

Comparison of Venues Between Beyoğlu and Kadıköy

Problem Description & Discussion of the Background

Istanbul is one of the biggest cities in the world with a population over 15 million. It is also a big entertainment center for both tourists and residents. Until a few years ago, Beyoğlu was the number one borough for all kinds of entertainment venues, but it started to change after a few terrorist attacks and bad political decisions. After that Kadıköy borough which is located in the Asia side of the city increased its popularity. On the other hand, city authorities tries to attract people to Beyoğlu, and increase its popularity again.

In this project I will compare two boroughs of Istanbul which are central places for entertainment venues.

This will help investors that interested in opening a venue in the city. It will be helpful if we can provide information about density, location, and category information of venues to them.

Data Description

Based on the problem description following factors will be used:

- Number of venues in given borough
- Category of venues
- Density of venue categories for each borough
- Average house renting prices

To obtain above information I will use

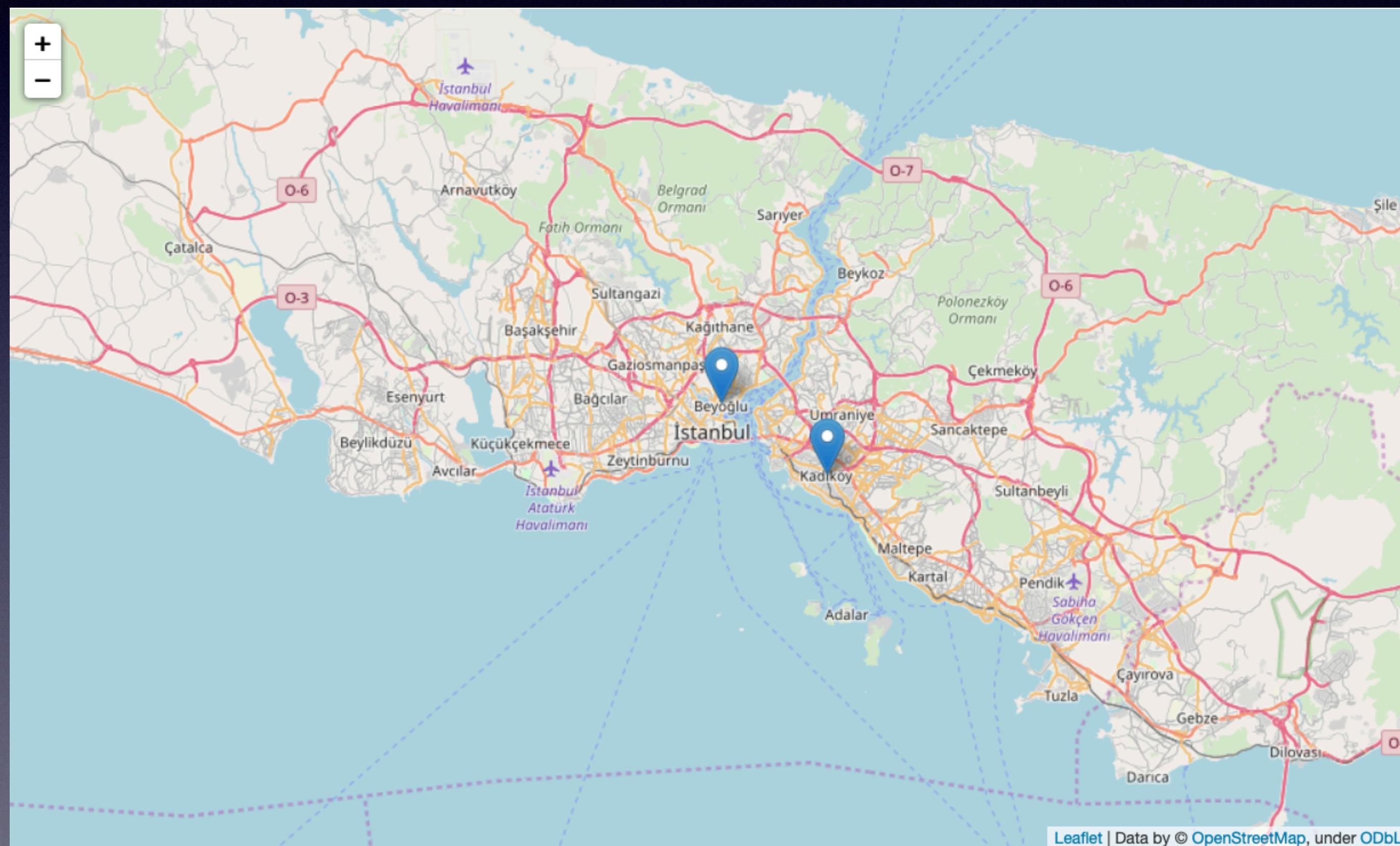
- Python geopy library to convert an address into latitude and longitude values.
- Foursquare API to get number, category, and location information of nearby venues in selected boroughs.
- Finally Zingat website to get average house renting prices for two boroughs which also gives information about some demographic information of residents.

