



Best Location to Open a Restaurant in Toronto

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Business Problem

- ▶ Toronto is one of the most popular cities in Canada with a high population.
- ▶ A city attracting 1000s of travellers each year.
- ▶ Toronto is well known for restaurants with great food.
- ▶ In this project, I am planning to analyze four square location data to determine the best neighborhood in Toronto to start a new coffee shop to help people planning to start their own coffee business in Toronto. The analysis will provide various information that will help in the decision making process by the target audience.

Data Overview

- ▶ The data that will be used for this analysis includes,
- ▶ A list of neighbourhoods in Toronto provided via Wikipedia
["https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M"](https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M)
- ▶ Geographical location of each neighbourhood obtained using Geocoder package.
- ▶ Venue data for existing coffee shops in Toronto

Data Collection

	Postal Code	Borough	Neighbourhood
0	M3A	North York	Parkwoods
1	M4A	North York	Victoria Village
2	M5A	Downtown Toronto	Regent Park, Harbourfront
3	M6A	North York	Lawrence Manor, Lawrence Heights
4	M7A	Downtown Toronto	Queen's Park, Ontario Provincial Government
5	M9A	Etobicoke	Islington Avenue, Humber Valley Village
6	M1B	Scarborough	Malvern, Rouge
7	M3B	North York	Don Mills
8	M4B	East York	Parkview Hill, Woodbine Gardens
9	M5B	Downtown Toronto	Garden District, Ryerson
10	M6B	North York	Glencairn
11	M9B	Etobicoke	West Deane Park, Princess Gardens, Martin Grov...

Data Collection

- ▶ Latitude and Longitude information

	Postal Code	Borough	Neighbourhood	Latitude	Longitude
0	M3A	North York	Parkwoods	43.753259	-79.329656
1	M4A	North York	Victoria Village	43.725882	-79.315572
2	M5A	Downtown Toronto	Regent Park, Harbourfront	43.654260	-79.360636
3	M6A	North York	Lawrence Manor, Lawrence Heights	43.718518	-79.464763
4	M7A	Downtown Toronto	Queen's Park, Ontario Provincial Government	43.662301	-79.389494

