

**CAPSTONE PROJECT - THE
BATTLE OF
NEIGHBORHOODS**

THAI RESTAURANT

BY DHIWA KOSITTIRACHART

INTRODUCTION

Thai immigrants to Canada are primarily well-educated professionals working as bankers, dentists, doctors, nurses, computer technicians and engineers. Many of them closed businesses such as Thai restaurants or Muay Thai gyms, which has become popular in Canada.

Thai cooking places emphasis on lightly prepared dishes with strong aromatic components and a spicy edge. Thai chef McDang characterises Thai food as demonstrating "intricacy; attention to detail; texture; color; taste; and the use of ingredients with medicinal benefits, as well as good flavor", as well as care being given to the food's appearance, smell and context.

So as part of this project, we will list and visualize all major parts of Toronto that has popular Thai restaurants.

DATA

- For this project we need the following data :
- Toronto,CA data that contains list Boroughs, Neighborhoods along with their latitude and longitude.
 - Data source : https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M and get latitude,longitude from https://cocl.us/Geospatial_data
 - Description : This data set contains the required information. And we will use this data set to explore various neighborhoods of new york city.
- Thai resturants in each neighborhood of Toronto city.
 - Data source : Fousquare API
 - Description : By using this api we will get all the venues in each neighborhood. We can filter these venues to get only indian resturants.
- GeoSpace data
 - Data source : Generating GeoJSON File for Toronto FSAs
<https://medium.com/dataexplorations/generating-geojson-file-for-toronto-fsas-9b478a059f04>
 - Description : By using this geo space data we will get the Toronto Borough boundaries that will help us visualize choropleth map.

APPROACH

- Collect the postal code, borough, neighborhood of Toronto city data from wikipedia
- Collect latitude, longitude data from https://cocl.us/Geospatial_data
- Using FourSquare API we will find all venues for each neighborhood.
- Filter out all venues that are Thai Restaurants.
- Find rating, tips and like count for each Thai Restaurants using FourSquare API.
- Using rating for each restaurant, we will sort that data.
- Visualize the Ranking of neighborhoods using folium library(python)

Defined the problems

- As a Thai food business, seeing the picture in business for Thai restaurants, so we would like to find out about the business
 - Best Places in Toronto city for Thai cuisine
 - which areas have the potential to market for Thai Restaurant
 - which is the best place to stay if I like Thai food

Stackholder

- Owner Thai Cuisine.
- Some one who want to eat Thai Food.

METHODOLOGY

- We will import the required libraries for python.
- pandas and numpy for handling data.
- request module for using FourSquare API.
- Matplotlib and folium to visualize the results on a map

Results form foursquare API

Resturant with maximum Likes

Borough	Downtown Toronto
Neighborhood	Adelaide,King,Richmond
ID	529612de11d2ab526191ccc9
Name	Pai
Likes	635
Rating	9.3
Tips	193
Postcodd	M5H
latitude	43.7067
longitude	-79.5941

