

ANALYSIS IF IS A GOOD IDEA TO START A **SPANISH RESTAURANT IN BARCELONA,** **SPAIN**

1. Introduction:

I'm a Data Science but I would like to start a Spanish Restaurant in Barcelona. There are any problems. First, Barcelona is a turistic city so, there are too many restaurants. Second, Barcelona is Catalonia capital so, Spanish cusine is very popular in there. Thirt, is more probably turisc eat in their Hotel but they going to eat a spanish traditional food.

2. How I resolve this problem?:

I focuse to research better hotels in Barcelona and I'll investigate how many restaurants are around in there. After these, I study some good opotunities in different locations to start my Spanish Restaurant. Finally, I decide search it around Majestic Hotel because it has good location, transport and turism transit. it's perfect to me and my future smart restaurant.

3. Target public:

My target public are turism that want to taste tipic catalan and spanich food with since smart vision. I hope age people between 30-50 years who love food experience and to discover news and locals products. However, this target may be local people who want same experience a good price. I think, my clients are interesting in food ecological products, natural tractaments and smart calid descoration. Their

motto is: 'food is not only food, it's brilliant and canonical experience of life'.

4. Data Origins:

I'll use to three data origins:

1. From geopy which convert an address into latitude and longitude values.
2. From FourSquare API
3. From

Wikipedia:

https://en.wikipedia.org/wiki/Category:Neighbourhoods_of_Barcelona

5. To resolve the problem:

A- I should know how many neighbourhood there are in Barcelona, Spain.

There are: 75

B- I must be join these with its latitude and longitude values with help geocoder module.

C- Visualize all in map.

D- Analysing neighbourhood to know which venue categories are important in each these.

	Neighbourhood	African Restaurant	Arepa Restaurant	Argentinian Restaurant	Art Gallery	Art Museum	Arts & Crafts Store	Asian Restaurant	Athletics & Sports	Auto Garage	Auto Workshop	BBQ Joint	Bakery	Bar	Basketball Court
0	Baró de Viver	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.166667	0.166667	0.000000
1	Bon Pastor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.000000	0.000000	0.000000
2	Camp d'en Grassot i Gràcia Nova	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.200000	0.150000	0.000000
3	Can Baró	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.000000	0.000000	0.333333
4	Can Peguera	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.000000	0.000000	0.000000

Burger Joint	Bus Stop	Business Service	Café	Castle	Chinese Restaurant	Church	Clothing Store	Cocktail Bar	Coffee Shop	College Residence Hall	Convenience Store	Coworking Space	Creperie	Cultural Center	Cupcake Shop	Dance Studio
0.0	0.0	0.0	0.00	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.60	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.10	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.00	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.25	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

In these two pictures, I watch all venues in each neighbourhood. For example, in Camp d'en Gassot i Gràcia Nova there aren't Africant and Arepa Restaurant, but there is a Bar.

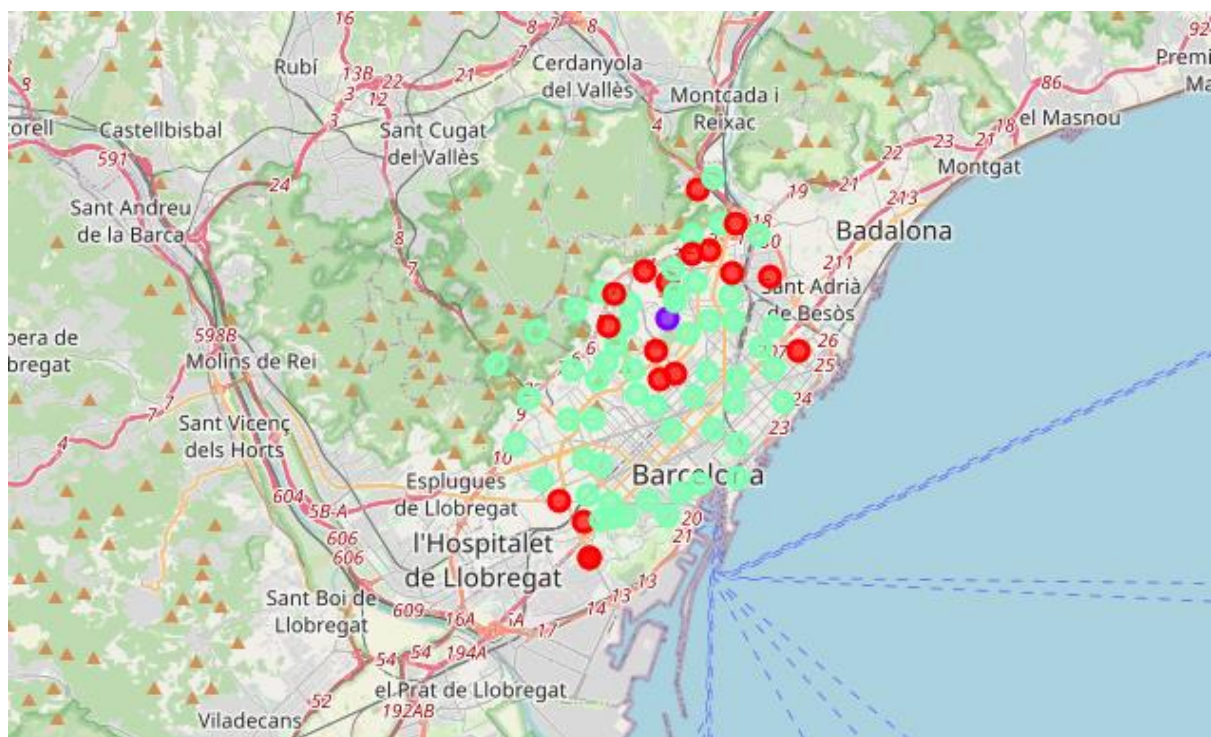
E- Analysing where neighbourhood there are Spanish Restaurants?