Methodology

I will first get venues near a selected venue for each borough, and then explore venues with Foursquare API.
After getting the venues, I will extract venue categories and show top 10 category for each borough.

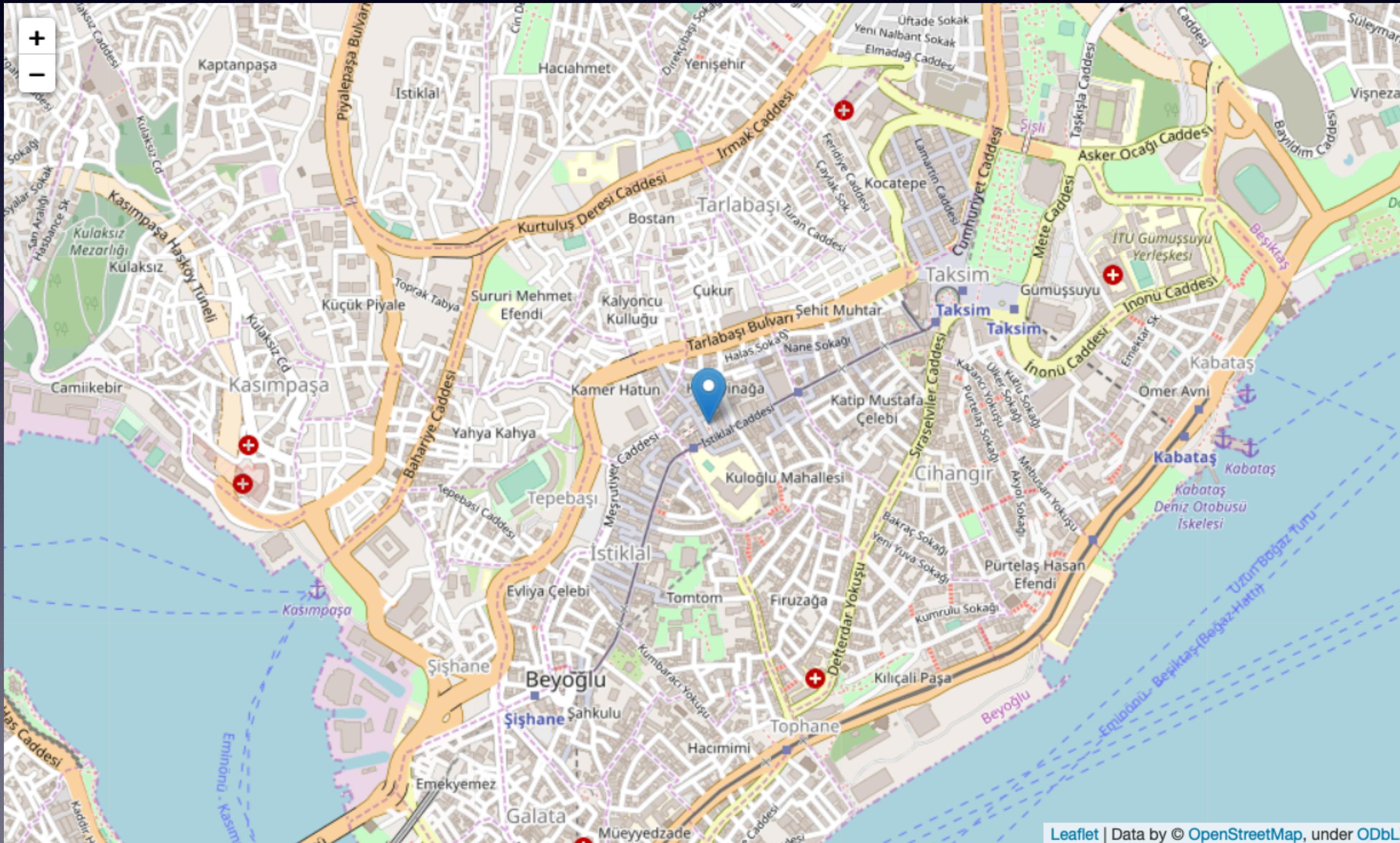
Exploratory Data Analysis

