

Lisbon

Introduction - The case for Lisbon



Regarding Lisbon I will try to map the parish of the city against foursquare in order to see what are the main activities of each parish.



The purpose is to help to decide in which parish should I open a restaurant or any other kind of business that I may considerer.



For this analysis I will study the viability of opening a seafood restaurant. The target of my restaurant will be mostly tourists.



The first obstacle that I may find is to get the GPS coordinates of all the parishes of the city.



This exercise could be helpful to anyone interested in open a new business.

The Data - Lisbon Neighborhoods

For this assignement the data was collected from the website <https://services.arcgis.com>.

The Lisbon parishes are:

Santo António
Parque das Nações
Marvila
Ajuda
Areeiro
Santa Maria Maior
Alvalade
Belém
Estrela
Arroios
Santa Clara
Avenidas Novas

Carnide
São Domingos de Benfica
Beato
Campolide
Alcântara
Campo de Ourique
São Vicente
Olivais
Misericórdia
Lumiar
Penha de França
Benfica

The Data - Lisbon Neighborhoods

The information obtained from the website needed to be converted to GPS format:

	Parish	Latitude	Longitude
0	Santo António	38.72134487346995	-9.148808060562017
1	Parque das Nações	38.774809235541774	-9.095477992530249
2	Marvila	38.74793529763537	-9.110954035254304
3	Ajuda	38.712179538844204	-9.19865159430916
4	Areeiro	38.741380367314136	-9.13352482861989

Analyzing the info

- The information from Foursquare was collected and crossed with the information from the Lisbon parishes. There were some filters applied:
- From Foursquare only restaurants where queried;
- From the query only seafood restaurants where selected.
- **The result:**

Neighborhood	Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category	ZipCode
Santo António	38.72134487346995	-9.148808060562017	Cervejaria Sem Vergonha	38.717711	-9.156884	Seafood Restaurant	1250
Santo António	38.72134487346995	-9.148808060562017	Cervejaria Ramiro	38.720347	-9.135703	Seafood Restaurant	1150-007
Santo António	38.72134487346995	-9.148808060562017	Sea Me - Peixaria Moderna	38.710706	-9.144251	Seafood Restaurant	1200-241
Parque das Nações	38.774809235541774	-9.095477992530249	D' Bacalhau	38.771297	-9.092237	Seafood Restaurant	1900-356

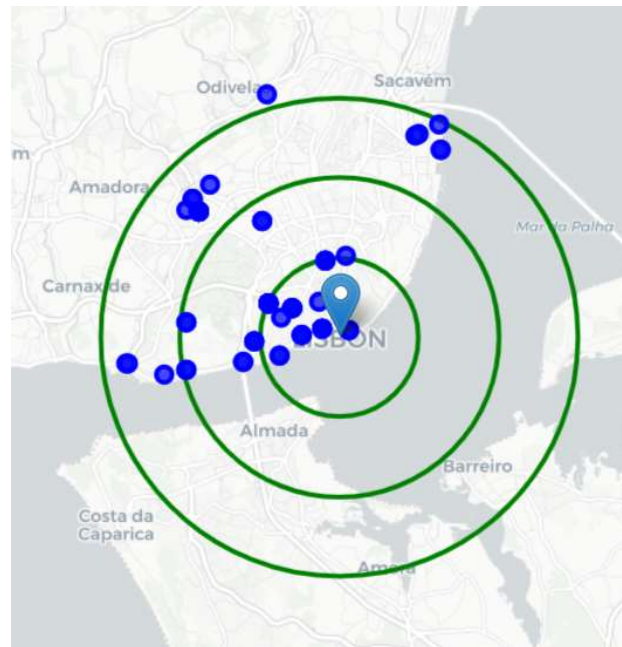
	Neighborhood	Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category	ZipCode	Distance to Seafood
46	Santo António	38.72134487346995	-9.148808060562017	Cervejaria Sem Vergonha	38.717711	-9.156884	Seafood Restaurant	1250	573.910765
54	Santo António	38.72134487346995	-9.148808060562017	Cervejaria Ramiro	38.720347	-9.135703	Seafood Restaurant	1150-007	857.705045
67	Santo António	38.72134487346995	-9.148808060562017	Sea Me - Peixaria Moderna	38.710706	-9.144251	Seafood Restaurant	1200-241	795.252564
106	Parque das Nações	38.774809235541774	-9.095477992530249	D' Bacalhau	38.771297	-9.092237	Seafood Restaurant	1900-356	23.639360
113	Parque das Nações	38.774809235541774	-9.095477992530249	Senhor Peixe	38.771084	-9.092245	Seafood Restaurant	1990-096	23.639360

Analyzing the info

From each seafood restaurant the distance to the nearest seafood restaurant was measured. Average distance of 665 meters.

Analyzing the info

Here we can see how the seafood restaurant are spread all over the city.



Analyzing the info

Next step, to get the number of restaurants nearby each seafood restaurante (<250m).

	Neighborhood	Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category	ZipCode	Distance to Seafood	Restaurants NearBy
46	Santo António	38.72134487346995	-9.148808060562017	Cervejaria Sem Vergonha	38.717711	-9.156884	Seafood Restaurant	1250	573.910765	3
54	Santo António	38.72134487346995	-9.148808060562017	Cervejaria Ramiro	38.720347	-9.135703	Seafood Restaurant	1150-007	857.705045	12
67	Santo António	38.72134487346995	-9.148808060562017	Sea Me - Peixaria Moderna	38.710706	-9.144251	Seafood Restaurant	1200-241	795.252564	48
106	Parque das Nações	38.774809235541774	-9.095477992530249	D' Bacalhau	38.771297	-9.092237	Seafood Restaurant	1900-356	23.639360	6
113	Parque das Nações	38.774809235541774	-9.095477992530249	Senhor Peixe	38.771084	-9.092245	Seafood Restaurant	1990-096	23.639360	7

Analyzing the info

The target are tourists. So we will focus on áreas with some restaurantes, but not many (between 5 and 25). Moreover we will select only seafood restaurants with a minimum distance of 500m to another seafood restaurante.

Locations with no more than two restaurants nearby: 38

Locations with no Seafood restaurants within 500m: 41

Locations with both conditions met: 15



Analyzing the info

By ZipCode our focus should start
on those áreas:

ZipCode	
0	1150-007
1	1350
2	1245-896
3	1600-130
4	1000-053

Further Developments

For further developments, there should be taken other factors in account:

- If the target is for tourists and seafood restaurants are quite expensive kind of meal, the distance from accommodations (hotel, hostel) with good rates (example: tripadvisor) could be a point for further studies;
- Also the proximity of the most visited places in the city (museums, palaces, gardens and others) should also be considered;
- The cost of rental/ acquisition where not considered and that's a crucial factor, since that cost could vary a lot between parishes;
- The impact of Covid-19 was not considered.