

Coursera IBM Data Science Final Capstone Project Opening a new Asian restaurant in Toronto, Canada

Introduction

A hypothetical scenario is created for a concept restaurateur who wants to explore opening an authentic Asian restaurant in Toronto area. The idea behind this project is that there may not be enough pan-Asian restaurants in Toronto and it might present a great opportunity for this entrepreneur who is based in Canada. To start with, this entrepreneur must look for locations where Asian food is popular, keeping in mind the neighbourhood population distribution and the presence of already established Asian cuisines. With this 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.

Business Problem

The objective of this capstone project is to find the most suitable location for the entrepreneur to open a new pan-Asian cuisine 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 an Asian restaurant, where should they consider opening it?

Target Audience

The entrepreneur who wants to find the location to open pan-Asian restaurant

Data

To solve this problem, we will need the below mentioned data:-

- List of neighborhoods in Toronto, Canada.
- Latitude and Longitude of these neighborhoods.
- Venue data related to Asian restaurants. This will help us find the neighborhoods that are most suitable to open our restaurant of choice.

Extracting the data

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