BATTLE OF NEIGHBOURHOODS

Identifying Optimal Location for Malay Restauran

Introduction

- Malaysian Cuisine in among the raising interest among American. Google trends indicated that the search for Laksa and Rendang has increase in the last 5 years while the New York Fancy Food Show indicate the traction on Malay cuisine booth are increasing year by year.
- It is proven that Malay Restaurant can attract customer in United States, however the question is how do we determine where is the best location to open a Malay Restautant?

Objective

- In this project, we will study in the location using Foursquare data and simple machine learning clustering. The aim of this project is to identify to open new restaurant by identify the nearby Malay restaurant location.
- Using segmentation and clustering, we hope we can determine:
- The density and clustering of Malaysian Restaurant in an Area.
- The optimal location in opening Malaysian Restauran.

Data

- The data acquired from Foursquare Data, and will be using location of New York, Chicago, San Francisco, Jersey City, and Boston. The id for Malay Restaurant in Foursquare is 4bf58dd8d48988d156941735.
- Due to limitation of the Data, the analysis is done only on the density and clustering of the data, the rental place and demand of the Malaysian Cuisine on the particular location will be done from another time.
- To start, let's get and look at the data and load it to maps

Methodology

- In this project, I will use the basic methodology as taught in Week 3 lab.
- Above, we have done convert addresses into their equivalent latitude and longitude values.
- Then we will use the Foursquare API to explore Malaysia Restaurant in the cities
- After that, explore function mean distance of the clustering of Malaysia Restaurant
- K-means clustering algorithm will be use to complete this task. And also, the Folium library to visualize the neighborhoods in Kuala Lumpur and Johor Bahru and their emerging clusters.

Results

- New York, NY Mean Distance from Mean coordinates 0.028080995980771958
- Chicago, IL Mean Distance from Mean coordinates 0.1266229556029728 5
- San Francisco, CA Mean Distance from Mean coordinates 0.098275908717049 7
- Jersey City, NJ Mean Distance from Mean coordinates 0.052126037579030844
- Boston, MA Mean Distance from Mean coordinates 0.06688814407594189