Coursera Final Capstone Project

Opening New Bakery Shop in Jakarta, Indonesia

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Business Problem

- Location is the most important decisions to make a new Bakery Shop

- Since a lot of Bakery Shop in Jakarta because it's a central Business in Indonesia, we try to find strategic location that are not crowded with another Bakery Shop

Data Used

Based on definition of our problem, there is some factors that influence our decision, such as:

- Number of existing Neighborhood in Jakarta
- Latitude and Longitude of Neighborhood
- Number of Venue, especially related to Bakery Shop

Following data sources will be needed to extract/generate the required information:

- Number of neighborhood will be obtained using Foursquare API
- Coordinates of Jakarta will be obtained using json File

Methodology

- Get the Data from json file that we collect from the internet
- Get latitude and longitude coordinate using Geocoder
- Use Foursquare API to get all venues in Jakarta
- Filter venues category by Bakery Shop
- Find the best region to build Bakery Shop using k-means Clustering (find the best k value before that)
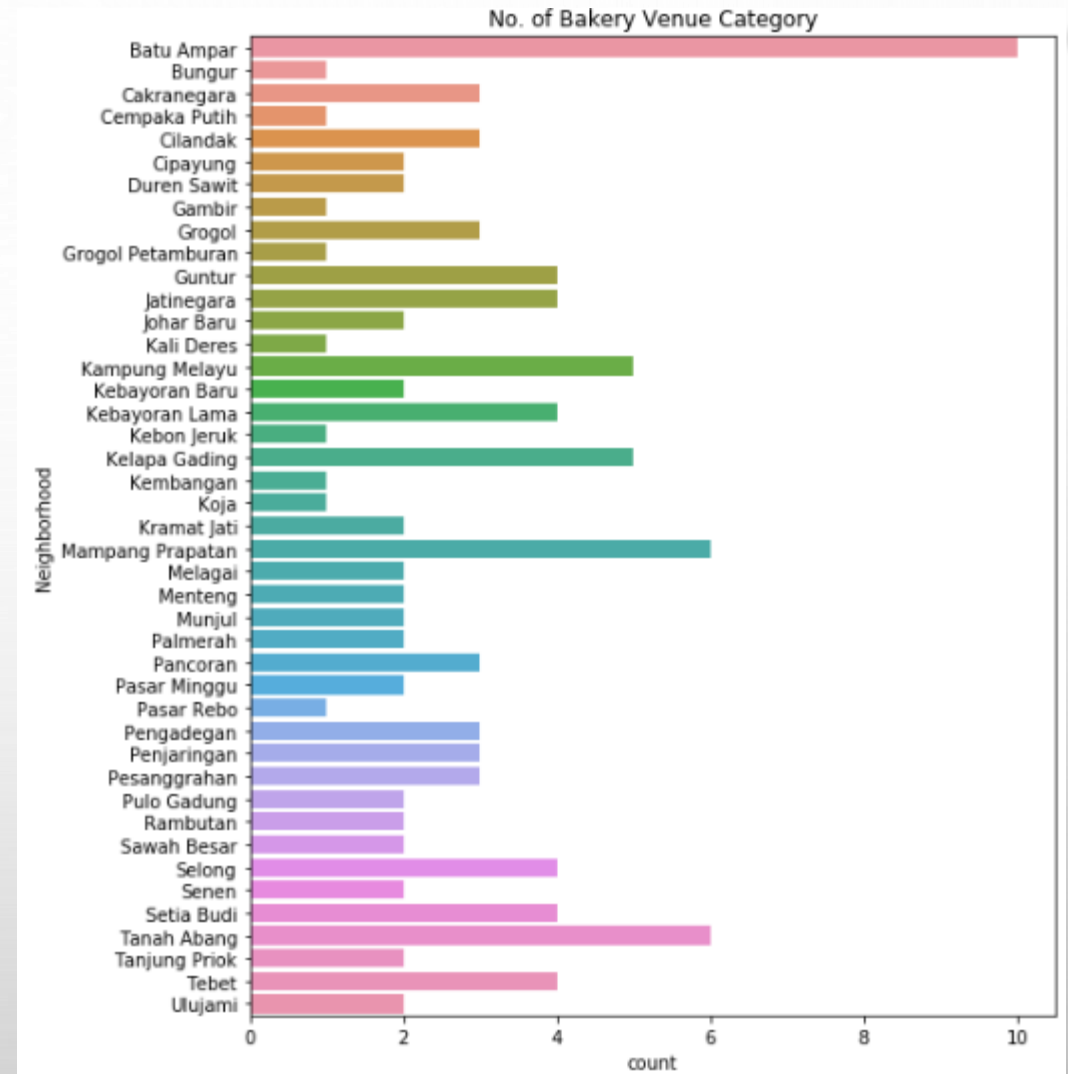- Visualize that using folium map

