



Choosing the best place to open a new restaurant

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In a city where would be the best place to open a new restaurant in a specific category (French restaurant, Italian restaurant, Chinese restaurant, etc.). I will structure the city in different categories based on their postal code and gather information from a couple of restaurants in each postal code.

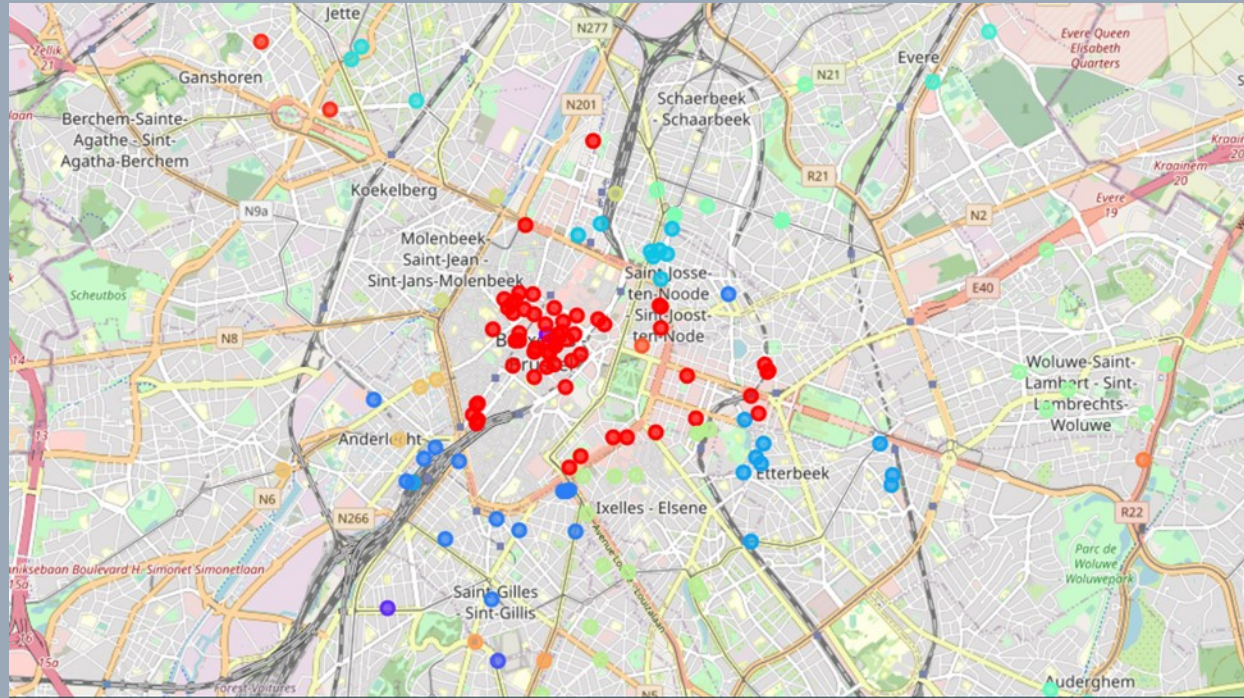
Based on the gathered information and there rating, it would be possible to find the best place for a restaurant based on lack of some good ones.

	id	name	categories	referralId	hasPerk	location.address	location.crossStreet	location.lat	location.lng	location.labeledLatLngs	loc
0	509d18bde4b07eb4d8229833	Frenchkick	[[{'id': '4bf58dd8d48988d104951735', 'name': 'B...'}]]	v-1613813228	False	Rue Marche Au Charbon 11	11	50.846585	4.350772	[[{'label': 'display', 'lat': 50.846585, 'lng':}]]	
1	4eb2fbb8b80328580a017302	Brasserie de l'Ommegang	[[{'id': '57558b36e4b065e9ebd306b0', 'name': 'B...'}]]	v-1613813228	False	Grote Markt 9 Grand Place	NaN	50.846566	4.352609	[[{'label': 'display', 'lat': 50.84656550922511...}]]	
2	50b5f09be4b0f5cb08770674	Restaurant NMBS / SNCB	[[{'id': '4bf58dd8d48988d128941735', 'name': 'C...'}]]	v-1613813228	False	Europakruispunt 2 Carrefour de l'Europe	NaN	50.846345	4.357042	[[{'label': 'display', 'lat': 50.84634510447499...}]]	
3	51d96c40498ec79de3eea97d	Restaurant Poissons Grill	[[{'id': '4bf58dd8d48988d1ce941735', 'name': 'S...'}]]	v-1613813228	False	Rue de Brabant 67	NaN	50.846563	4.353374	[[{'label': 'display', 'lat': 50.84656277189522...}]]	
4	5cc57f751acf11002c9bc2cc	the blue restaurant	[[{'id': '52e81612bcb57f1066b7a02', 'name': 'B...'}]]	v-1613813228	False	NaN	NaN	50.845667	4.353267	[[{'label': 'display', 'lat': 50.845667, 'lng':}]]	

THE DATA COMES FROM THE FOURSQUARE API

	id	name	address	latitude	longitude	postal code	rating
0	509d18bde4b07eb4d8229833	Frenchkick	Rue Marche Au Charbon 11	50.846585	4.350772	1000	8.0
1	4eb2fbb8b80328580a017302	Brasserie de l'Ommegang	Grote Markt 9 Grand Place	50.846566	4.352609	1000	5.0
2	50b5f09be4b0f5cb08770674	Restaurant NMBS / SNCB	Europakruispunt 2 Carrefour de l'Europe	50.846345	4.357042	1000	0.0
5	52e2df4c498ed7af43f58713	Rustic - Restaurant romanesc	Rue Gretry	50.849873	4.350758	1000	0.0
6	4c7cd7b4744d8cfadfa2bb37	French Touch	Marnixlaan 17 avenue Marnix	50.839198	4.363390	1000	6.0

AFTER CLEANING THE DATA IS IN A PANDAS DATAFRAME



AFTER KMEANS CLUSTERING, THE DATA IS VISUALIZED ON A MAP

rating	
mean	
postal code	
1000	4.617647
1030	3.750000
1040	6.000000
1050	1.666667
1080	0.000000
7000	8.000000

AFTER USING THE GROUPBY METHOD IN PANDAS, IT IS VERY CLEAR WHERE THE BEST PLACE WOULD BE TO OPEN A RESTAURANT

Conclusion

The conclusion is that my lack of data, gives me a falsely prediction and in the future the best thing is to collect much more data. Another thing is that this was just for one category of restaurants, different categories will give different predictions, but the method still stays valid.