Indian Restaurant Recommendation

DATA SCIENCE
IBM CAPSTONE PROJECT

Problem Description

- MIGRATING FROM ONE PLACE TO ANOTHER AND WANTS THE RESTAURANT THAT SHOULD BE OF HIS CHOICE AND ITS NEARBY TO THE ADDRESS WHERE HE IS RESIDING. SO THE QUESTION ARISES:
- CHECK ALL THE RESTAURANTS
- FILTER THE CATEGORY OF YOUR CHOICE
- CHECK THE RATING AND NEAR BY LOCATION

Target Audience

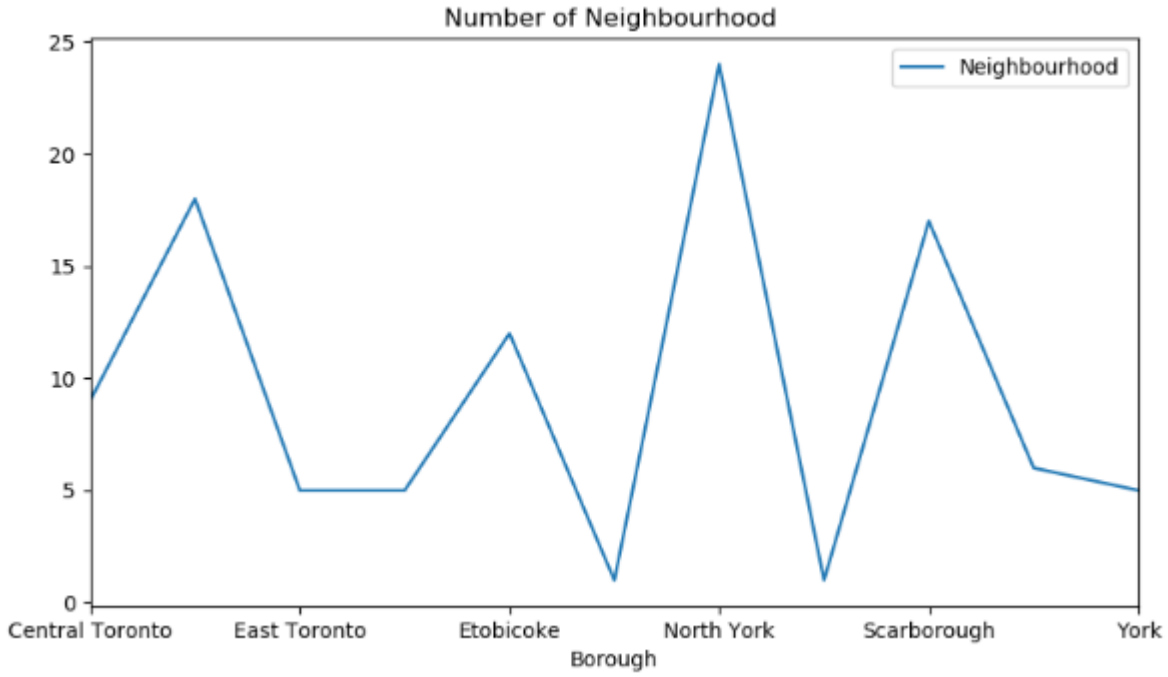
I believe this is for every person who is shifting from one place to another. As the need for a job everyone must travel and wants to be in a place where he got all the amenities. After a long hour of job, he needs that the daily needs should be nearer as much it can be. So, predicting the Battle of neighborhood is correct for description for this project.

Dataset

- 1) Using Canada Dataset: https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M and get latitude, longitude from https://cocl.us/Geospatial_data'
- Finding based on address the near by restaurants using Foursquare API. By using this API we will get all the venues in each neighborhood. We can filter these venues to get restaurants based on input we have provided.

Analysis from the dataset

	Postcode	Borough	Neighbourhood
0	M1A	Not assigned	Not assigned
1	M2A	Not assigned	Not assigned
2	M3A	North York	Parkwoods
3	M4A	North York	Victoria Village
4	M5A	Downtown Toronto	Harbourfront



Using Four Square API

- Using Foursquare API, we input the address where we are residing or from where to we search the restaurant.
- Using API, we get the latitude and longitude of the given location
- Now, input the type of restaurant you want to search.
- You will get all the restaurants in radius of 500.
- We get the rating of those restaurants and sort them.
- Recommend the restaurant which is having the highest rating.

