

Examining Conditions To Open A Specific Restaurant In Hamburg, Germany!

Capstone Project

IBM Data Science 2021

Introduction

- Hamburg is the second biggest city after Berlin in Germany and biggest noncapital in the European Union
- It is internationally known for its diverse culture, rich history and modern architecture
- All those aspects are attractive for investors who are interested in opening a restaurant

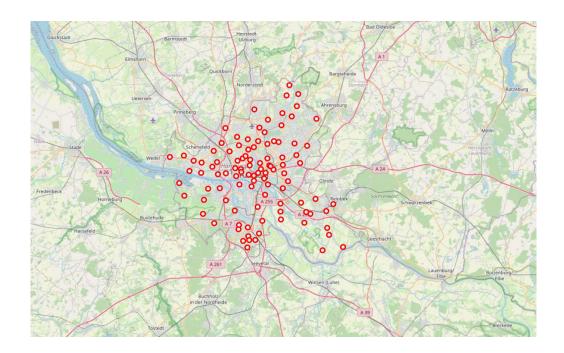
Data Prerequisites

The data consists of

- Hamburgs 7 boroughs and 104 neighborhoods, taken from Wikipedia
- Average Income per Year of Altonas inhabitants, taken from Statistikamt Nord, 2013
- Overall more than 104 rows including more than 10 features
- Several non necessary features were dropped

Displaying Boroughs and Neighborhoods

- Due to the size of the dataset a map is displayed
- You can see that the river (Elbe) divides the city
- The northern part is more dense and populated



Further Data Analysis

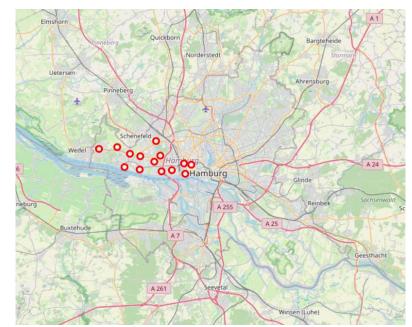
Comparing density of boroughs

- Hamburg-Nord, Altona and Eimsbüttel are the three most dense
- Altona would be the favored choice due to its mostly centered neighborhoods

	Population	Population Density per Sq.km			
Borough					
Hamburg-Nord	314593	101824			
Altona	275264	80357			
Eimsbüttel	267051	72058			
Wandsbek	441012	68788			
Hamburg-Mitte	295411	59443			
Harburg	169426	30740			
Bergedorf	130290	14600			

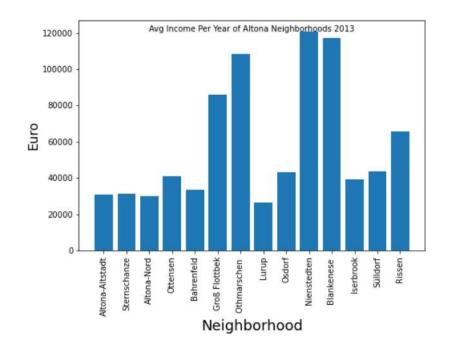
Displaying Altonas Neighborhoods

- Altona has a couple of outlying neighborhoods
- Most of Altonas neighborhoods are centered



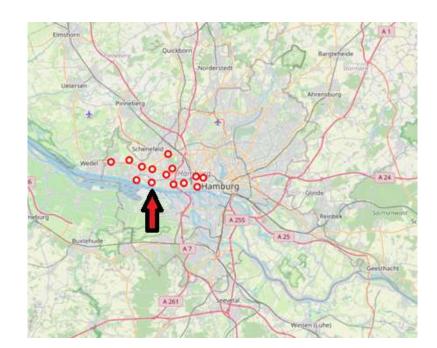
Analyzing Altonas Neighborhoods Income

- Nienstedten has the highest Income Per Year in 2013
- In comparison to Blankenese (2nd) it is more centered
- Also near the river Elbe



Displaying Nienstedten on Map

Here lies Nienstedten (arrow)



Analyzing Nienstedtens Venues

Nienstedten has no specific restaurants listed in the top 10s

N	eighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
7	Nienstedten	Wine Bar	Garden	Bakery	Ice Cream Shop	Hotel	Flower Shop	Grocery Store	Pharmacy	Park	Record Shop

Conclusion and Outlook

- Altona is one of the most dense and centered boroughs of Hamburg, therefore there are a lot of potential customers and tourists to come along
- Nienstedten as a neighborhood of Altona features inhabitants with a high income per year
- Furthermore the view from Nienstedten to the river Elbe and Hamburgs harbour also attracts tourists
- Currently there are no highly favored restaurant venues under the top 10 of Foursquare
- A recommendation to open up a restaurant with any kind of cuisine could be an investment choice
- Next steps would be to analyze the desires of the inhabitants and tourists to choose for example a cuisine style, analyze the price for rental of restaurant space and nearby surroundings of other neighborhoods