Map of Istanbul with Beyoğlu and Kadıköy marked



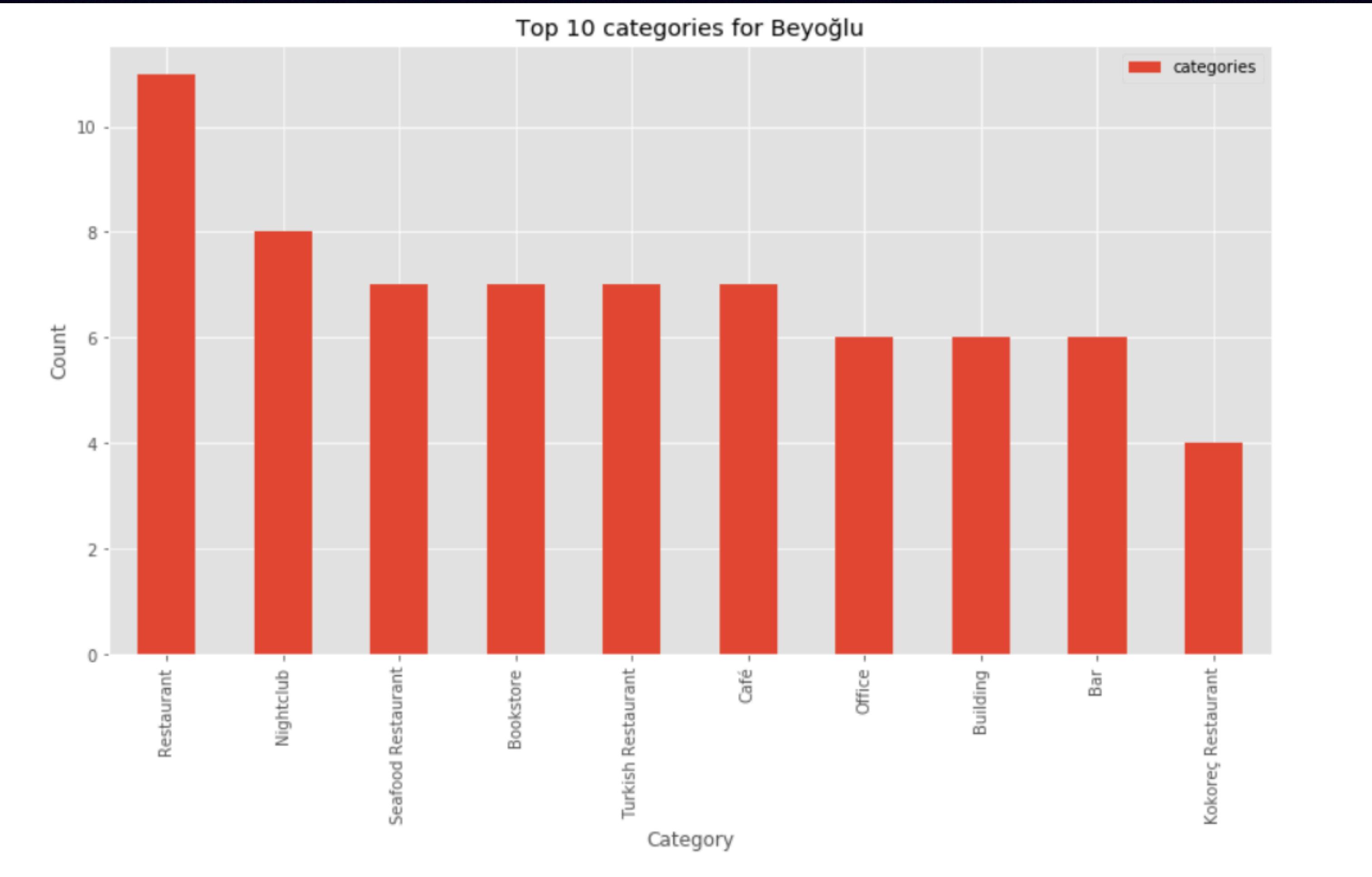
Data Exploring for Beyoğlu

I will take "Çiçek Pasajı" as a center point for Beyoğlu, because it is almost the mid point for famous Istiklal Street which contains most of the entertainment places



