

FINAL REPORT

Capstone Project - The Battle of Neighbourhoods (Part-1)

Introduction:

Toronto City has also been a major point of entry for immigrants. **Indian Canadians** are **Canadians** with ancestry from **India**. The term **Indo-Canadians** or **East Indian** is sometimes used to avoid confusion with the **First Nations**. **Statistics Canada** specifically uses the term **Asian Indian** to refer to Indian Canadians. Categorically, Indian Canadians comprise a subgroup of **South Asian Canadians** which is a further subgroup of **Asian Canadians**. According to **Statistics Canada**, Indian Canadians are one of the fastest growing communities in Canada, making up the second largest non-European group after **Chinese Canadians**.

Canada contains the world's **eighth largest Indian diaspora**. The largest group of Indian Canadians are of **Punjabi** origin, accounting for around 50 percent of the Indo-Canadian population. The highest concentrations of Indian Canadians are found in the provinces of

Ontario and **British Columbia**, followed by growing communities in **Alberta** and **Quebec** as well, with the majority of them being foreign-born

With its diverse culture, comes diverse food items. There are many restaurants in New York City, each belonging to different categories like Indian, and French etc.

Problem:

To find the answers to the following questions:

Q1) List and visualise all major parts of Toronto City that has great Indian restaurants.

Q2) what is best location in Toronto for Indian Cuisine?

Q3) which areas have potential Indian Restaurant Market?

Q4) which all areas lack Indian Restaurants?

Q5) which is the best place to stay if you prefer Indian Cuisine?

Data Section:

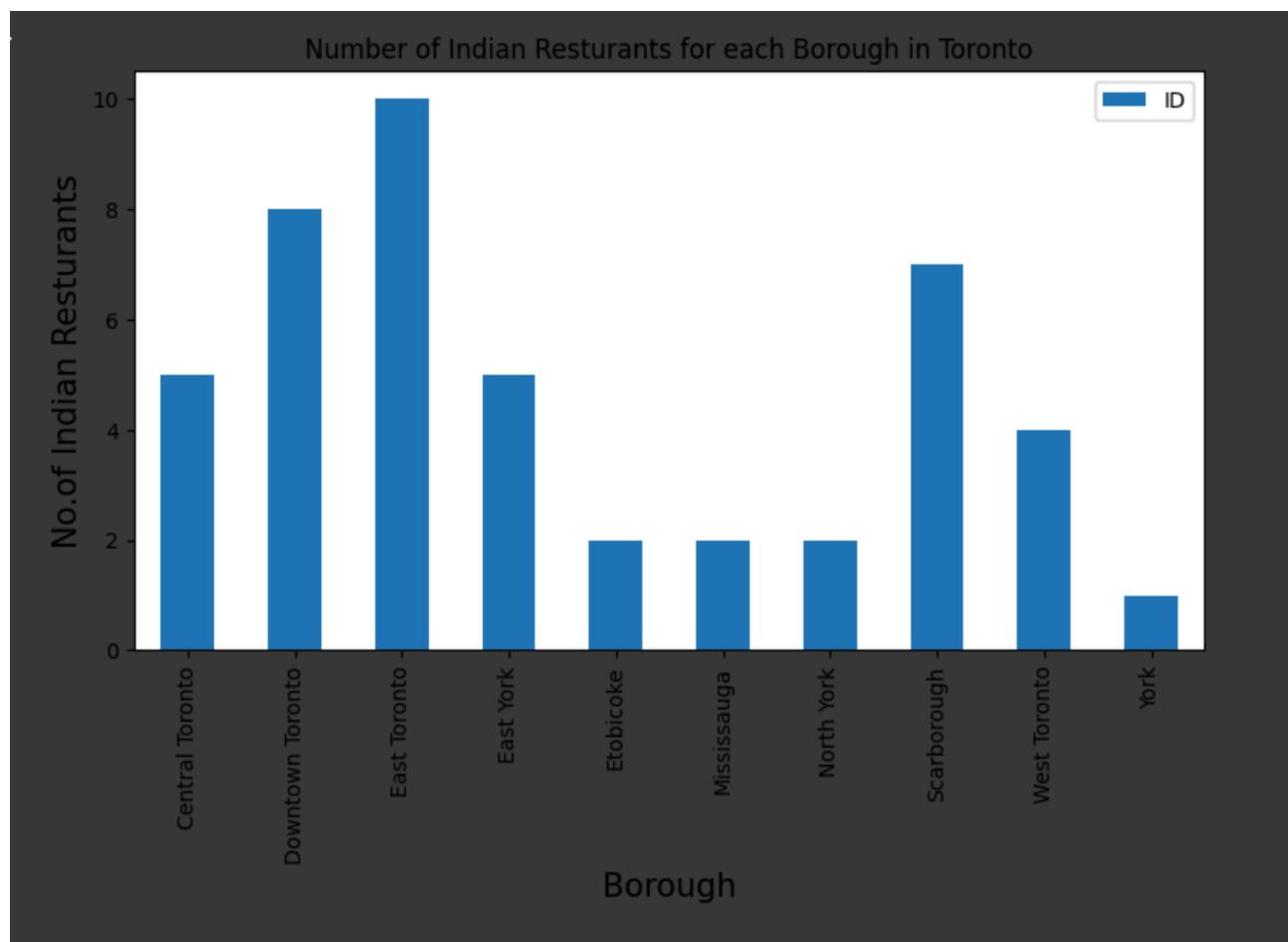
Toronto City's demographics show that it is a large and ethnically diverse metropolis. With its diverse culture, comes diverse food items. There are many restaurants in Toronto City, each belonging to different categories like Chinese, Indian, and French etc.

