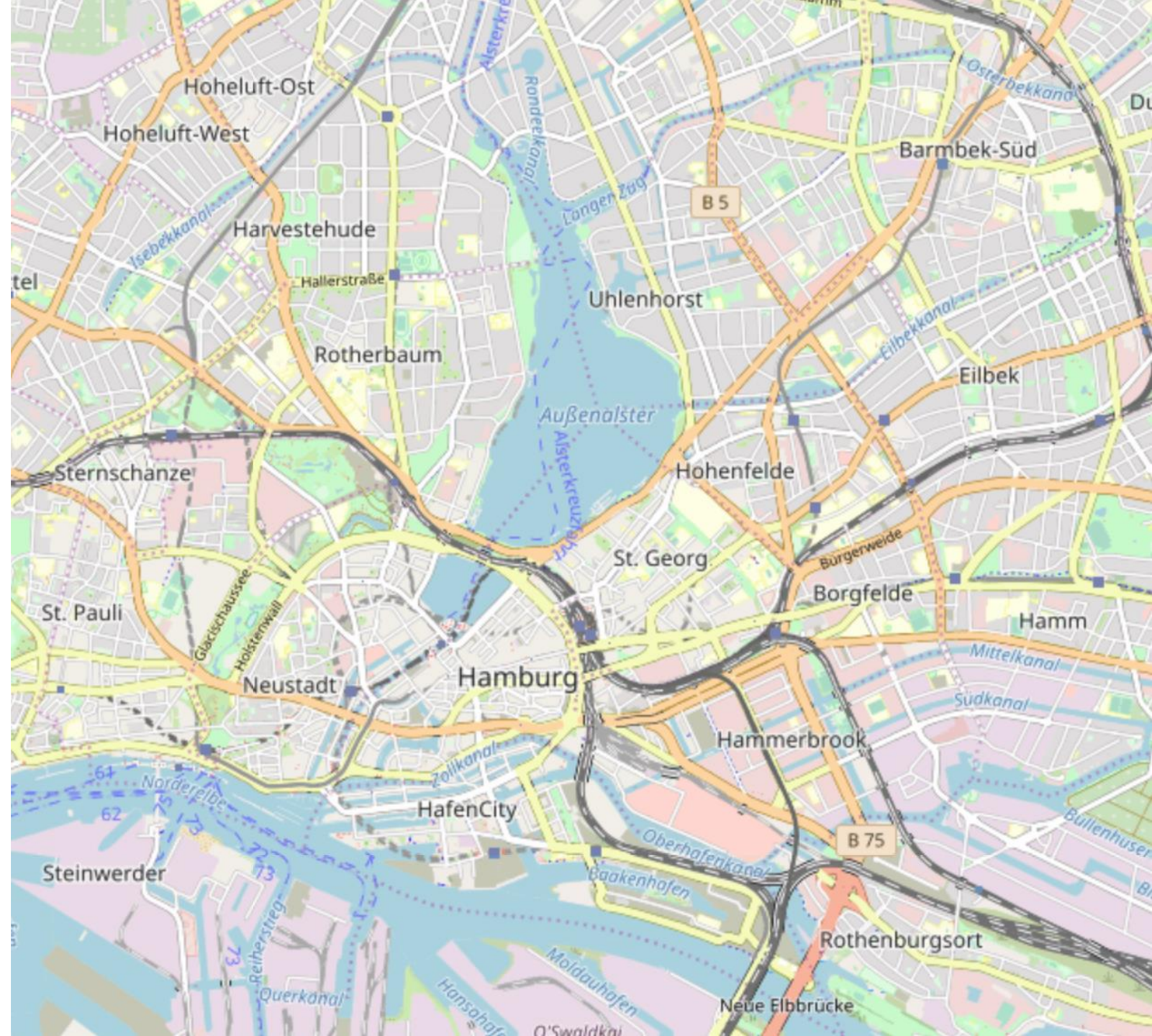
3. Methodology
First step:

- Download Hamburg Data
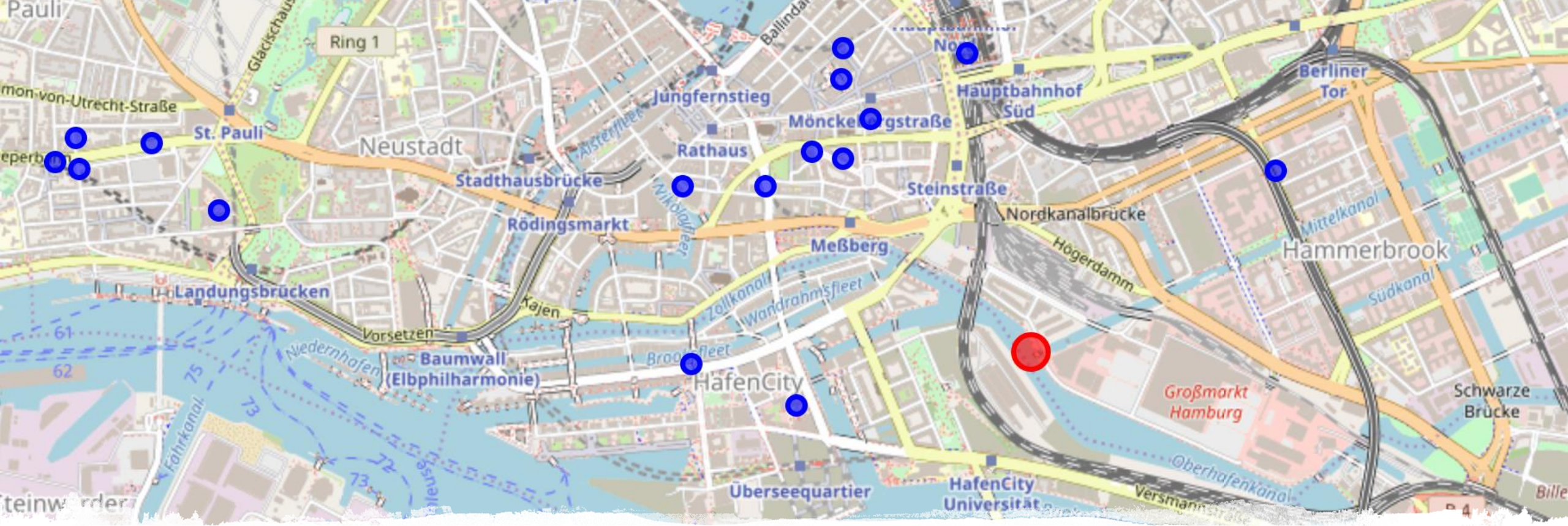- Create a folium map of Hamburg:

Data Preprocessing

- Filtering the dataframe

3. Methodology
Second step:

use Fourtsquare API to find and display all Burger joints within a radius of 6 km around the Rathaus including data preprocessing

4. Results und Discussion

- As one could easily see the distribution of burger joints, it was not necessary to compute the distances to the Hafencity and Rathaus anymore.

- After having displayed the Burger joints on the map, one can easily see, that only two Burger joints are placed directly in the Hafencity. The Hafencity is an amazing tourist hotspot and provides an opportunity to make money with a high priced burger joint. Another option would be to rent a space in Neustadt (North-west from Hafencity), because there is not a single burger joint yet displayed on Fourtsquare.

5. Conclusion

- The Foursquare API showed the competition in Hamburg on the burger market. After having done another analysis, the client should compare the rental prices in Hafencity and Neustadt and try to find a suitable location for the new burger place in Hamburg.