Data Exploring for Beyoğlu

Top 10 Venue Categories for Beyoğlu



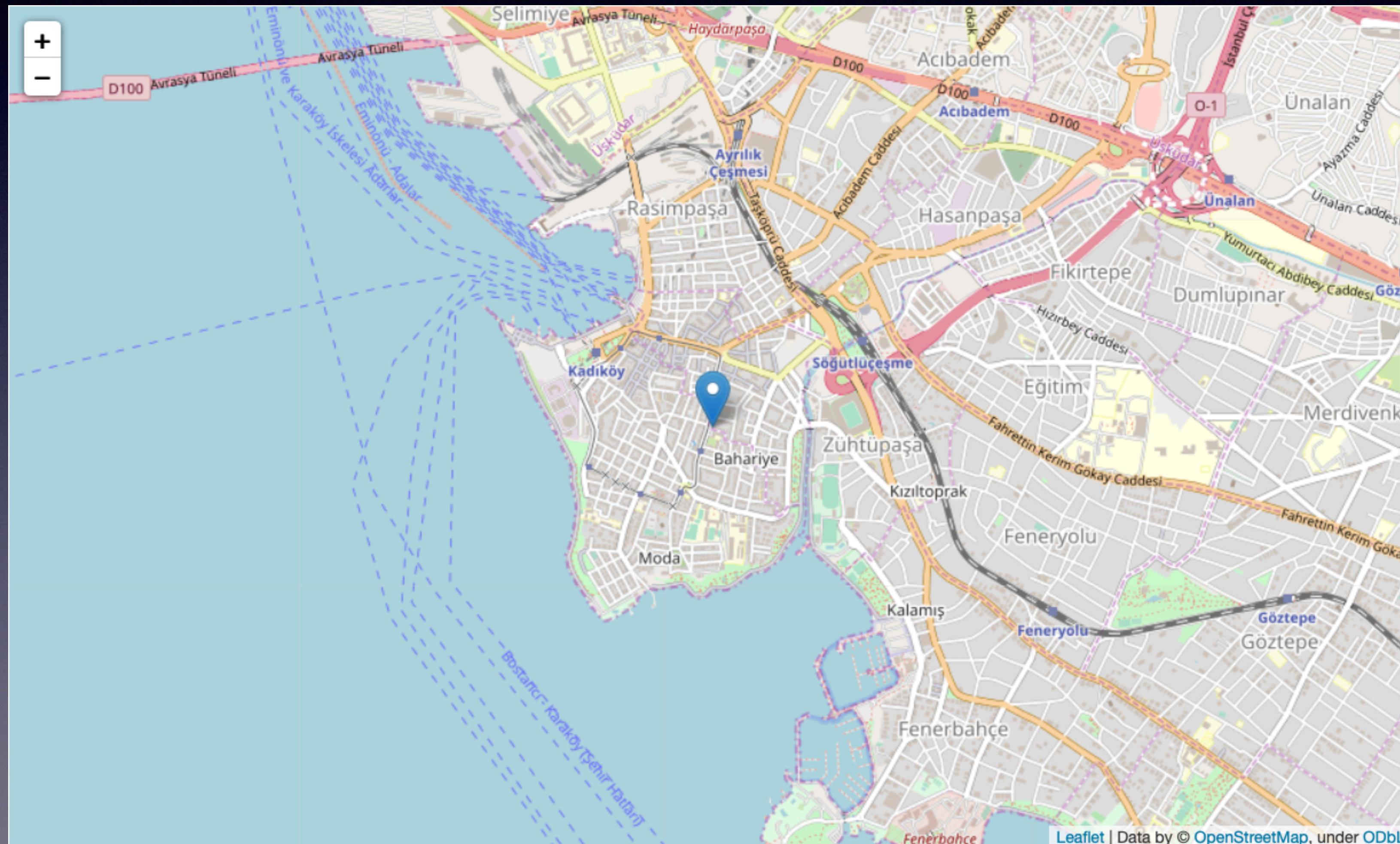
Data Exploring for Beyoğlu

Top 10 Venue Categories table with average rent price

Borough	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	Average Rent
0 Beyoğlu	Restaurant	Nightclub	Seafood Restaurant	Bookstore	Turkish Restaurant	Café	Office	Building	Bar	Kokoreç Restaurant	3413.0