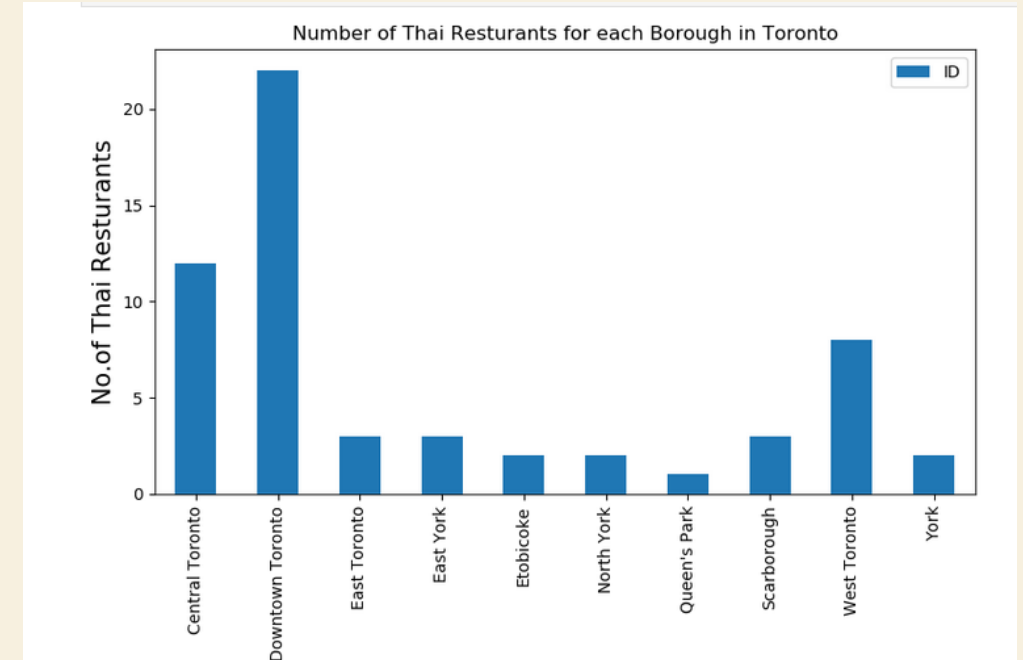
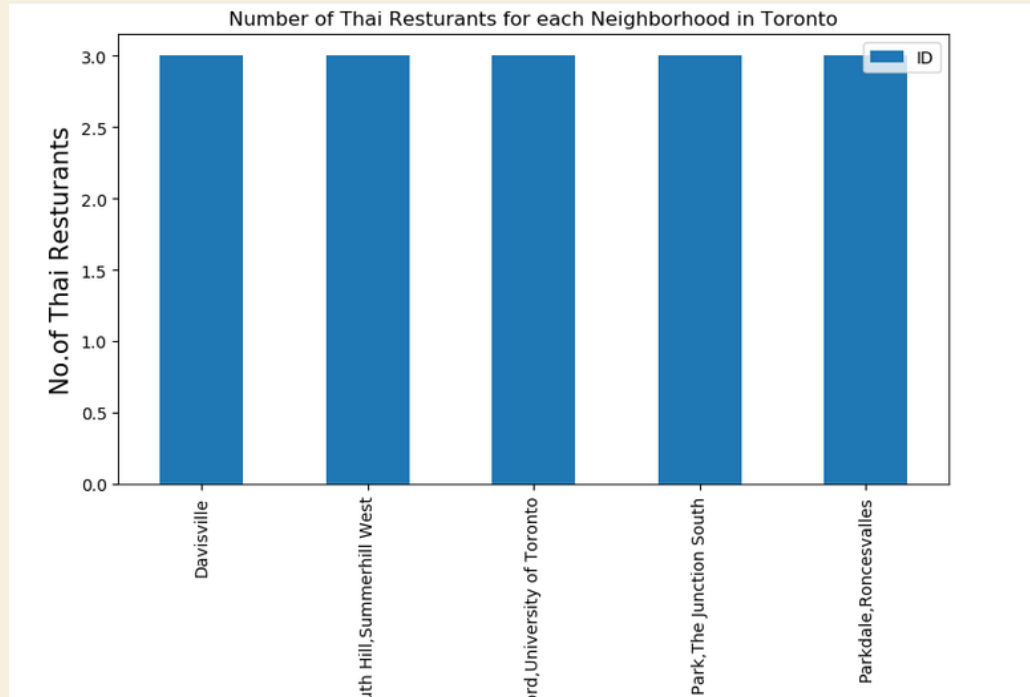
Resturant with maximum Tips

Borough	Downtown Toronto
Neighborhood	Ryerson,Garden District
ID	4ad4c061f964a52095f720e3
Name	Salad King
Likes	489
Rating	8.5
Tips	207
Postcodd	M5B
latitude	43.7067
longitude	-79.5941

