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IBM Project Work

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Contents

Using Machine Learning to find locations to open a Nepalese Restaurant

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1.Introduction

1.1 Background

For this Capstone project, I am creating a hypothetical scenario for a concept Nepalese Restaurant who wants to explore opening an authentic Nepalese Restaurant in Toronto area. The idea behind this project is that there may not be enough Nepalese Restaurant in Toronto and it might present a great opportunity for this entrepreneur who is based in Canada.

As Nepalese food is very similar to other Asian cuisines, this entrepreneur is thinking of opening this restaurant in locations where Asian food is popular (therefore, looking for huge number on Asian Restaurants in the region). With the purpose in mind, finding the location to open such a restaurant is one of the most important decisions for this entrepreneur and I am designing 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 Nepalese 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 Nepalese Restaurant, where should they consider opening it?

1.3 Target Audience

The entrepreneur who wants to find the location to open authentic Nepalese Restaurant.

2.Data

To solve this problem, I will need below data:

- List of neighbourhoods in Toronto, Canada.
- Latitude and Longitude of these neighbourhoods.
- Venue data related to Asian restaurants.

This will help us find the neighbourhoods that are most suitable to open Nepalese Restaurant.

3. Extracting Data

- Scrapping of Toronto neighbourhoods via Wikipedia
- Getting Latitude and Longitude data of these neighbourhoods via Geocoder package
- Using Foursquare API to get venue data related to these neighbourhoods