

The background features a series of concentric circles in light gray, some solid and some dashed, creating a ripple effect. A large blue speech bubble is centered on the page, containing the main text.

# Giving recommendations for opening a new restaurant

Capstone Project - The Battle of Neighborhoods (Week 2)

# Business Problem

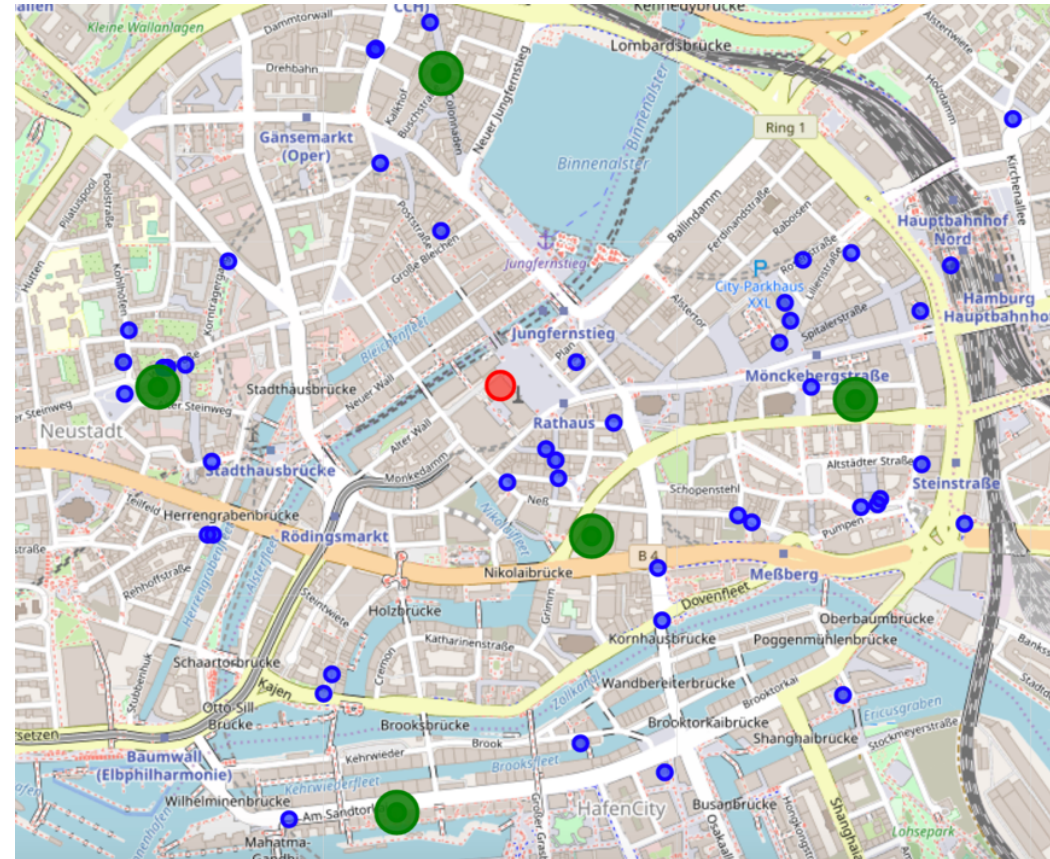
- Someone who is looking to open a restaurant
- What is the density of restaurants in the neighborhood?
- Which recommendations based on geographical and external data can be provided?

# Data Acquisition and cleaning

- the Foursuqare API → using relevant endpoints
- Cleaning and Preparing data by reformatting received JSON-Data to more readable data
- Goal: Use it for Sklearn K-Means Fitting

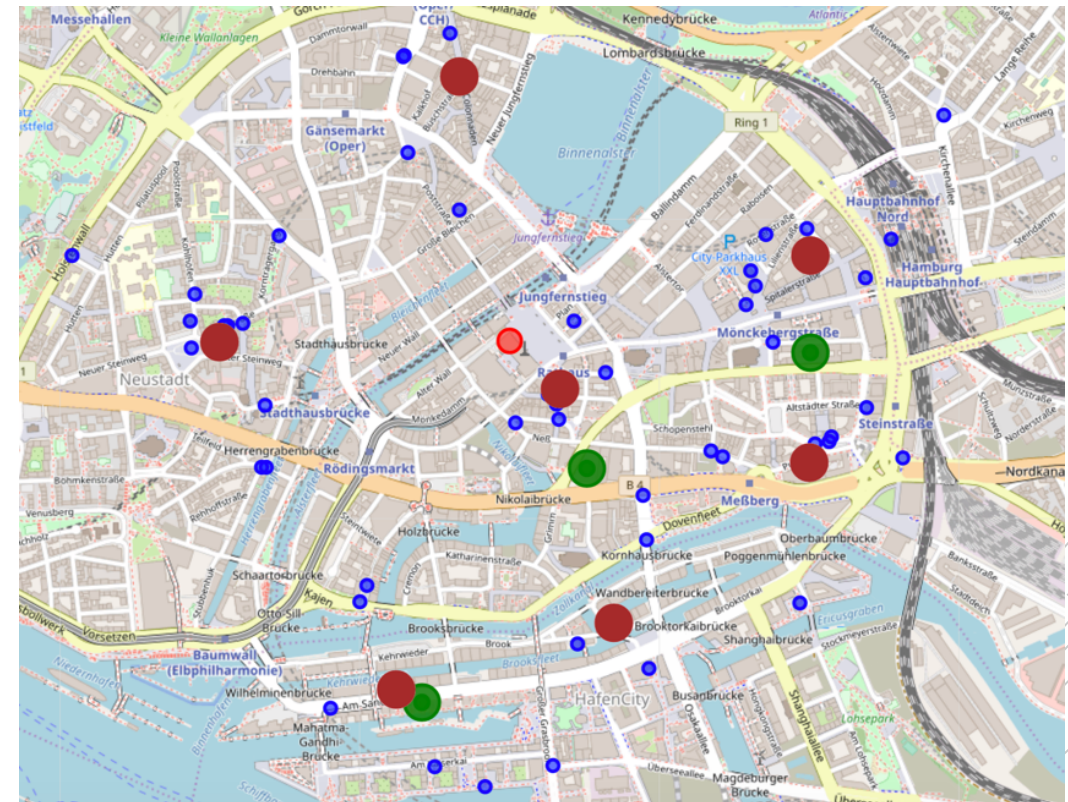
# Exploratory Data Analysis

- Using Sklearn K-Means algorithm
- Geolocation data for each restaurant can be used



# Observations

- Cluster centers are better with  $n=7$
- High amount of restaurants in outer places
- Not many Italian restaurants in the city



# Conclusions

- **Should not be recommended** to open a new restaurant at one of the direct cluster centers, because there are many italian restaurants already available.
- **Good recommendation** to open a restaurant in the northern/western direction to the town hall. But also in between the to cluster centers at the left / middle.



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Thank you!

Capstone