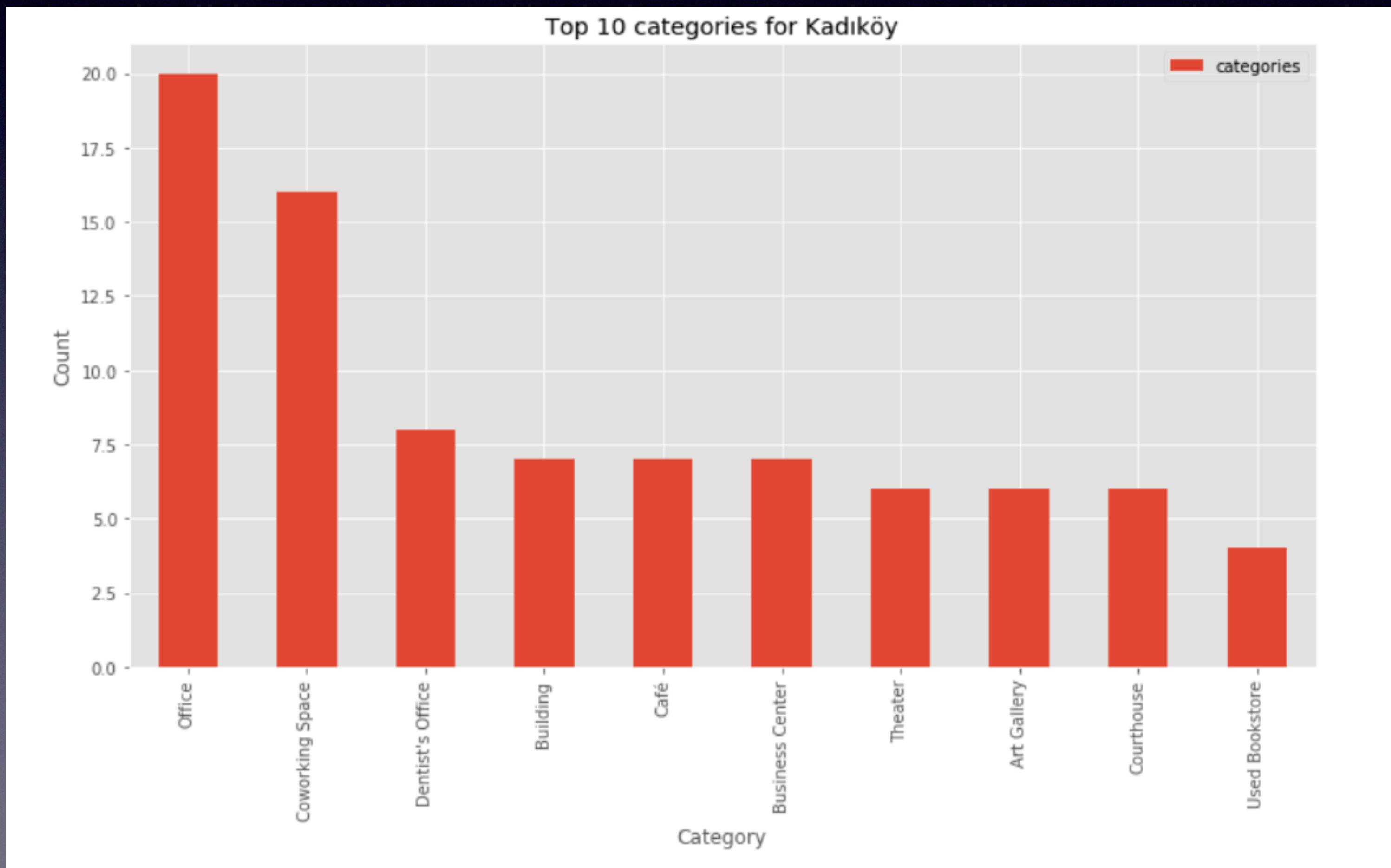
Data Exploring for Kadıköy

I will take "Moda Sahnesi" as center to explore venues for Kadıköy borough.



