

IBM APPLIED DATA SCIENCE CAPSTONE PROJECT

PLACES FOR OPENING A NEW VEGAN RESTAURANT COMPLEX AT MUMBAI, ECONOMIC HUB OF INDIA

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Introduction

A restaurant is generally an establishment where the public may obtain meals or refreshments. As with so many ideas that evolve over time, restaurants now serve a larger role in society... they have become places of social contact, of discovering new cultures and tastes from far-away lands, of spending an evening with your loved ones, of clinching business deals over a glass of wine, and so forth. All this, of course, in addition to the basic functions of “restoring” people with the help of good food, service and ambience. When it comes to vegetarian people, a complete vegan restaurant plays the most vital role. In Mumbai, where a diversity of people stays from all over the world. So, we have to choose such a location that will be beneficial for the person who is trying to open the business. Crowded places where there are very less amount of vegan restaurants will be an idle site for the project.

Business Problem

The goal of this project is to find the ideal place to launch the vegan restaurant in Mumbai, India. We have to find the best location using the Data science and Machine Learning techniques like clustering and also using data visualisation tools like Folium maps etc.. Now we have to spot where Vegetarian people are more in number and Vegan Restaurants are less.

Where would you recommend to open a Vegan Restaurant Complex in Mumbai, India?

Target Audience

My project is solely focussed on the businessman trying to open a new Vegan Restaurant complex in Mumbai. Every year more people are migrating to Mumbai, so restaurants are also growing in more numbers in the city. But Vegan Restaurants are comparatively less in number.

DATA SECTION

The data that we need is :

- The neighbourhood areas list in Mumbai. This will create the extent of the project in the city. More nos of neighborhood included, more places we can explore.
- Next, we will have to get the latitude and longitude of those places and merge it with the neighborhood areas.
- Furthermore, we have to explore these places for vegan restaurants and will use this for clustering.

The neighborhood areas data we will get from wikipedia page:

https://en.wikipedia.org/wiki/Category:Suburbs_in_Mumbai. We will use this data to separate the name of the neighborhoods of Mumbai. Next, we will use the geocoder to find the latitude and longitudes of these places and merge it with the previous DataFrame. Next we will use the FourSquare API to explore these neighborhoods using the location details and get the venues data. And finally using the venues to plot on the map using folium maps. Next, we will use ML techniques like K-Means clustering to cluster those points.