Resturant with maximum Rating

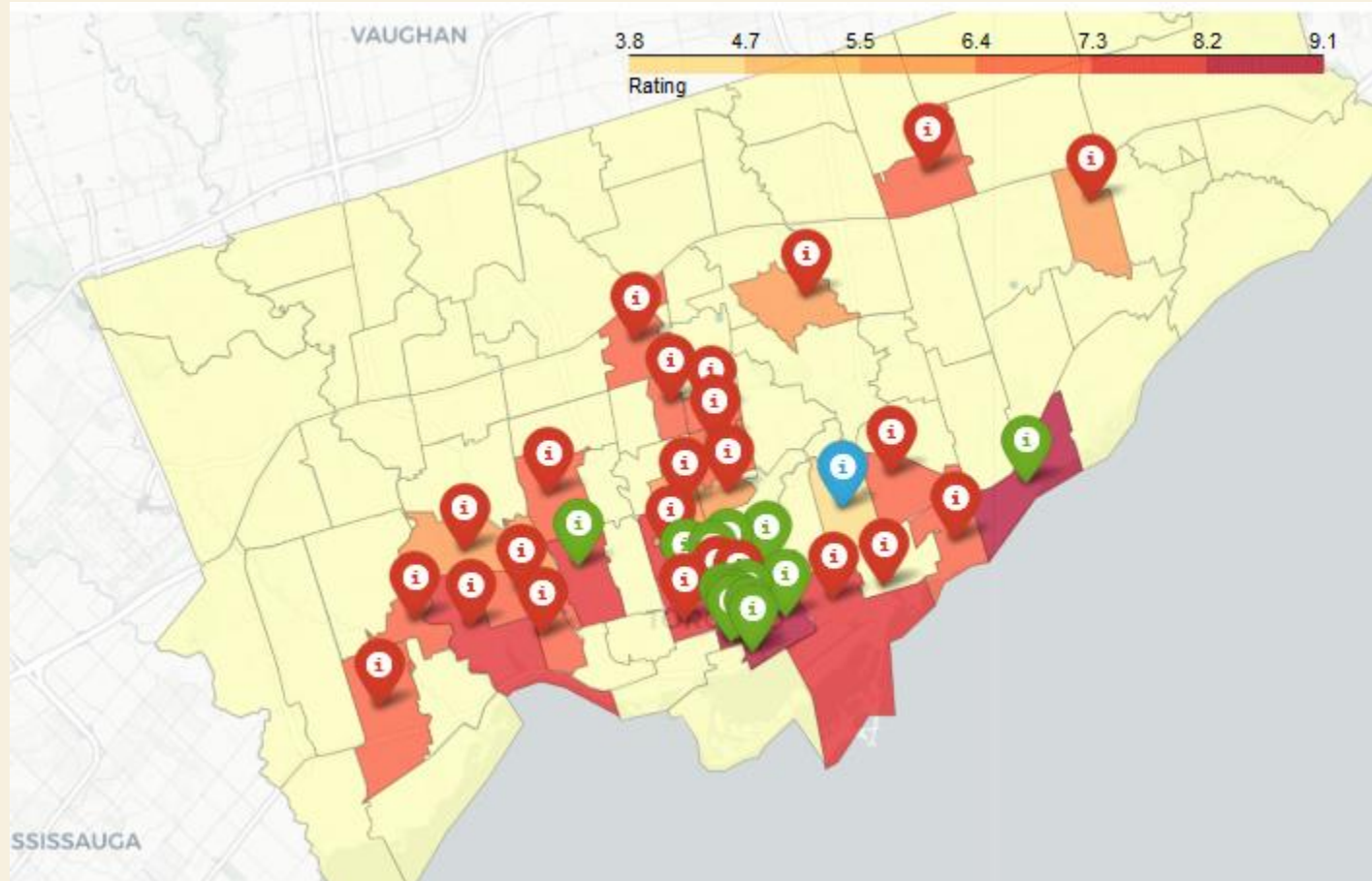
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In Downtown Toronto is maximum Tips, Like , rating from foursquare API to show “Pai” is popularity Thai restuarant in Tonronto.



In Toronto have 58 Thai. Restaurants but the most number of Thai restaurants is at Down Town and it have similarity number for each neighborhood.

Visualized the Data



Now that we have visualized the Neighborhoods.

- In green maker show the Restaurants is rating between 8-9 point
- in Red maker show the Restaurants is rating Between 6-7 Point
- And rating lower than 6 show in blue point

For Each vanue maker.

Conclusion

- The best place to conduct Thai food business is located in downtown Toronto Area, because it is considered to be a rating, which means that a lot of people who have served Thai food are headed to Down Town, which is a Thai food source.
- The property is recommended for man to invest in Thai food business. Do business in a resource that has a prevalence of business, that is, Downtown Toronto or nearby.

Limitations

- The ranking is purely on basis of rating of restaurants
- The accuracy of data depends purely depends on the data provided by FourSquaret