For this project we need the following data:

- * Toronto City Data that is available in the Week -3 Lab section with the course and converted that to Toronto.csv as per the lab instructios.
- * We also require the Geo-Spatial Coordinates.csv file to plot the coordinates of the neighbourhood in the Toronto city
- * We would also require the Four-Square API credentials.

Methodology

1. First we collect the data from the Toronto.csv file and then map their Latitudes and Longitudes with the Neighbourhood.
2. Then we provide our Four-Square API Credentials to access the data from four square.



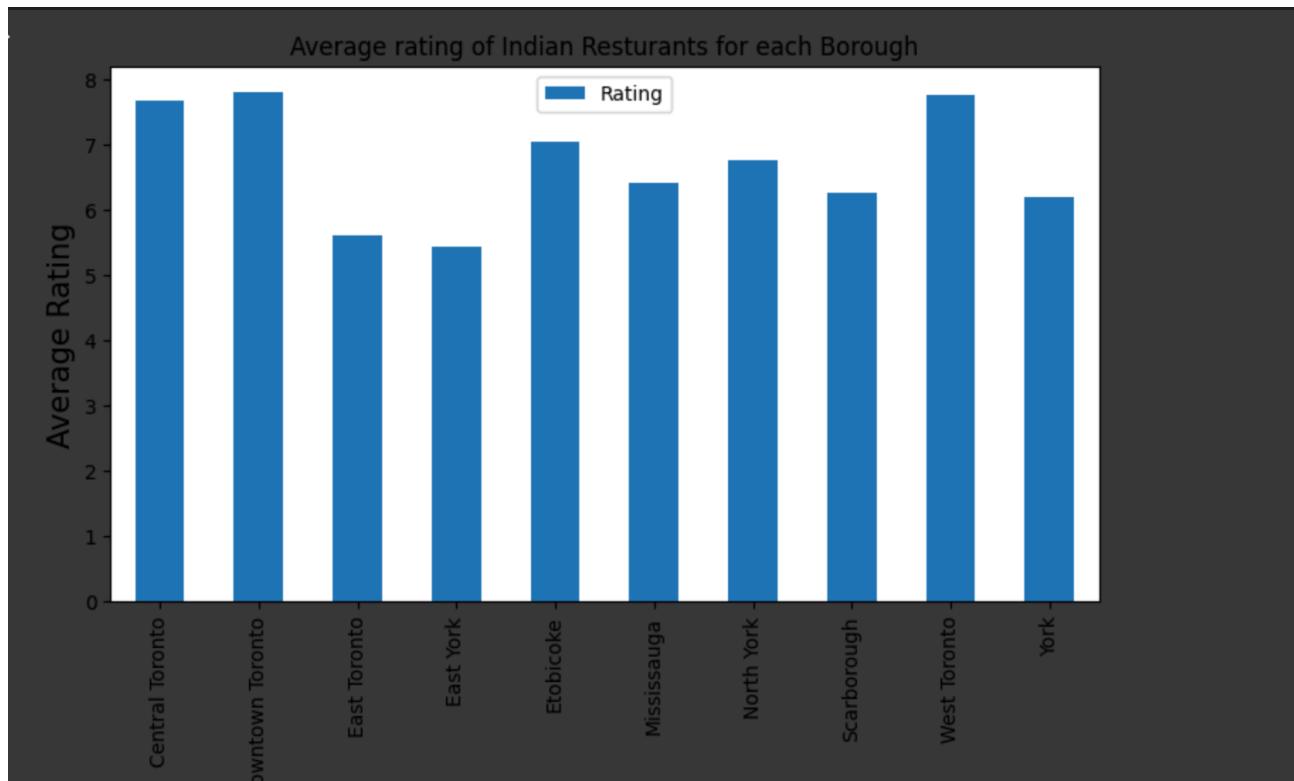
3.Then we collect the data from the Four-Square API and collect all the Indian restaurants in the Toronto city and get their details.

