

# Family-friendly Places in Munich

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## 1. Introduction

Because I live in Munich, Germany, and I have a family, I decided to explore neighborhoods in Munich and compare them by family-friendly food places (restaurants, bakeries, etc.). Not every place in a city is family-friendly. This project can help analyze Munich from that perspective and help families to explore the city, or maybe even settle in one of the neighborhoods. The audience of this project are families who either live in Munich or visit the city.

## 2. Data

In this section, I'm getting the required data for the analysis and show examples of the data. The data, required for this project is:

- List of Munich districts and their coordinates.
- List of family-friendly places with coordinates.

### Sources

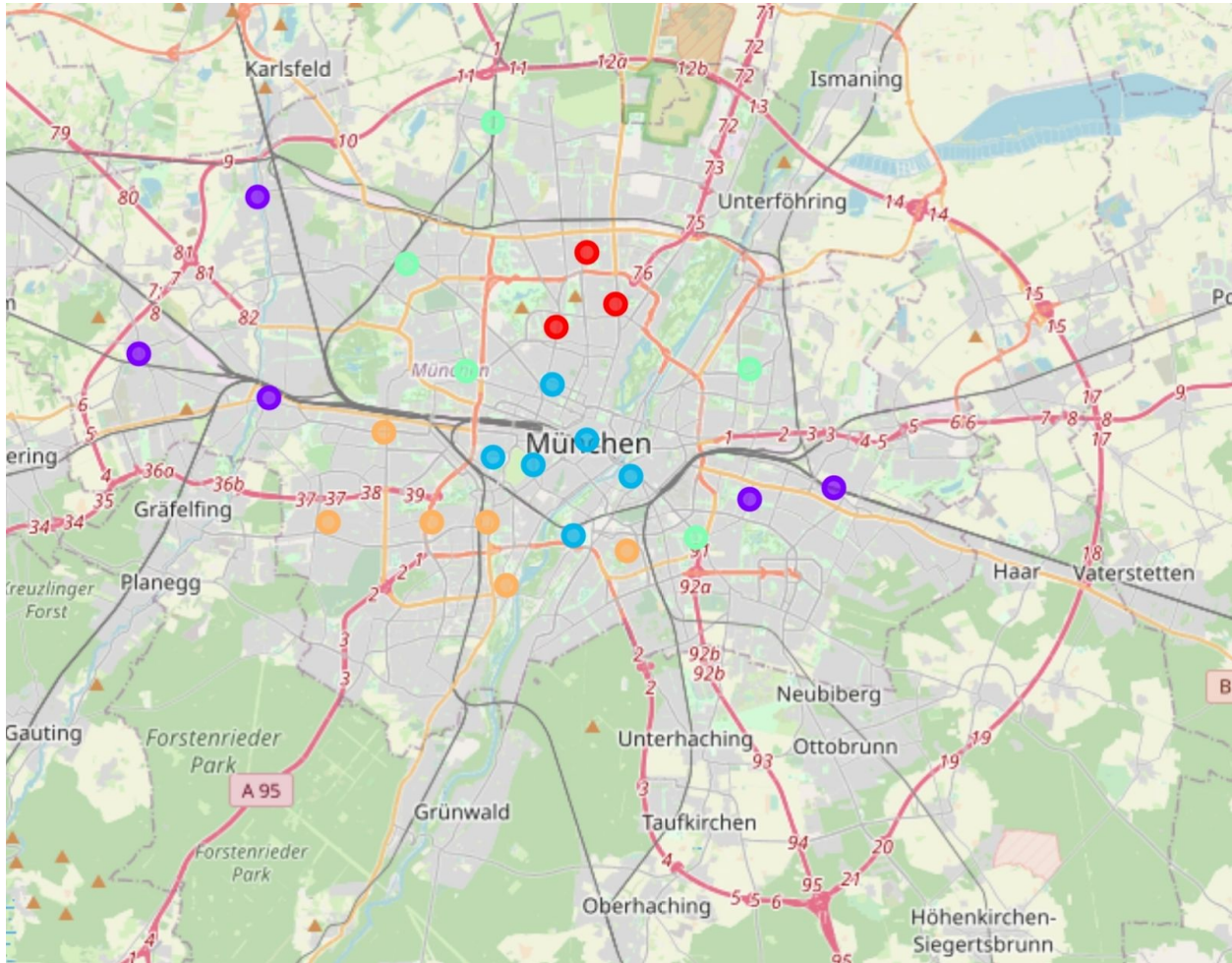
- List of Munich districts: [https://www.toytowngermany.com/wiki/Munich\\_city\\_districts](https://www.toytowngermany.com/wiki/Munich_city_districts)
- District locations are obtained via geopy library based on district names.
- Family-friendly places are obtained via Foursquare API.

## 3. Methodology

In this project, I'm providing families with information on Munich districts and helping to compare them.

As a first step, I'm going to analyze the most common venues in each district. Then I'm going to apply K-means clustering to put the districts in clusters for better comparison. Finally, I'm going to compare each cluster.

## 4. Results



**Cluster 0:** in districts of this cluster families will mostly find cafe, italian restaurant and some kind of asian restaurant.

**Cluster 1:** looks like a restaurant focused cluster. In districts of this cluster families will mostly find: italian restaurant, german restaurant and bakery.

**Cluster 2:** in districts of this cluster families will mostly find cafe and german/bavarian/italian restaurant. notably all the district here are located in the city center, therefore it's understandable that cafe and restaurant are the most common places.

**Cluster 3:** This cluster seems to be similar to Cluster 1, with prevailing number of cafes vs bakeries in Cluster 1. interestingly just like in Cluster 1 districts of this cluster aren't located within the same part of the city.

**Cluster 4:** in districts of this cluster families will mostly find: cafe, italian restaurant, german restaurant and ice cream shop.

## 5. Discussion

My analysis shows that districts in Munich have different predominant family-friendly places, and therefore it's possible to cluster them in various categories.

I learned that most of all, Munich has cafes, Italian restaurants, German restaurants, Greek restaurants, and bakeries.

Cafes are prevailing in the city center, while restaurants are prevailing outside of the city center. Interestingly, only one cluster showed a good amount of ice cream shops (southern region of Munich).

Finally, I'd like to note that the analysis was done on the places returned by Foursquare API with family-friendly keyword. Analyzing food places without such constraints may give a different result, but the goal of this project was to focus on family-friendly places.

## 6. Conclusions

This project helps families in Munich to better understand the city districts from the eating places perspective. I grouped similar districts into clusters and showed their difference. There's no better cluster, everyone can decide what's best for them, because each cluster has many food options. The project can be used as part of a bigger study on Munich districts to find family friendly districts using multiple different parameters, not just eating places.