Best Place To Open an Indian restaurant in New York

Introduction

A person wants to open an Indian restaurant in New York. The idea behind this project is that there may not be enough Indian restaurants in New York and it might present a great opportunity for this person who is based in New York. As Indian food is very similar to other Asian cuisines, this person is thinking of opening this restaurant in locations where Asian food is popular. With the purpose in mind, finding the location to open such a restaurant is one of the most important decisions for this person and I am creating a model to help the person in finding the best location to open the restaurant in New York.

Business Problem

In New York, if someone wants to open a Indian restaurant, where should they consider opening it?

Target Audience

The person who wants to find the location to open authentic Indian restaurant in New York

Data

For model designing following data will be required:

- List of neighborhoods in New York.
- Latitude and Longitude of these neighborhoods.
- Venue data related to Indian and Asian restaurants. This will help us find the best places that are most suitable to open a Indian restaurant.

Following data sources will be needed to extract/generate the required information:

- The information regarding the neighborhoods in New York and their corresponding latitude and longitude coordinates can be downloaded from the following link “**https://geo.nyu.edu/catalog/nyu_2451_34572**”.
- Use **geopy** library to get the latitude and longitude values of New York City.
- number of restaurants and their type and location in every neighborhood will be obtained using **Foursquare API.**

After loading the data from “**https://geo.nyu.edu/catalog/nyu_2451_34572**” we came to know that all the relevant data is in the features key, which is basically a list of the neighborhoods.So, let's define a new variable that includes this data.The next task is essentially transforming this data of nested Python dictionaries into a *pandas* dataframe.

Foursquare

Now that we have our location candidates, let's use Foursquare API to get info on restaurants in each neighborhood.

We're interested in venues in 'food' category, but only those that are proper restaurants - coffee shops, pizza places, bakeries etc. are not direct competitors so we don't care about those. So we will include in outlist only venues that have 'restaurant' in category name, and we'll make sure to detect and include all the subcategories of specific Indian restaurant' category, as we need info on Indian restaurants in the neighborhood.