



The trending venues in Lisbon and Rio de Janeiro.

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CASE STUDY, APPLICATION OF CLUSTERING TO  
FIND SIMILARITIES BETWEEN TRENDING PLACES

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# Introduction

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Going to holidays and choose places to stay and enjoy might be a challenge. Sometimes places were made for tourists and we can't enjoy local culture. and some trending places are too fancy and expensive, at the end have poor quality, as many restaurants we can see that food isn't fresh and all customers are foreign people. Maybe all tourists were fooled





# Data and Source

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We used data from Foursquare in order to collect some characteristics from each spot.

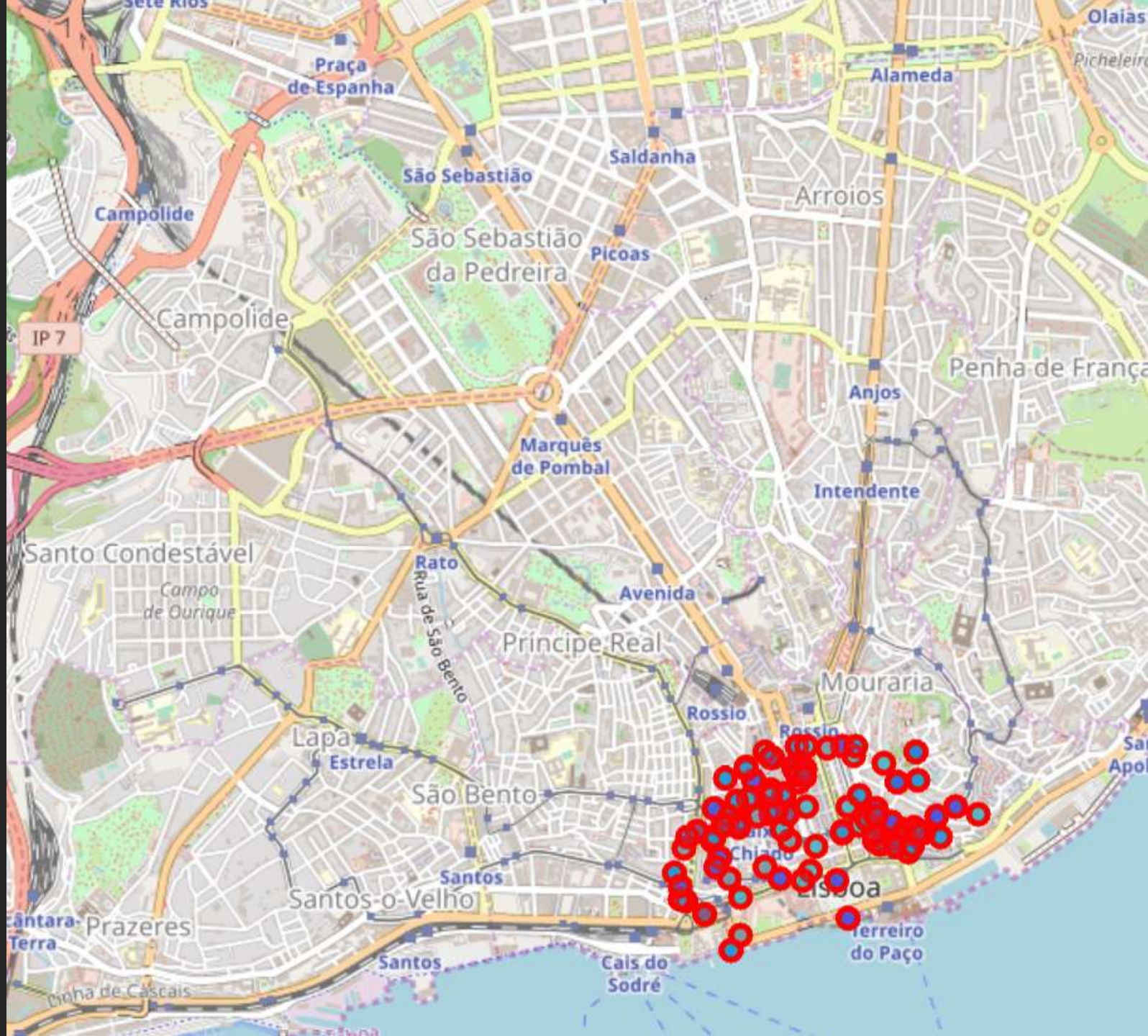
Such as categories, number of reviews, rating, average cost, name and location.