Data Exploring for Kadıköy

Top 10 Venue Categories for Kadıköy

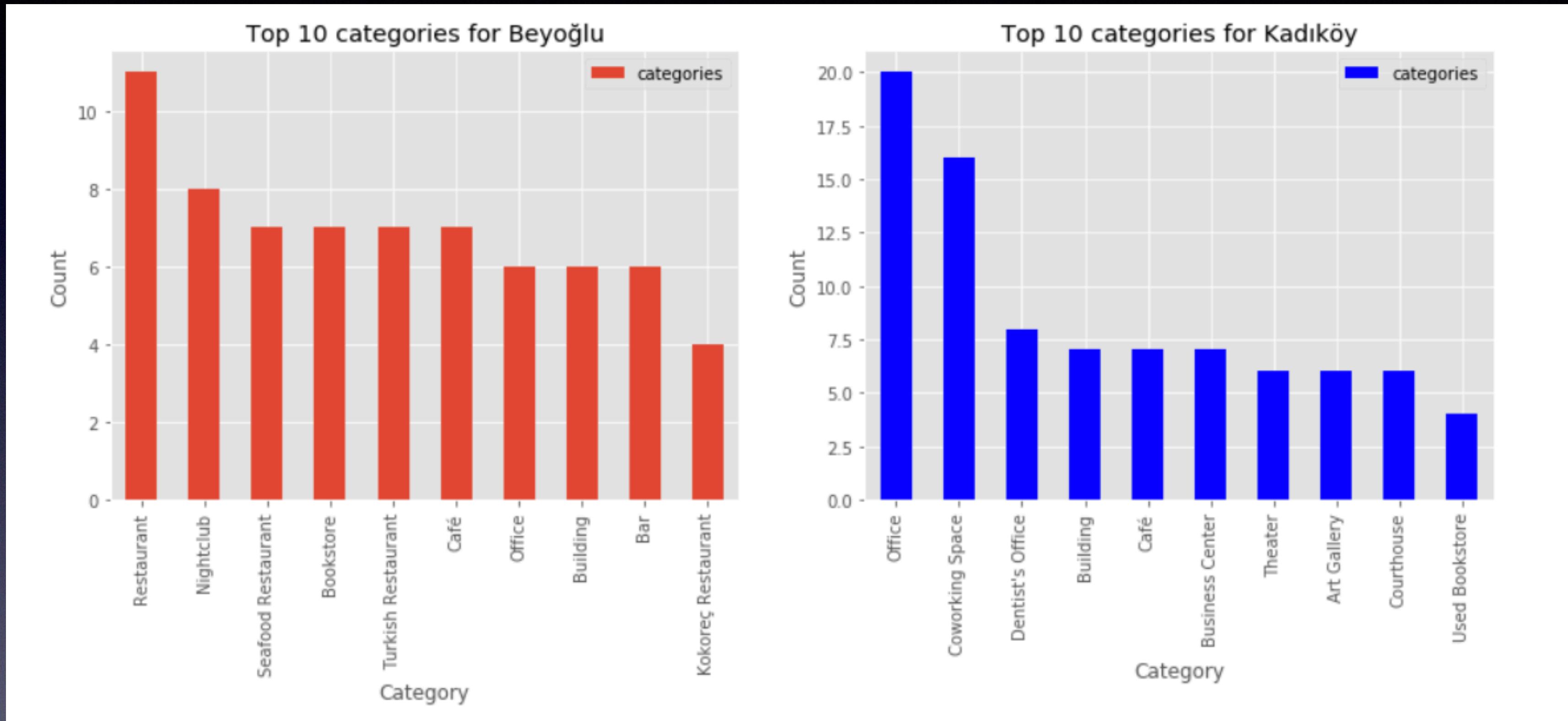


Data Exploring for Kadıköy

Top 10 Venue Categories table with average rent price

	Borough	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	Average Rent
0	Kadıköy	Office	Coworking Space	Dentist's Office	Building	Café	Business Center	Theater	Art Gallery	Courthouse	Used Bookstore	2179.0

Merged Results for Beyoğlu and Kadıköy



	Borough	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	Average Rent
0	Beyoğlu	Restaurant	Nightclub	Seafood Restaurant	Bookstore	Turkish Restaurant	Café	Office	Building	Bar	Kokoreç Restaurant	3413.0
1	Kadıköy	Office	Coworking Space	Dentist's Office	Building	Café	Business Center	Theater	Art Gallery	Courthouse	Used Bookstore	2179.0

Results and Discussion

In this project, I started with explaining the intention of project, and gave a brief background information about Istanbul. I selected the two popular boroughs of Istanbul, and showed them on the map.

First, I started to analyze venues for Beyoğlu borough. I received the venue information near the middle point of İstiklal Street, and then extracted categories of venues. Then I obtained the top 10 venue categories. Finally, I showed the top 10 result as a bar plot.

I repeated the same process for Kadıköy borough, and merged the results.

I also received the average house renting prices for both boroughs by parsing a real estate website.

Since I selected a small part of the boroughs, it may not give exact opinion, but it gives a general idea about venues, their densities and types in the determined areas.

Conclusion

Purpose of this project was to give an idea to investors that will open a venue in a popular place of Istanbul.

In spite of Beyoğlu lost its popularity recently, it is still a good option to opening an entertainment based place. On the other hand, renting price averages are much more expensive than Kadıköy.

This data can give information not just to investors, but also to city authorities to take action.

Thank you

Coşkun Deniz