Indian Restaurant Statistics for Toronto							
	Borough	Neighborhood	ID	Name	Likes	Rating	Tips
0	Downtown Toronto	Regent Park, Harbourfront	4af9a379f964a520c91222e3	Bombay Palace	14.0	7.2	13.0
1	Downtown Toronto	Regent Park, Harbourfront	52af6dc5498e33995b0bbf03	Sultan Of Samosas	9.0	6.8	4.0
2	Downtown Toronto	Queen's Park, Ontario Provincial Government	4bedf8b5e24d20a17b567214	Kothur Indian Cuisine	16.0	8.1	19.0
3	East Toronto	The Beaches	4cd7c6352b1f8915b7e7f7e	Delhi Bistro	6.0	7.0	3.0
4	Scarborough	Woburn	0		0.0	0.0	0.0
5	East York	Leaside	504bcf32e4b0ef19b0e2ecf8	Mt Everest Restaurant	8.0	6.5	6.0
6	Downtown Toronto	Christie	4adb969ef964a520332921e3	Banjara Indian Cuisine	142.0	8.8	75.0
7	Downtown Toronto	Christie	4b7369d7f964a52049ad2de3	Madras Masala	35.0	7.9	22.0
8	Scarborough	Cedarbrae	4d6008f829ef236a8832a059	CANBE Foods Inc	22.0	8.0	8.0
9	Scarborough	Cedarbrae	4c77fc87bd346dc8c90f0ef	La Sani Grill	12.0	6.8	12.0
10	East York	Thorncliffe Park	4daf08e66e81e2dfdd4fe40	Iqbal Kebab & Sweet Centre	13.0	7.6	6.0
11	East York	Thorncliffe Park	4bed9f2fbac3c9b6ad93fee9	Hakka Garden	10.0	6.4	12.0
12	East York	Thorncliffe Park	507a19e5e4b0602b62f73d11	Faley Restaurant	6.0	6.7	4.0
13	East York	East Toronto, Broadview North (Old East York)	0		0.0	0.0	0.0
14	Downtown Toronto	Harbourfront East, Union Station, Toronto Islands	50b79b94e4b0a577af25a83f	Indian Roti House	38.0	7.1	14.0
15	East Toronto	The Danforth West, Riverdale	4c1d5337eac020a1cb1048c2	Sher-E-Punjab	10.0	7.0	8.0
16	West Toronto	Brockton, Parkdale Village, Exhibition Place	4aecbbbf964a520bcc21e3	Mother India	45.0	8.0	31.0
17	West Toronto	Brockton, Parkdale Village, Exhibition Place	4ba6e1ff8f964a520537539e3	Om Restaurant	20.0	7.7	18.0

4.Now we collect all the ratings and likes of the Indian restaurants in the Toronto city.

	Borough	Neighborhood	ID	Name	Likes	Rating	Tips
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1	Downtown Toronto	Regent Park, Harbourfront	52af6dc5498e33995b0bbf03	Sultan Of Samosas	9	6.8	4
2	Downtown Toronto	Queen's Park, Ontario Provincial Government	4bedf8b5e24d20a17b567214	Kothur Indian Cuisine	16	8.1	19
3	East Toronto	The Beaches	4cd7c6352b1f8915b7e7f7e	Delhi Bistro	6	7.0	3
4	Scarborough	Woburn	0		0	0.0	0

