IBM DATA SCIENCE CAPSTONE PROJECT

OPENING AN ASIAN RESTAURANT IN CHICAGO

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Introduction

For this Capstone project, My client wants to open an authentic asian restaurant in Chicago area. The idea behind this project is that there may not be enough Asian restaurants in Chicago and it might present a great opportunity for this entrepreneur who is based in India.This entrepreneur is thinking of opening this restaurant in locations where Asian food is popular where many Asian restaurants are in the neighborhood. With this in mind, finding the location to open such a restaurant is one of the most important decisions for my client and I am creating this project to help him find the best place for opening his restaurant.

Business Problem

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

Data

To solve this problem, I will need below data:

- List of neighborhoods in Chicago,IL,USA.
- 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 an asian restaurant.

Extracting the data

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