There are in 31 neighbourhood which 10 are:

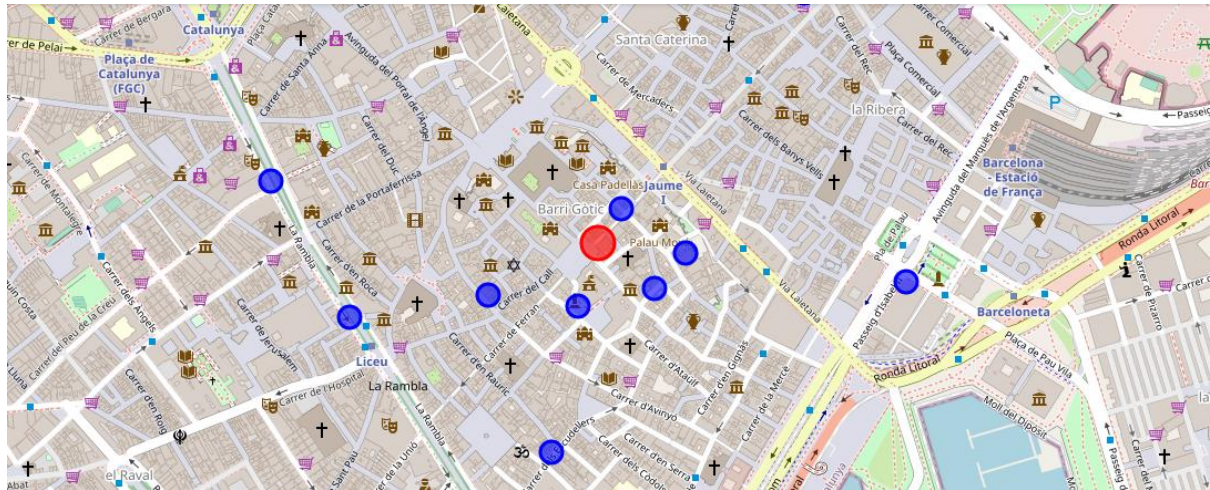
	Neighbourhood	Spanish Restaurant
0	Baró de Viver	0.000000
1	Bon Pastor	0.000000
2	Camp d'en Grassot i Gràcia Nova	0.050000
3	Can Baró	0.000000
4	Can Peguera	0.000000
5	Canyelles (neighbourhood)	0.250000
6	Ciutat Meridiana	0.000000
7	Diagonal Mar i el Front Marítim del Poblenou	0.125000
8	Dreta de l'Eixample	0.000000
9	El Baix Guinardó	0.083333

If I see value equal 0.00 in this picture, it means there aren't any Spanish Restaurant in that region. It can be a good opportunity but I should consider other items, for example, more restaurants or gyms or schools or hotels or turistic monuments.

F- Do 3 optimizer clusters to see where I could open my Spanish Restaurant:



There are 30 possible locations to start my Spanish Restaurant but not all these options are good.



In this picture, I can see 8 Spanish Restaurants in Barcelona around Majestic Hotel, all of them situate in Barri Gòtic. So, it indicates this place there are too many restaurants, so I must be considerer other possible locations to start my restaurant. If I analysing clusters I see 2 best oportunities.

6. Conclusions:

Finally, in Barcelona there are 8 Spanish Restaurant situate in Barri Gòtic. So, there are 2 places that I could start my restaurant and it's possible to expance well. My best option is Camp d'en Grassot i Gràcia Nova because transit turism, best transport and situation in Barcelona.