# Top 100 venues in LISBOM

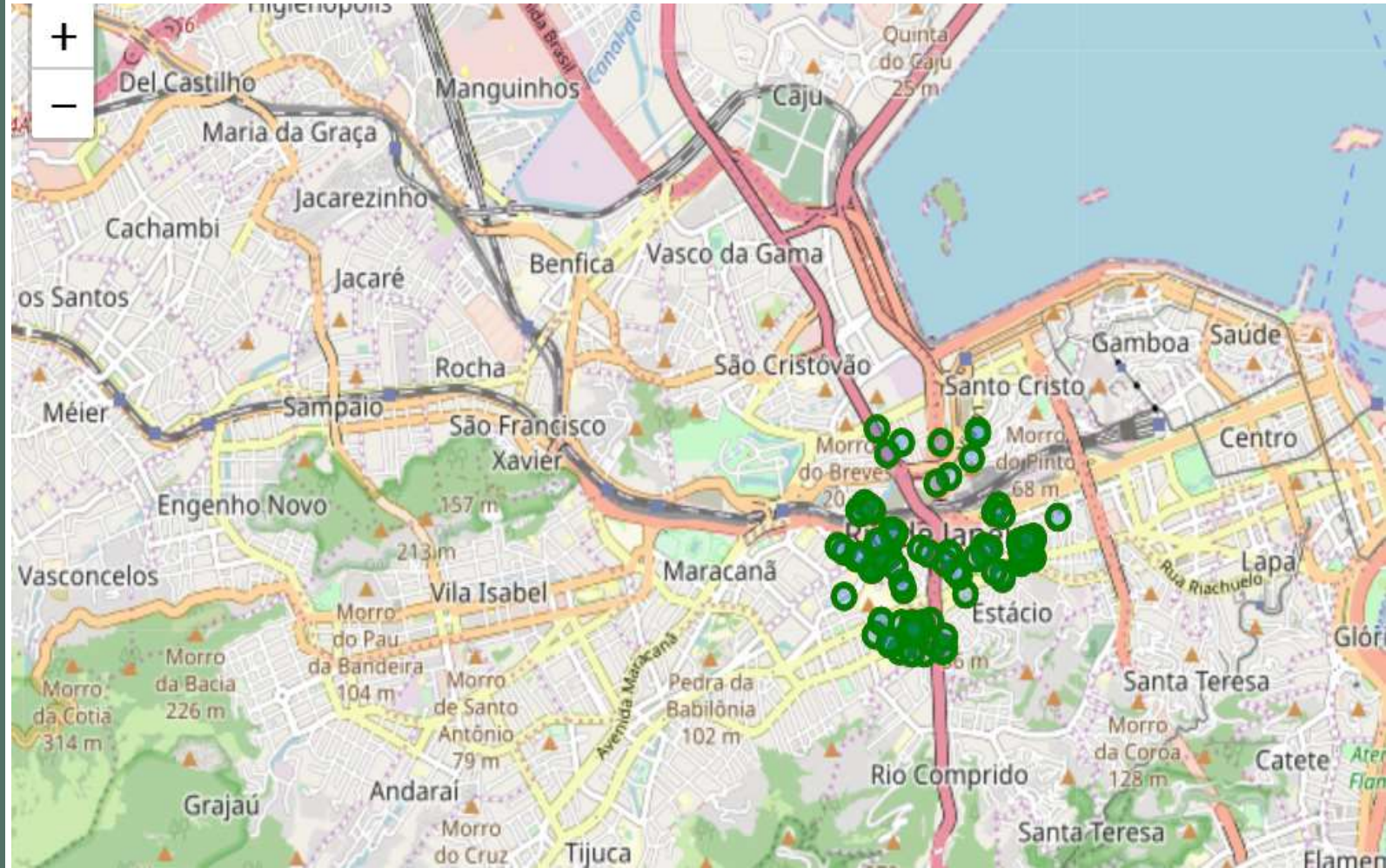
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# Top 100 Venues in Rio de Janeiro

