Using Machine Learning to find locations to open a Burmese Restaurant

Introduction

1.1 Background

For the Capstone project, we are making an imaginary scenario for a concept Burmese restaurateur who wishes to research opening an authentic Burmese restaurant in the Toronto area. The main idea behind this project is that there may not be enough Burmese restaurants in Toronto and it may present an opportunity for this entrepreneur who is based in Canada. As Burmese food is similar to other Asian cuisines, this entrepreneur is thinking of establishing this restaurant in locations where Asian food is popular (many Asian restaurants in the neighbourhood). With this purpose, finding the location to open such a restaurant is one of the most important decisions for the entrepreneur and am creating this project to help him find the most suitable location.

1.2 Business Problem

The objective of this capstone project is to find the most suitable location for the entrepreneur to open a new Burmese restaurant in Toronto, Canada. By using data science methods and machine learning methods such as clustering, this project aims to provide solutions to answer the business question: In Toronto, if an entrepreneur wants to open a Burmese restaurant, where should they consider opening it?

1.3 Target Audience

The entrepreneur who wants to find the location to open authentic Burmese restaurant

2. Data

To solve this problem, I will need below data:

- List of neighbourhoods in Toronto, the city of Canada.
- Lat and Long of these neighbourhoods.
- Venue data that is related to the Asian restaurants. This data shall help me find the neighbourhoods that are most suitable and viable to open a Burmese restaurant.

3. Extracting Data

- Scraping of the Toronto neighbourhoods via Wikipedia will be done by:
- Fetching Latitude and Longitude data of these neighbourhoods through Geocoder package
- Using the Foursquare API to fetch venue data related to those neighbourhoods