

Capstone Project - The Battle of the Neighborhoods (Week 2)

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1 – Problem:

Stakeholder wants to find:

- all the theatres near “Rotunda do Marquês”;
- pick the theatre with higher classification in Foursquare;
- choose the closest restaurant to that theatre.

Data Section

Data imported from:

<http://geodados.cm-lisboa.pt/datasets/teatros/data>.

```
df_theatres.head()
```

```
]:
```

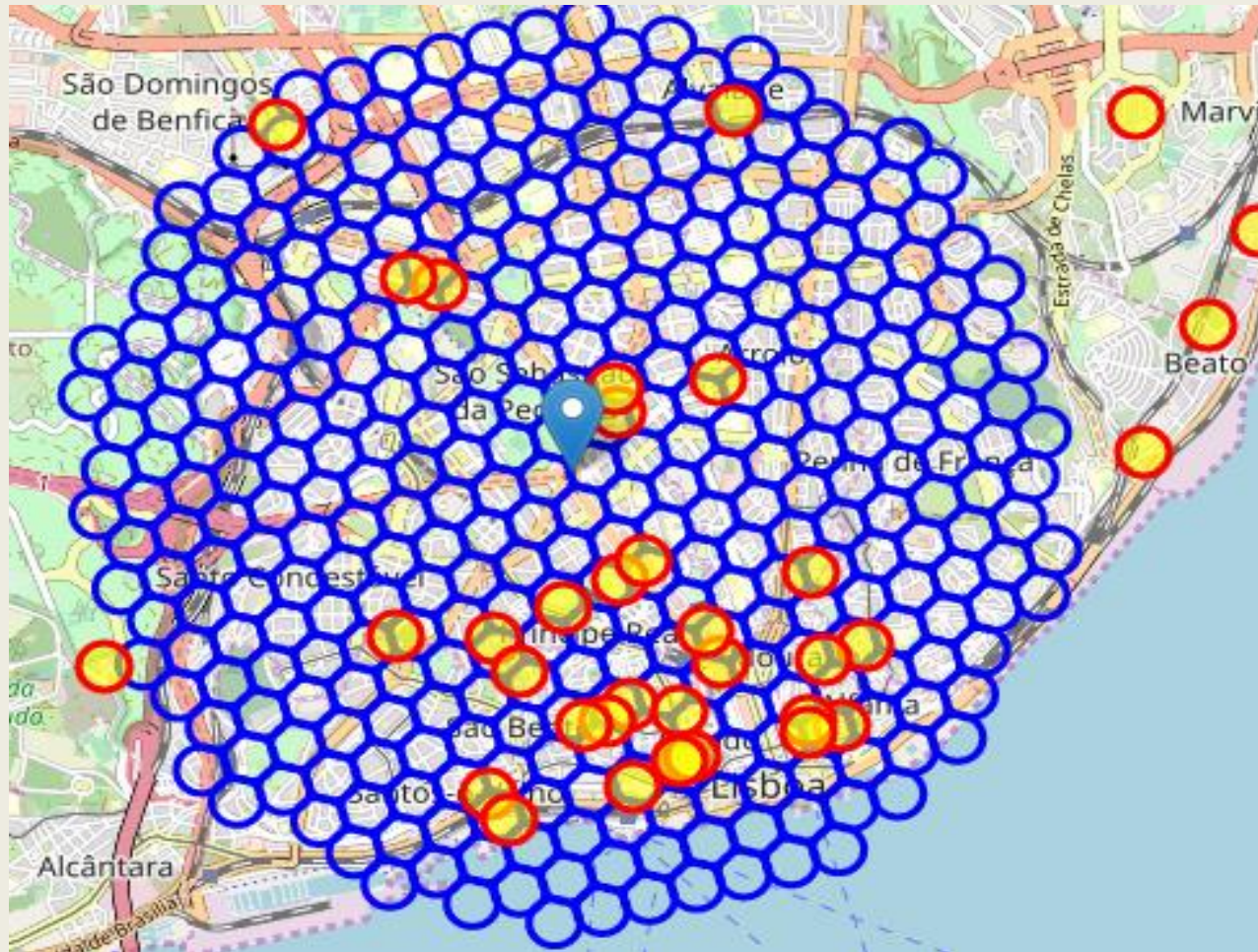
	X	Y	OBJECTID	INF_NOME	INF_MORADA
0	-9.192913	38.760653	1	Teatro Armando Cortez	Estrada da Pontinha, 7
1	-9.211664	38.694272	2	Gabinete Curiosidades Karnart	Avenida da Índia, 168
2	-9.202426	38.750718	3	Teatro Turim	Estrada de Benfica, 723A
3	-9.145780	38.712304	4	Teatro do Bairro	Rua Luz Soriano, 63
4	-9.131669	38.711071	5	Café - Teatro Santiago Alquimista	Rua de Santiago, 19

3 – Methodology

Using visual exploration of the place



Find the theatres in the defined location




In foursquare it was found the theatre
with best rating: “São Luiz Teatro
Municipal”:



1. São Luiz Teatro Municipal

Teatro • €€€

R. António Maria Cardoso, 38, Lisboa

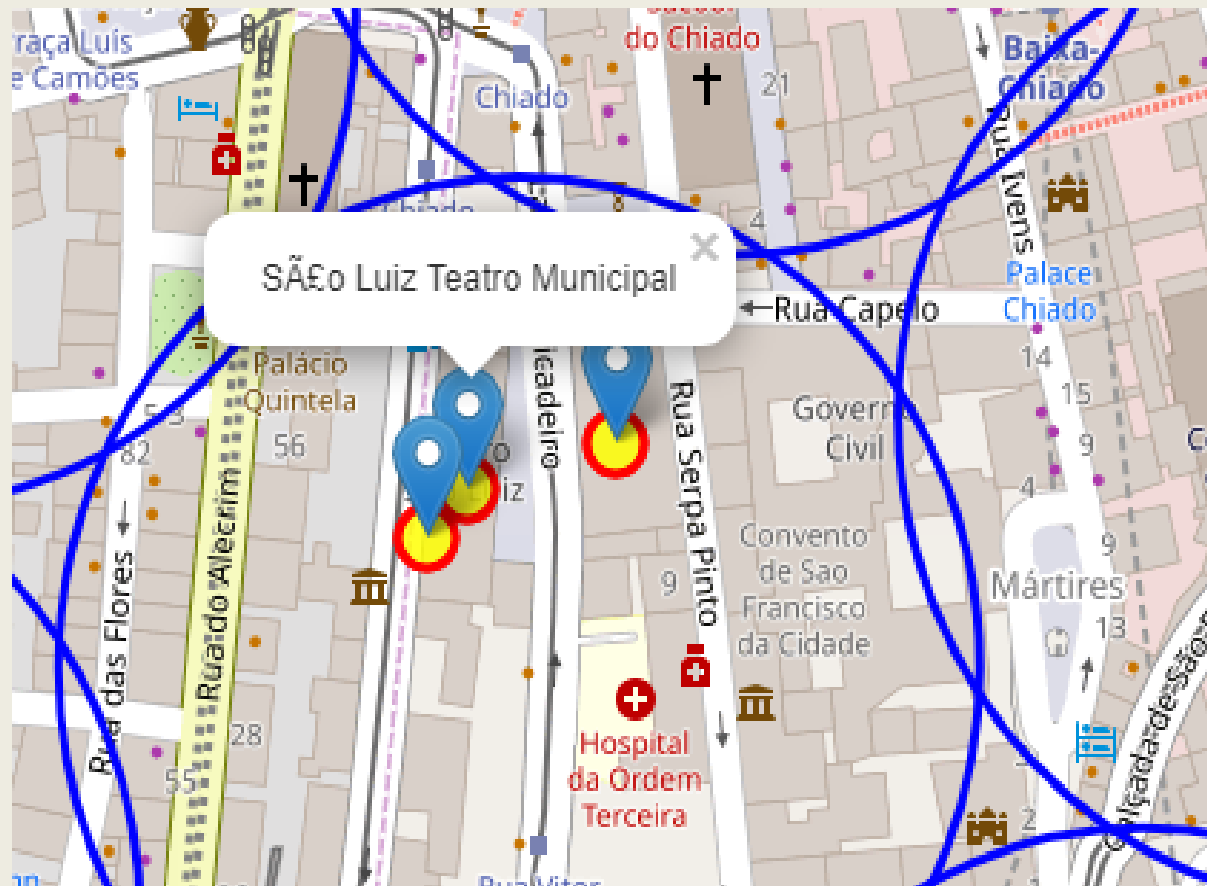
 Salvar

9.3

Find the closest restaurant, through foursquare API:

	name	categories	address	cc	city	country	distance	formattedAddress	labeledLatLngs	lat
0	Re-Food	Food Service	R. do Teixeira 9	PT	Lisboa	Portugal	428	[R. do Teixeira 9, 1200-089 Lisboa, Portugal]	[{'label': 'display', 'lat': 38.714367, 'lng': ...}]	38.714367 -9.14
1	Stairwell - Wine Bar & Creative Food	Wine Bar	Rua da Misericórdia, 139	PT	Lisboa	Portugal	381	[Rua da Misericórdia, 139, 1200 Lisboa, Portugal]	[{'label': 'display', 'lat': 38.712764, 'lng': ...}]	38.712764 -9.14
2	Penhas Douradas Food	Gourmet Shop	NaN	PT	NaN	Portugal	418	[Portugal]	[{'label': 'display', 'lat': 38.71101467110674...}]	38.711015 -9.14
3	Ahmad Halal Foods Restaurante	Halal Restaurant	NaN	PT	Lisboa	Portugal	146	[1150 Lisboa, Portugal]	[{'label': 'display', 'lat': 38.71527, 'lng': ...}]	38.715270 -9.14
4	Ofício	Portuguese Restaurant	Rua Nova da Trindade,	PT	Lisboa	Portugal	418	[Rua Nova da Trindade, 10, 1200-108 Lisboa]	[{'label': 'display', 'lat': 38.71154, 'lng': ...}]	38.711540 -9.14

Labelling all the points in order to find,
by visual exploration, the required
theatre:



5 – Result and Discussion

- theatre nearest “rotunda do Marquês”
and with higher rate: São Luis ;
- closest restaurant : Ahmad Halal Foods

6 – Conclusion

- stakeholder found the answer to the question;
- with the same data/ methodology could also find new answers if choosing different initial point or new assumptions to identify the theatre or restaurant