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# Table Visualization

	name	categories	rating	Average_cost	status	nr_of_reviews	ok	lat	lng	location	output
0	Praça do Comércio (Terreiro do Paço)	Plaza	9.4	empty	False	2518	False	38.707960	-9.136657	Lisbon	1
1	Yes! Lisbon Hostel	Hostel	9.2	empty	False	94	False	38.709131	-9.137634	Lisbon	3
2	Cais das Colunas	Plaza	9.0	empty	False	123	False	38.706628	-9.136121	Lisbon	1
3	Pousada de Lisboa, Terreiro do Paço	Hotel	8.8	empty	False	33	False	38.708294	-9.137870	Lisbon	3
4	Da Prata 52	Portuguese Restaurant	8.8	Moderate	False	170	False	38.709613	-9.136404	Lisbon	1
...	...	...	...	...	...	...	...	...	...	...	...
195	Sabor Arretado	Comfort Food Restaurant	6.1	empty	False	6	False	-22.917728	-43.211805	Rio de Janeiro	0
196	Joaquim e Terezinha	Brazilian Restaurant	6.3	Moderate	False	14	False	-22.918773	-43.213933	Rio de Janeiro	2
197	Mag's Lanches	Food	5.9	empty	False	10	False	-22.911819	-43.214731	Rio de Janeiro	0
198	MegaMatte	Snack Place	6.0	Cheap	False	15	False	-22.911622	-43.202445	Rio de Janeiro	4
199	Gallant Hotel	Hotel	5.5	empty	False	29	False	-22.912514	-43.210548	Rio de Janeiro	3

# Now we applied non supervised technique called K-mean, with $k = 5$

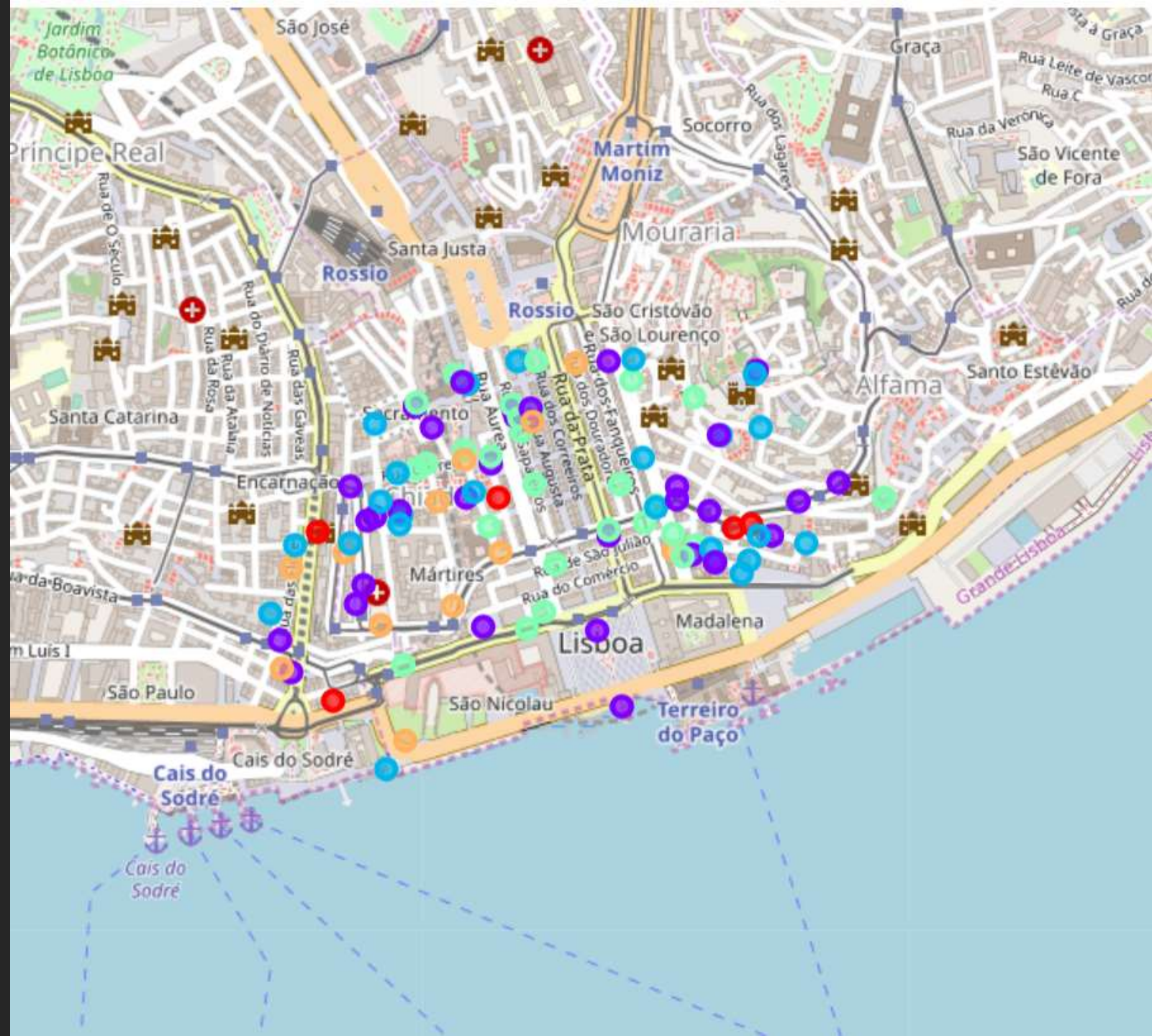
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Let's check the result using package Folium

