IBM Capstone Project

THE BATTLE OF NEIGHBORHOODS

Problem Statement

- Suppose, you are looking to invest in some firm in a city/neighborhood.
- Where would you want to go to learn about that place to make a safe investment?
- This project helps those investors to give an idea and a picture of how well the businesses are going in that area, and a clarity of where to invest the money.
- Now, any person who wants to invest in any business can look up at this data to understand and decide where they will invest their investments.

Demo of how the project works

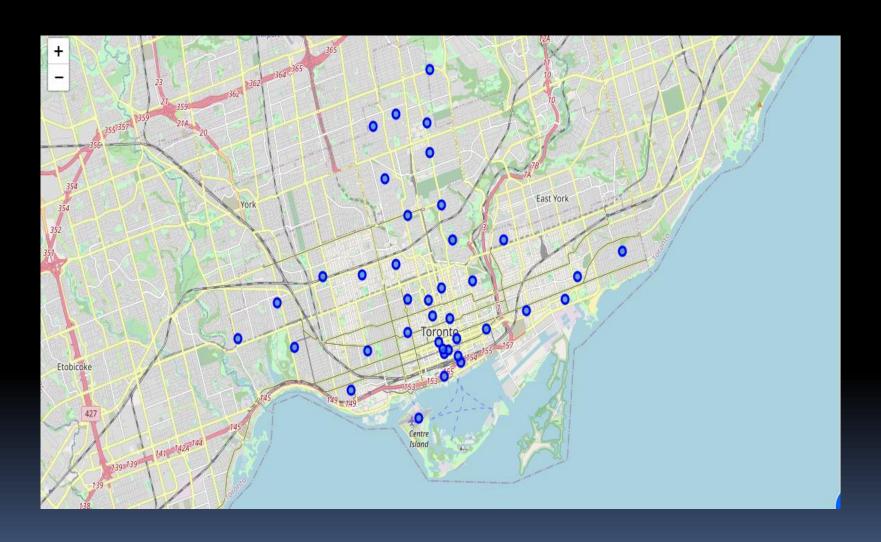
- Let's say that you want to invest in a firm in Toronto.
- You want to know what businesses are presently existing in those neighborhoods, how many businesses are there in each category and how well they are doing.
- So, now we will use the data acquired from the links to form a dataframe and use it accordingly to arrive to a solution based on the investor needs.

Coordinated Data Frame

	Postal Code	Borough	Neighborhood	Latitude	Longitude
0	МЗА	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
5	M9A	Etobicoke	Islington Avenue	43.667856	-79.532242
6	M1B	Scarborough	Malvern, Rouge	43.806686	-79.194353
7	M3B	North York	Don Mills	43.745906	-79.352188
8	M4B	East York	Parkview Hill, Woodbine Gardens	43.706397	-79.309937
9	M5B	Downtown Toronto	Garden District, Ryerson	43.657162	-79.378937

DataFrame 1. Coordinates of Respective Neighborhoods

Map of Neighborhoods



Map 1. Toronto Neighborhoods

Harbourfront Neighborhood

	Venue Category	
Coffee Shop	22	
Café	6	
Aquarium	5	
Park	5	
Hotel	4	
Bakery	4	
Restaurant	4	
Scenic Lookout	3	
Brewery	3	
Italian Restaurant	3	
Pub	3	

DataFrame 2. Top Venues in Harbourfront Neighborhood

Map of Venues-Harbourfront Neoghborhood

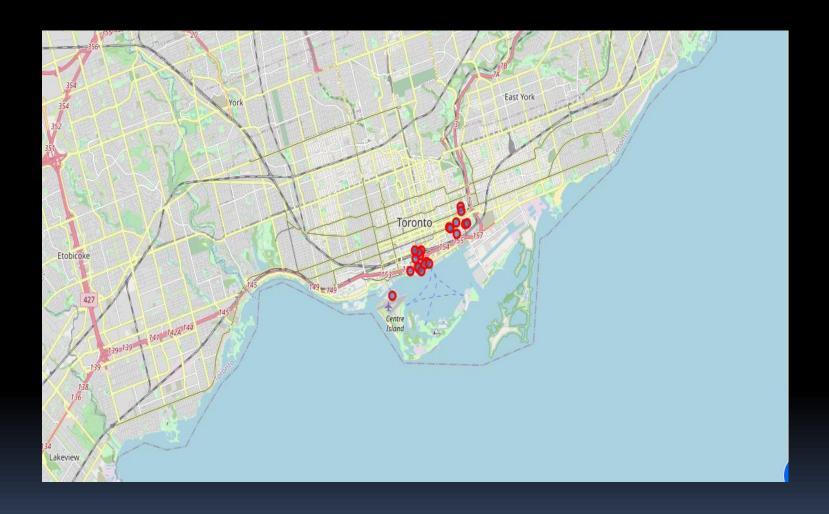


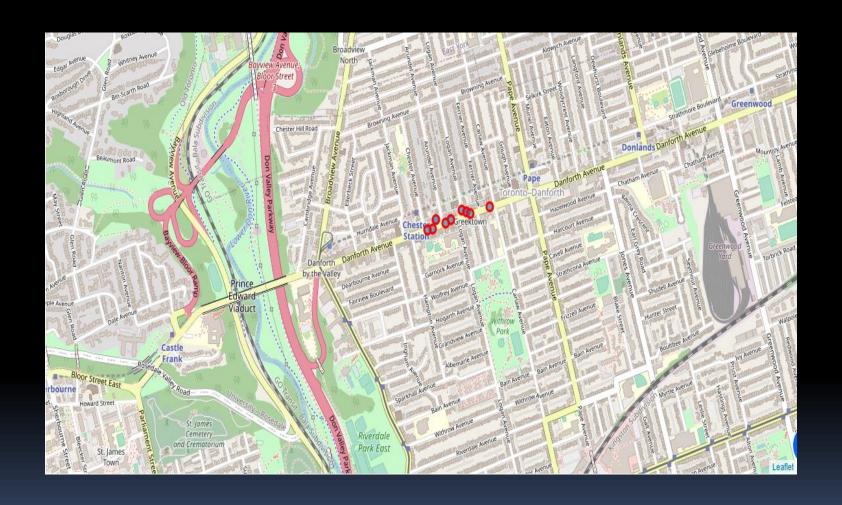
Figure 4. Coffee Shops in Harborfront Neighborhood

Riverdale Neighborhood

	Venue Category	
Greek Restaurant	9	
Coffee Shop	3	
Italian Restaurant	3	
Furniture / Home Store	2	
Restaurant	2	
Ice Cream Shop	2	
Fruit & Vegetable Store	1	
Pizza Place	1	
Liquor Store	1	
American Restaurant	1	
Trail	1	
Yoga Studio	1	
Bakery	1	
Bookstore	1	
Frozen Yogurt Shop	1	
Cosmetics Shop	1	
Café	1	
Bubble Tea Shop	1	
Brewery	1	

DataFrame 3. Top venues in Riverdale

Map of Riverdale Venues



Map 4. Greek Restaurants present in Riverdale

Conclusion

- In the above manner, we can arrive to conclusions on where we can invest the money, on which neighborhood, on which venue in that neighborhood and how much we can invest and so on.
- We can even apply the above project to compare cities with the appropriate data.
- The data for the above dataframes was taken from:

https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M

https://cocl.us/Geospatial_data

THANK YOU

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