Battle Of Neighborhoods

Analysis of Indian Restaurants in Greater Toronto Area
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Introduction

- Toronto is an international center of business, finance, arts, and culture, and is recognized as one of the most multicultural and cosmopolitan cities in the world
- The cuisine of Toronto reflects Toronto's size and multicultural diversity.
- Toronto is also home to many fine dining establishments and chain restaurants ranging from fast food to casual or upscale dining.

As a part of this project, we will explore the neighborhoods of Toronto, research and visualize the areas that has great Indian restaurants.

Background and Description of the Problem

- For somebody trying to immigrate to Canada from India, there are multiple things to consider before the migration.
 - Cost of living, housing, demographic and proximity to Indian restaurants and grocery stores
 - Challenge is to identify the best among those restaurants and the areas where they are concentrated

Project Goals -Answer to questions

- Which is the best place to stay if I prefer Indian Cuisine?
- What is the best location in Toronto for Indian Cuisine?
- Which areas lack Indian Restaurants and have potential for a new Indian Restaurant?

Project Strategy

Data

- Toronto data that contains list Boroughs, Neighborhoods, Postal Code including Latitude and Longitude
 - Data source: 'https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada: M'
- Indian restaurants in each neighborhood of Toronto.
 - Data source : Fousquare API

Methodology

- Use the **wikipedia** data combined with **Foursquare** to get Borough and Neighborhood with the most number of Indian restaurants.
- Identify the top restaurant for an area based on the results from 1 using 'ratings', 'likes' and 'tips'.
- Utilize Bar chart visualization to get insights into Indian restaurant details.
 - Summarize the results and draw conclusion



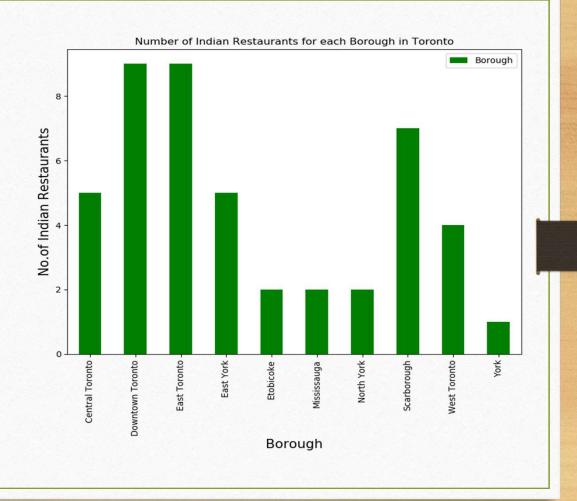
Steps

- Import necessary libraries for data and feature engineering
- Collect the Toronto data from https://en.wikipedia.org/wiki/List of postal codes of Canada: M
- Utilize Foursquare API to get the venue details and Indian restaurants
- Get ratings and tips for the restaurants from Foursquare API
- Results, Conclusion and Discussion *** Visualize data as needed for analysis



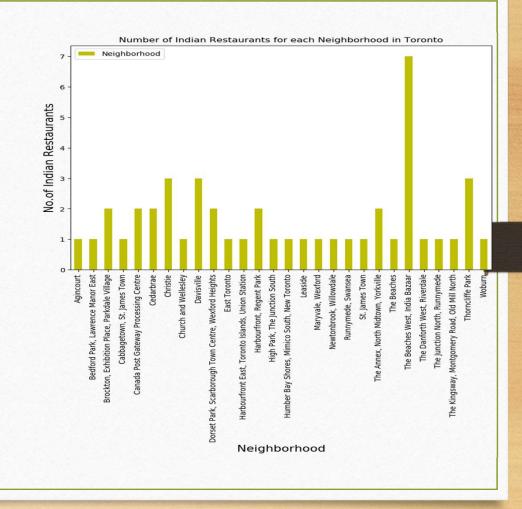
Toronto Indian Restaurants By Borough

- Downtown and East Toronto has more than 9 Indian restaurants
- York has the least number of Indian Restaurants
- Toronto (Downtown, East, West and Central) contributes to the majority of Indian cuisines



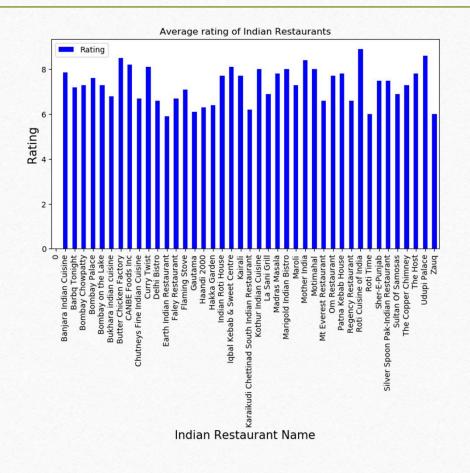
Toronto Indian Restaurants By Neighborhood

- The Beaches West, India Bazaar Neighborhood has the most Indian restaurants
- Christie, Davisville and Thorncliffe park are the second most popular neighborhoods for Indian cusine



Indian Restaurants by Rating

- Roti Indian Cuisine is the top rated Indian Restaurant
- Banjara Indian Cuisine and Udupi Palace are also rated high



Indian Restaurants in Toronto - Map



Results, Conclusion and Discussion

- The Beaches West, India Bazaar neighborhood in East Toronto Borough is the best place for Indian restaurants
- Christie, Davisville and Thorncliffe park are the next best neighborhoods for Indian cuisine
- Boroughs- Downtown Toronto, East Toronto and Scarborough has the most number of Indian restaurants in Greater Toronto Area
- Banjara Indian Cuisine is rated as the best indian restaurant with cheap pricing
- Roti Indian cuisine is equally good but it is a little expensive

Answer to Questions

- Which is the best place to stay if I prefer Indian Cuisine? The Beaches West, Indian Bazaar neighborhood
- What is the best location in Toronto for Indian Cuisine? Downtown and East Toronto
- Which areas lack Indian Restaurants and have potential for a new Indian Restaurant? Etobioke, North York and York seem to have potential for some Indian cuisine. But the demographic and 'likes' need to be researched for market analysis.

Limitations

- Data accuracy is limited to Foursquare API
- Ratings are solely based on the responses section of Foursquare API
- New restaurants that were not added to the API is not reported
- Folium map is not rendered in the final report and an image of the map is uploaded to GitHub.