The Battle of Neighborhoods

Introduction

Mumbai is the largest city in India with a population of 1.84 crores according to the 2011 census and it is also the financial capital of India. Mumbai is also home to good restaurants in India, but due to the immense population density of Mumbai, there is a scope for more new restaurants. In this study I will try to find a location in Mumbai city for launching a new restaurant, which may give maximum profit.

Data Required

- Neighborhoods and its geographical coordinates
  - Source: https://en.wikipedia.org/wiki/List_of_neighbourhoods_in_Mumbai
    Or Geopy library
- Venue data
  - Source : Foursquare API

Libraries required

Pandas: For creating and manipulating dataframes.

Folium: Python visualization library would be used to visualize the neighborhood cluster distribution of using an interactive leaflet map.

Scikit Learn: For importing k-means clustering.

JSON: Library to handle JSON files.

XML: To separate data from presentation and XML stores data in plain text format.

Geocoder: To retrieve Location Data.

Beautiful Soup and Requests: To scrap and library to handle http requests.

Matplotlib: Python Plotting Module.