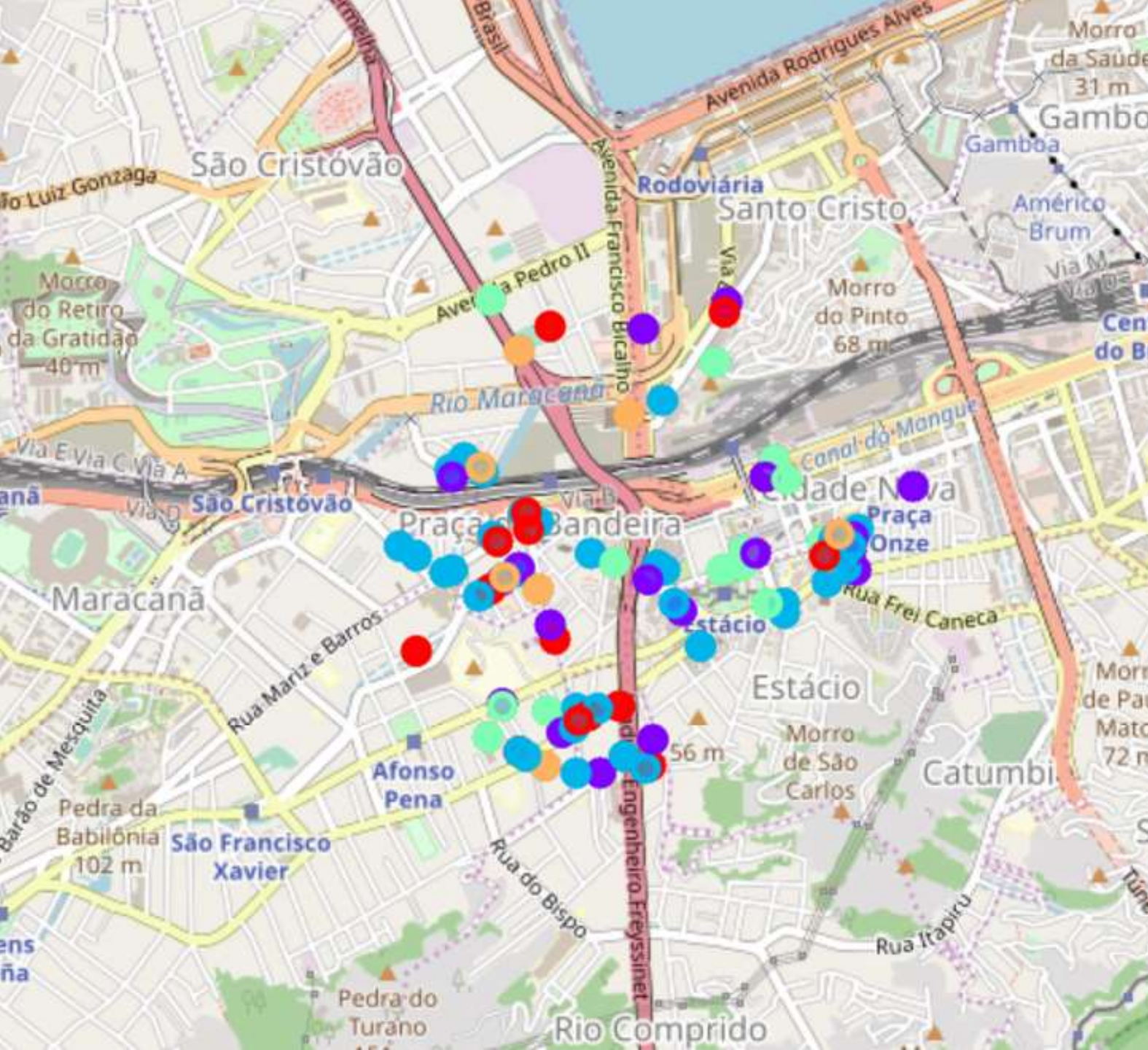


# Each location and its cluster - Lisbon

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Each location  
and its cluster  
– Rio de  
Janeiro

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	name	categories	rating	Average_cost	nr_of_reviews	location
	Nova Pombalina	Snack Place	8.8	Cheap	89	Lisbon
	Nova	Wine Bar	8.5	Moderate	14	Lisbon
	Tágide Wine & Tapas Bar	Tapas Restaurant	8.6	Expensive	136	Lisbon
	Ao 26 – vegan food project	Vegetarian / Vegan Restaurant	8.9	Moderate	116	Lisbon
	Ribeira das Naus	Waterfront	8.9	empty	209	Lisbon
	São Luiz Teatro Municipal	Theater	9.3	empty	113	Lisbon
	Wine Not?	Tapas Restaurant	8.2	Expensive	26	Lisbon
	Garrafeira Nacional	Wine Shop	8.7	empty	74	Lisbon
	By the Wine - José Maria da Fonseca	Wine Bar	9.5	Moderate	536	Lisbon
	Armazéns do Chiado	Shopping Mall	8.2	empty	1010	Lisbon
	Lisbon Art Stay	Wine Bar	8.2	Moderate	8	Lisbon
	Sol e Pesca	Tapas Restaurant	9.0	Cheap	258	Lisbon
	São Cristóvão Futebol e Regatas	Soccer Field	7.4	empty	16	Rio de Janeiro
	All In Sports Bar	Sports Bar	6.9	Cheap	12	Rio de Janeiro