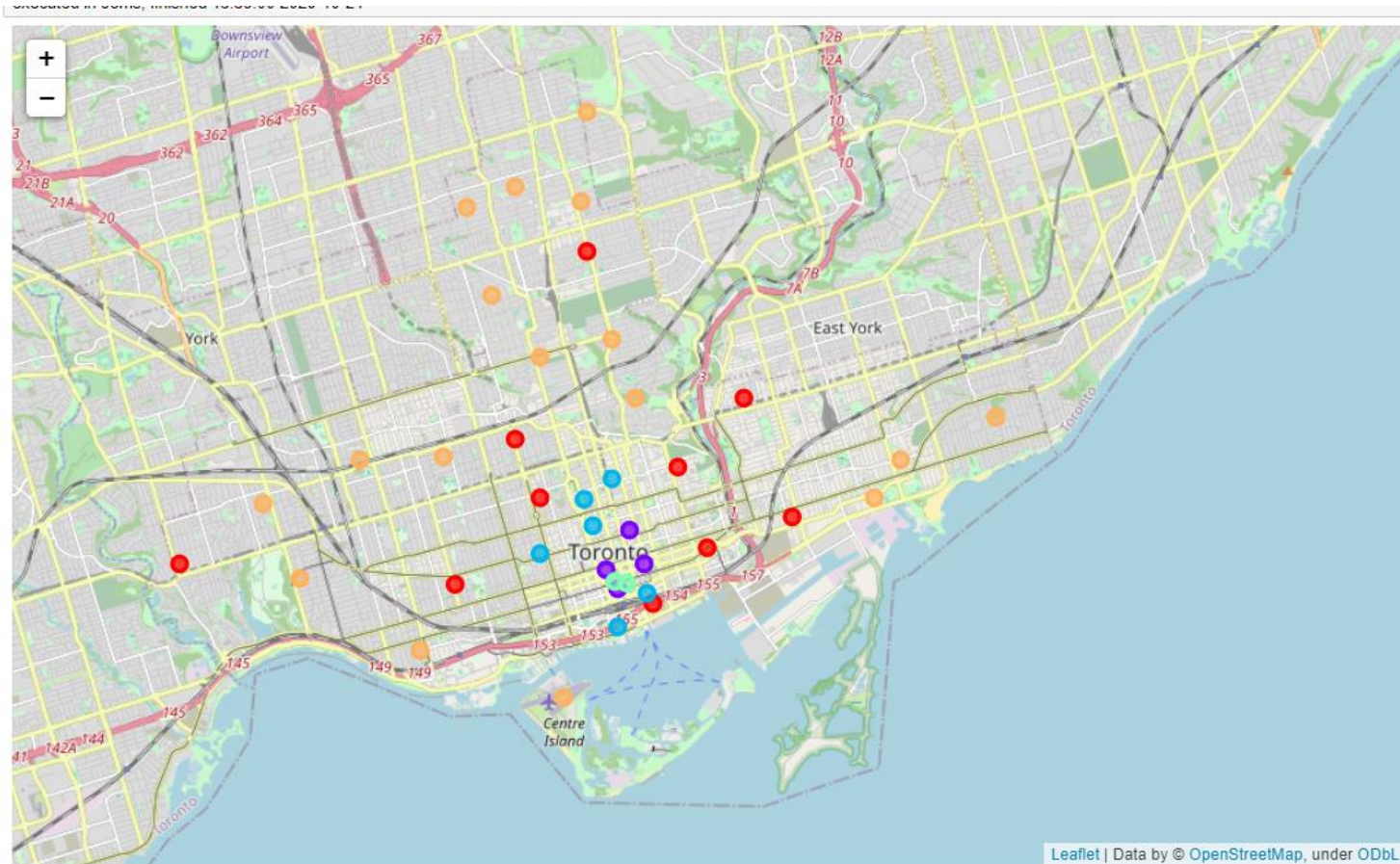
Neighborhoods in Toronto



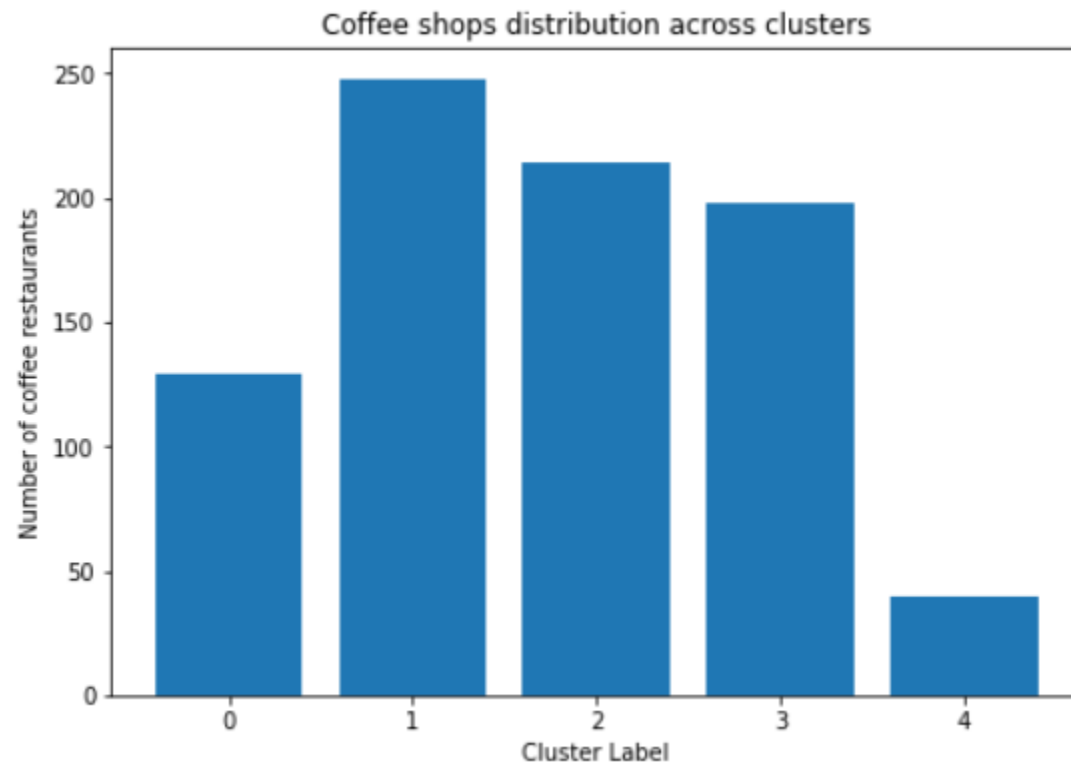
Existing Coffee Shops

	Neighborhood	Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
0	Regent Park, Harbourfront	43.65426	-79.360636	Tandem Coffee	43.653559	-79.361809	Coffee Shop
1	Regent Park, Harbourfront	43.65426	-79.360636	Impact Kitchen	43.656369	-79.356980	Restaurant
2	Regent Park, Harbourfront	43.65426	-79.360636	Morning Glory Cafe	43.653947	-79.361149	Breakfast Spot
3	Regent Park, Harbourfront	43.65426	-79.360636	Arvo	43.649963	-79.361442	Coffee Shop
4	Regent Park, Harbourfront	43.65426	-79.360636	Rooster Coffee	43.651900	-79.365609	Coffee Shop

Clustering – based on coffee shops distribution



Coffee shops and clusters



- Most of the coffee shops are in cluster 1 represented by purple color.
- Cluster 4 has the least number of coffee shops.

Neighborhoods with minimum coffee shops

Cluster Labels	Postal Code	Borough	Neighbourhood	Latitude	Longitude	NUmber of coffee shops	
21	4	M5P	Central Toronto	Forest Hill North & West, Forest Hill Road Park	43.696948	-79.411307	0.0
29	4	M4T	Central Toronto	Moore Park, Summerhill East	43.689574	-79.383160	0.0
33	4	M4W	Downtown Toronto	Rosedale	43.679563	-79.377529	0.0
19	4	M5N	Central Toronto	Roselawn	43.711695	-79.416936	0.0
18	4	M4N	Central Toronto	Lawrence Park	43.728020	-79.388790	0.0
4	4	M4E	East Toronto	The Beaches	43.676357	-79.293031	1.0