Analysis

Latitude and Longitude Region of Jakarta, Indonesia
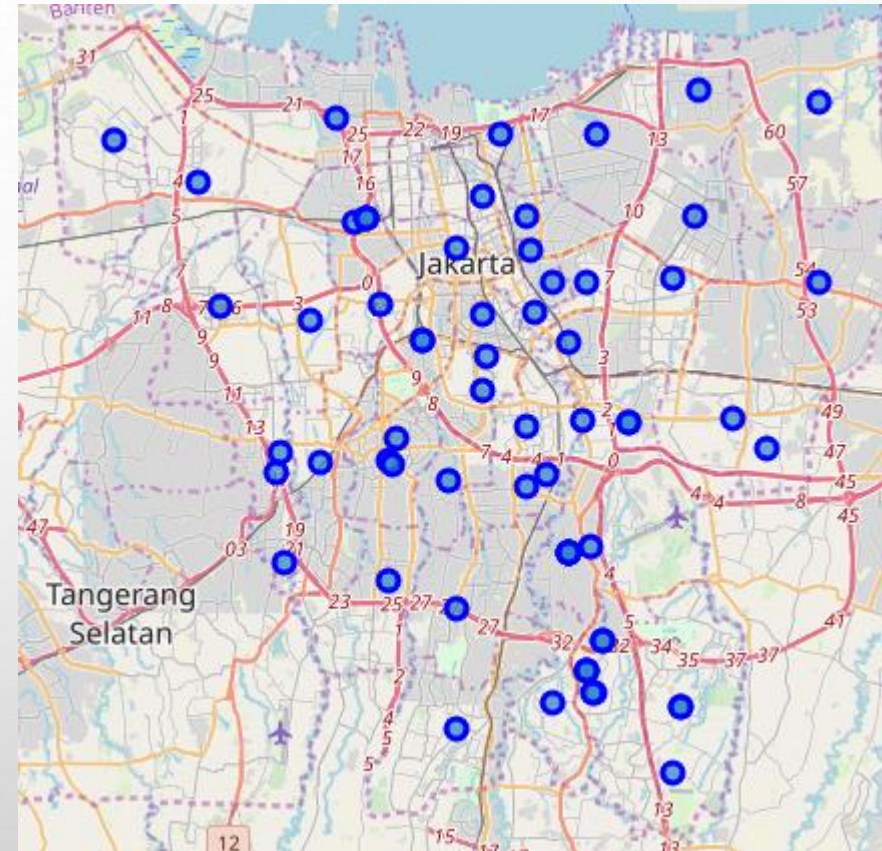
Number of total Venues in Jakarta.
Filtered by > 50 category of venue
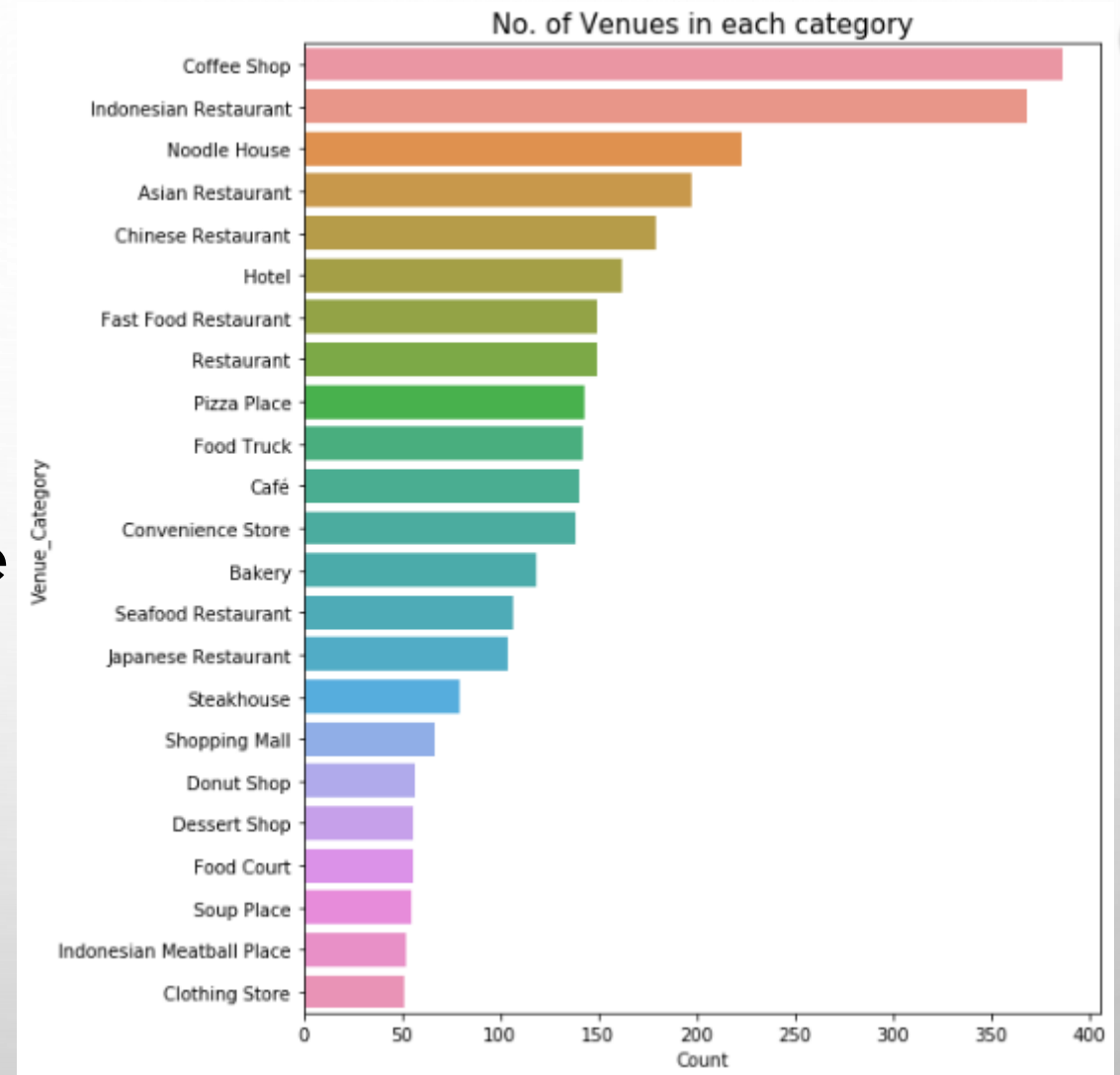
Number of total Bakery Shop in Jakarta.

