Capstone Project - The Battle of Neighbourhoods

Opening a New Vegetarian Restaurant in Chennai

Introduction:

Vegetarian and vegan dietary practices vary among countries. Differences include food standards, laws, and general cultural attitudes of vegetarian diets. In survey, it states that most of the Indians are Vegetarians. People follow their own diet. In the busy world, most of the people having their launch in restaurants. Hence it is necessary to follow a proper diet to stay healthy and compete the world. The food we take should be hygiene and easily available to the people. Thus, in this Data Analysis Project we going to identify the good place to start our Vegetarian / Vegan Restaurant in and around the neighbourhoods of Chennai.

Business Problem:

The main objective of this Capstone Project is to provide a good Vegetarian Restaurant to the public. The target of this Project is to find a location to start our business in and around location Chennai, India. Even though vegetarians are high in India, it is difficult find a good restaurant within their living area. Thus, through this project we are aiming the neighbourhood with a less or no Vegetarian/ Vegan Restaurant and provide a good environment to have their meals without searching and travelling long distance from their living.

Data:

For our analysis, we need the following data:

- List of Neighbourhoods of Chennai.
- The Latitude and Longitude of the Neighbourhoods.
- Venues Data in the Neighbourhoods.

Source of the Data:

I. List of Neighbourhoods of Chennai:

For the List of Neighbourhoods of Chennai, we are collecting the data from Wikipedia (https://en.wikipedia.org/wiki/List_of_neighbourhoods_of_Chennai). This List is not available as for our use directly. Hence, we are applying Beautiful Soup method to extract our requirements and forming a Data Frame using Pandas Library.

II. The Latitude and Longitude of the Neighbourhoods:

To get the Latitude and Longitude of the Neighbourhoods we are using “geocoders”. We need to find the latitude and longitude for each of neighbourhoods in Neighbourhoods table. Then for our convenience we are merging the latitude and longitude with Neighbourhoods table. Finally, at this stage we have table with Neighbourhood name along with its Latitude and Longitude.

III. Venues Data in the Neighbourhoods:

To get the Venues in and around the Neighbourhoods, we are using the Foursquare. Thus, we get the response as JSON format. Then we need to extract the only the data we are interested and form a Data Frame to store the data.