Finding the best location for a vegan restaurant in three metropolitan areas

Introduction/Business Problem

A vegan diet is being adopted by more and more people in the USA, and the demand for vegan restaurants in correspondingly increasing. This capstone project is tailored to stakeholders who are interested in opening a vegan restaurant and have a preference for one of the following cities: New York City, Chicago or Los Angeles.

We ask the following relevant questions: Which city is most suitable in terms of vegan restaurant demand? What types of cuisines or pricings should our restaurant provide?

This project will be of interest to stakeholders who want to open a vegan restaurant in an urban area or want to know about the distribution of vegan restaurants in terms of location, type of cuisine, pricing and popularity.

Data sources

Using the Foursquare API (https://developer.foursquare.com/places) we can retrieve current and historical information about restaurants in the three cities of interest, including location, neighbourhood characteristics, rating, and type of cuisine. To map out districts in each city we can scrape borough names from public websites like Wikipedia.

For example, we can search for vegan restaurants in Hell's kitchen in New York City and find the surrounding venues and their characteristics. We can do the same for all other boroughs and ultimately cluster types of vegan restaurants by their surrounding venues' characteristics. Which neighborhoods lead to the highest success? What cuisines lead to the highest success? Which city and borough is ideally suited for opening a new vegan restaurant and what cuisine should it provide?