Result and Discussion

Category of every Cluster :

- Red dot means there are not many of Bakery Shop in that area.
- Purple dot means there are some of Bakery Shop in there but not too much
- Yellow dot means moderate number of Bakery Shop
- Blue dot means there are lot of Bakery Shop in there which mean there was intense competition there
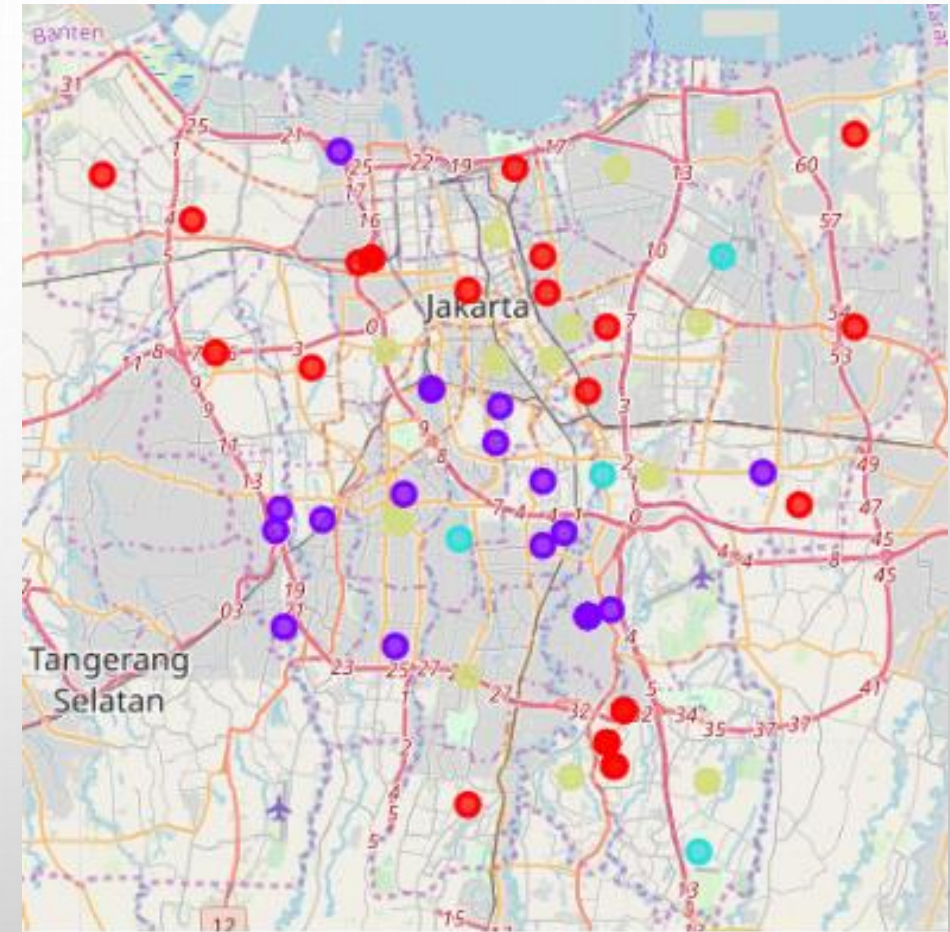
Conclusion

The answer of business problem based on analysis that we've been done is the owner can choose the area of Cluster 0 as a place to set up his Bakery Shop. Because there are very few bakeries there, which means there is little competition going on.