38	4	M7Y	East Toronto	Business reply mail Processing Centre, South C...	43.662744	-79.321558	1.0
32	4	M5V	Downtown Toronto	CN Tower, King and Spadina, Railway Lands, Har...	43.628947	-79.394420	2.0
15	4	M4L	East Toronto	India Bazaar, The Beaches West	43.668999	-79.315572	2.0
20	4	M4P	Central Toronto	Davisville North	43.712751	-79.390197	3.0
23	4	M4R	Central Toronto	North Toronto West, Lawrence Park	43.715383	-79.405678	3.0
25	4	M6R	West Toronto	Parkdale, Roncesvalles	43.648960	-79.456325	3.0
22	4	M6P	West Toronto	High Park, The Junction South	43.661608	-79.464763	4.0
31	4	M4V	Central Toronto	Summerhill West, Rathnelly, South Hill, Forest...	43.686412	-79.400049	4.0
9	4	M6H	West Toronto	Dufferin, Dovercourt Village	43.669005	-79.442259	5.0
14	4	M6K	West Toronto	Brockton, Parkdale Village, Exhibition Place	43.636847	-79.428191	6.0
7	4	M6G	Downtown Toronto	Christie	43.669542	-79.422564	6.0

Discussion

- ▶ The neighbourhoods like Forest Hill North & West, Forest Hill Road Park has 0 coffee restaurants.
- ▶ Drawbacks:
- ▶ Clustering is completely based on data obtained from the Foursquare API.
- ▶ The analysis does not take into consideration about the population distribution across the neighbourhood.

Conclusion

- ▶ This concludes the optimal findings for this project and recommends the entrepreneur to open an coffee shop in cluster 4 with little to no competition.