	Poró Restaurante	Vegetarian / Vegan Restaurant	7.0	Moderate	12	Rio de Janeiro
	Casa Vila da Feira e Terras de Santa Maria	Sports Club	7.4	empty	39	Rio de Janeiro
	Boulevard Cidade Nova	Shopping Plaza	6.7	empty	57	Rio de Janeiro
	SuperVia - Estação Leopoldina	Train Station	5.8	empty	40	Rio de Janeiro
	Vila Mimosa	Strip Club	6.0	Expensive	48	Rio de Janeiro
	Mundial Supermercados	Supermarket	5.8	empty	82	Rio de Janeiro
	MegaMatte	Snack Place	6.0	Cheap	15	Rio de Janeiro

# An example:5th cluster and its characteristics

Categories: {entertainment cluster: (majority ) - bars, pubs and clubs}

Price between moderate and Expensive



# Conclusion

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If we are interested in looking for a moment to entertainmet: we can use 5<sup>th</sup> cluster and search for a places that are similar in Lisbon and Rio.

See an example: if you love nova pombalina when you stay in Lisbon, perhaps when you go to Rio de Janeiro you might like to know Megamatte. It's a nice cluster so look at when you are looking for entertainment.

If you are interested in other places like hotels you can seen in other cluster. And so on.