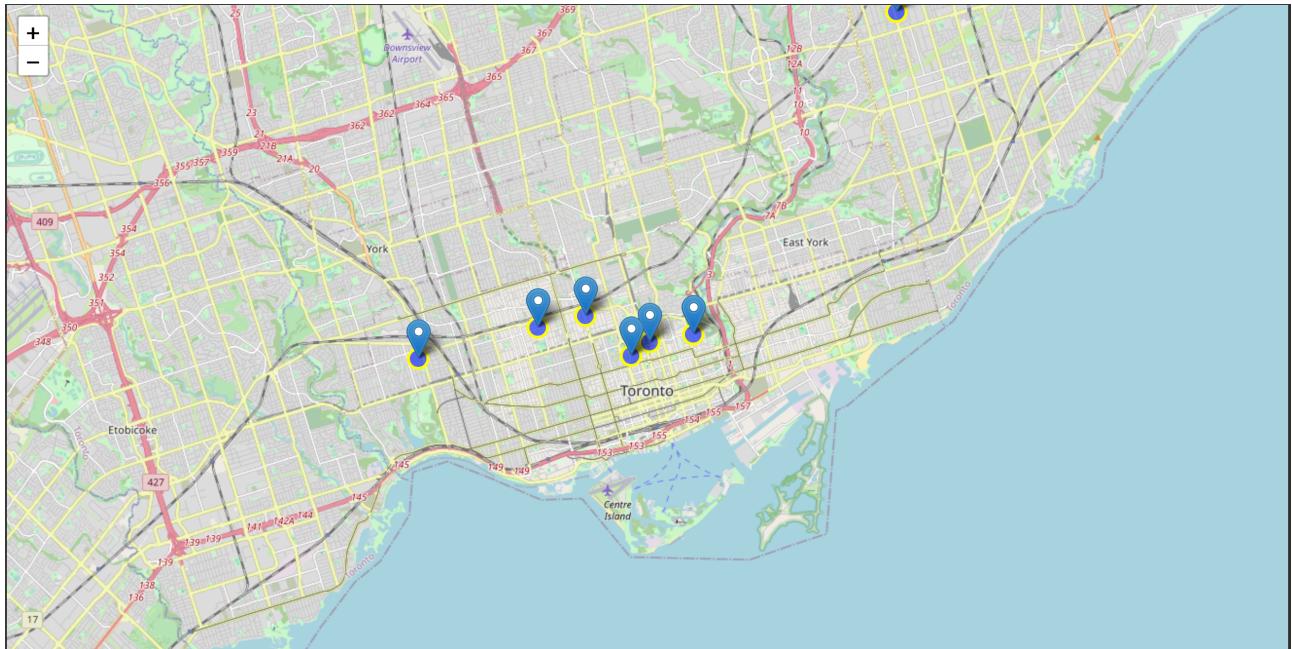
5. We now plot the restaurants based on their ratings and likes.



6. Then we find out the best and average shop in Toronto for Indian cuisine.

	Borough	Neighborhood	Latitude	Longitude	Average Rating
0	Downtown Toronto	Christie	43.669542	-79.422564	8.35
1	Downtown Toronto	Church and Wellesley	43.665860	-79.383160	8.10
2	West Toronto	High Park, The Junction South	43.661608	-79.464763	8.30
3	Downtown Toronto	Queen's Park, Ontario Provincial Government	43.662301	-79.389494	8.10
4	Downtown Toronto	St. James Town, Cabbagetown	43.667967	-79.367675	8.40
5	Central Toronto	The Annex, North Midtown, Yorkville	43.672710	-79.405678	8.15
6	Scarborough	Wexford, Maryvale	43.750072	-79.295849	8.00

7.Finally we suggest the location for the user if he/she wants to enjoy the Indiana cuisine .



Result:

So now we can answer the questions asked above in the Questions section: Answers:

1. The following location in Toronto has great Indian restaurants.

	Borough	Neighborhood	Latitude	Longitude	Average Rating
0	Downtown Toronto	Christie	43.669542	-79.422564	8.35
1	Downtown Toronto	Church and Wellesley	43.665860	-79.383160	8.10
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2. Christie(Downtown Toronto),Church(Downtown Toronto) and Wellesley and the High Park,The Junction South(West Toronto) are some of the best neighbourhoods for Indian cuisine.
3. Downtown has potential Indian Restaurant Market.
4. North Yorks ranks last in average rating of Indian Restaurants.
5. DownTown Toronto is the best place to stay if you prefer Indian Cuisine.

Conclusion:

I have applied my skills and knowledge to the best of my potential and still I agree that there is always room for improvement. We can further improve this analysis with data from the restaurants and the type of customers visiting these restaurants for the companies to expand their business.