Using Four Square API

Let's visualize the restaurants that are nearby

```
[19]: dataframe_filtered.name
```

```
[19]: 0            Indian Biriyani House
      1            Indian Biriyani House
      2          Touch - Indian Cuisine
      3                  Indian Flavour
      4             Ram's Indian kitchen
      5    Tamarind: The Indian Kitchen
      6           Chadani Indian Cuisine
      Name: name, dtype: object
```

These are the filtered restaurants on the basis of search criteria

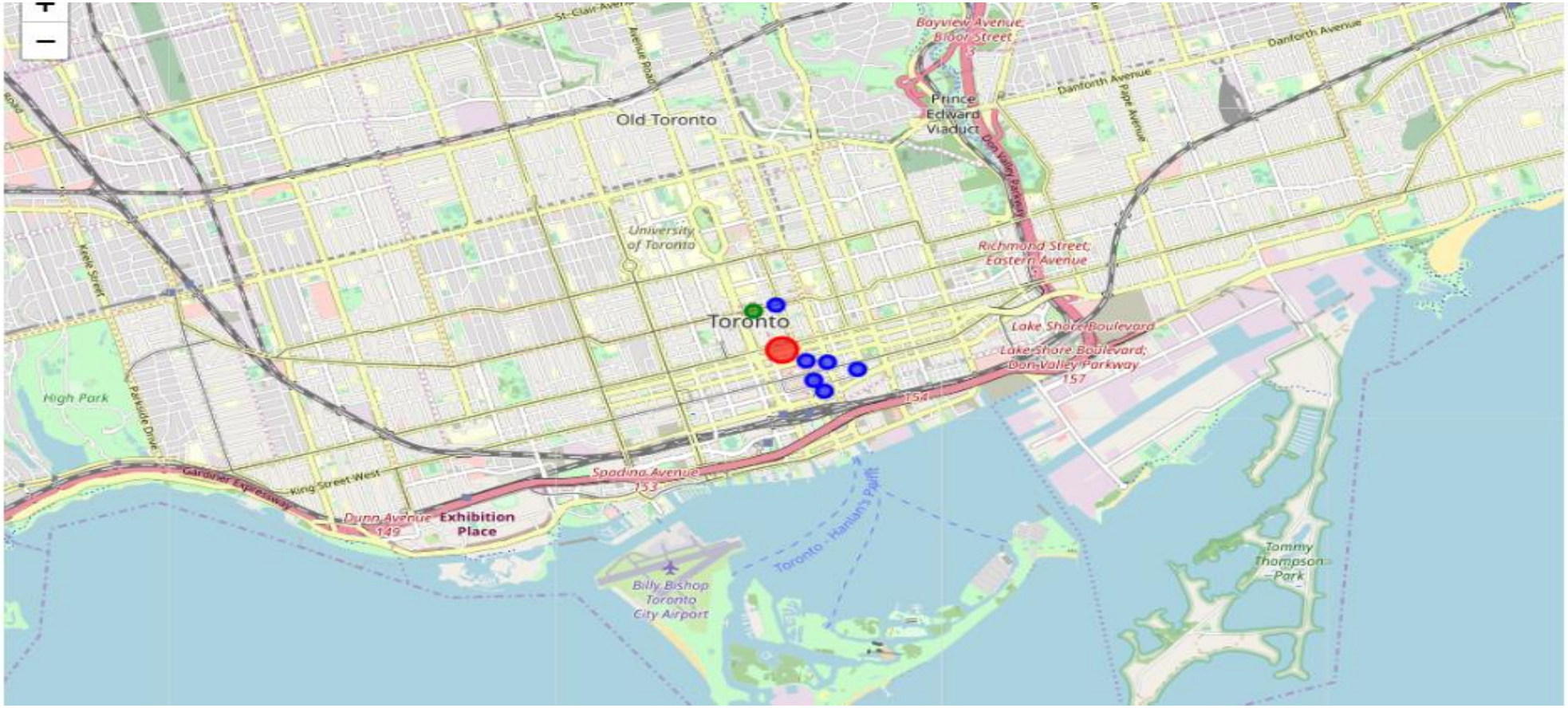
Using Four Square API

[27]:

	name	lat	lng	categories	Rating	Pricing	Likes	distance
1	Indian Biriyani House	43.655120	-79.386645	Indian Restaurant	7.1	2.0	5.0	514
2	Touch - Indian Cuisine	43.649869	-79.378218	Indian Restaurant	0.0	2.0	2.0	445
5	Tamarind: The Indian Kitchen	43.646859	-79.378707	Indian Restaurant	0.0	1.0	2.0	609
0	Indian Biriyani House	43.650050	-79.380662	Indian Restaurant	0.0	2.0	1.0	255
3	Indian Flavour	43.655649	-79.384119	Indian Restaurant	0.0	2.0	0.0	508
4	Ram's Indian kitchen	43.648026	-79.379819	Indian Restaurant	0.0	2.0	0.0	452
6	Chadani Indian Cuisine	43.649153	-79.374814	Indian Restaurant	0.0	2.0	0.0	730

Restaurants are sorted on the basis of rating. Like the highest is having the Indian Biryani House.

Visualization through Map



Conclusion

The Green Dot on the map shows the Restaurant having the highest rating and also recommended. And the blue dots are the other restaurants that are having less rating from the recommended one.