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The Optimal Location for Indian Restaurant

Introduction

As an Indian and food lover, I was always curious to, what if someone like me want to open Indian restaurant. Great!!!

I choose London for my analysis. London is diverse city. London is home of 500k people roughly 10% of total population, originated from Indian, Pakistan and Bangladesh. India Pakistan and Bangladesh were a single country in colonial era. And it had been ruled by Britain, so lot of people for Indian subcontinent are moved to Britain and especially London, Additional to that, lot of travellers visit to London. Thant's why I am so excited about London

Business problem

Stakeholder who is interested to open a Indian restaurant in London is our, we need to get optimal location for the same. For that we are considering some criteria.

- We will consider the area which has more Indian population
- Restaurant should be not crowed with another Indian restaurants
- It should be as near to city centre as possible

There are 33 boroughs in London, and we will study each of them

Data

The Borough list, Area, Population we can get by scrapping a Wikipedia page.

I will use geocoder python package to get latitude and Longitude of borough, also to get the distance of borough from city centre

Foursquare API will be used to get the top venues in Borough which can be used to explore the neighbourhood.

How to solve problem with Data

We will use area population and venues to divide the Boroughs. We will make clusters of boroughs which has same qualities. For that we will use unsupervised machine learning algorithm K-mean clustering. Also, we will use Elbow method and Sillihoette score to get K values. After getting we will narrow down our analysis to select the Borough which has high Indian origin population, low number of Indian restaurants and it should be as possible as close to city centre. With this criteria we will find the location.

References

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