The Battle of the Neighborhoods - Chennai

by,

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1. Introduction:

Chennai, Tamil Nadu is home to a large number of business, from micro to big companies..It is also a great tourist destination. In this project we will determine the optimal location to open a restaurant in the Chennai district, and will be targeted at stakeholders interested in opening a restaurant in Chennai. Since we are not aware of what type of restaurant is popular in Chennai, we will also determine the most popular type(s) of restaurants in Chennai. We will utilize data science and machine learning techniques in order to do this. This project will be of interest to anyone wanting to open a restaurant in Chennai, and as a secondary application can also be useful to anyone wanting to visit or live in Chennai.

2. Data

In this project we will utilize three datasets in order to solve our problem. The first dataset is a list of municipalities. This data set was scraped from Wikipedia using BeautifulSoup. The next data set is one contain the latitude and longitude for each municipality. This dataset was obtaining using Geocoder package. The file containing the list of venues was obtained using the Foursquare API. We selected all venues not just restaurants in order to see where restaurants were more popular.

Some of the features extracted from the data were, the latitude and longitude of each municipality, and from the foursquare API we extracted the venues, the venue category, and its geo-coordinates. All of this data can be used to help us in our analysis and problem solving, which will be discussed more thoroughly in the methodology and analysis sections.