

# **Coursera Capstone**

## ***Opening a New Asian Restaurant in Ho Chi Minh City, VietNam***

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# BUSINESS PROBLEM

- ❖ Location of the asian restaurant is one of the most important decisions that will determine whether the mall will be a success or a failure
- ❖ Objective: To analyse and select the best locations in the Ho Chi Minh city to open a new asian restaurant
- ❖ This project is timely as the city is currently suffering from oversupply of asian restaurant.
- ❖ Business question
  - In the Ho Chi Minh city if a property businessman is looking to open a new asian restaurant, where would you recommend that they open it?

# DATA

## ❖ Data required

- List of neighbourhoods in Ho Chi Minh
- Latitude and longitude coordinates of the neighbourhoods
- Venue data, particularly data related to asian restaurant

## ❖ Sources of data

- Wikipedia page for neighbourhoods([https://en.wikipedia.org/wiki/Category:Suburbs\\_in\\_Kuala\\_Lumpur](https://en.wikipedia.org/wiki/Category:Suburbs_in_Kuala_Lumpur))
- Geocoder package for latitude and longitude coordinates
- Foursquare API for venue data



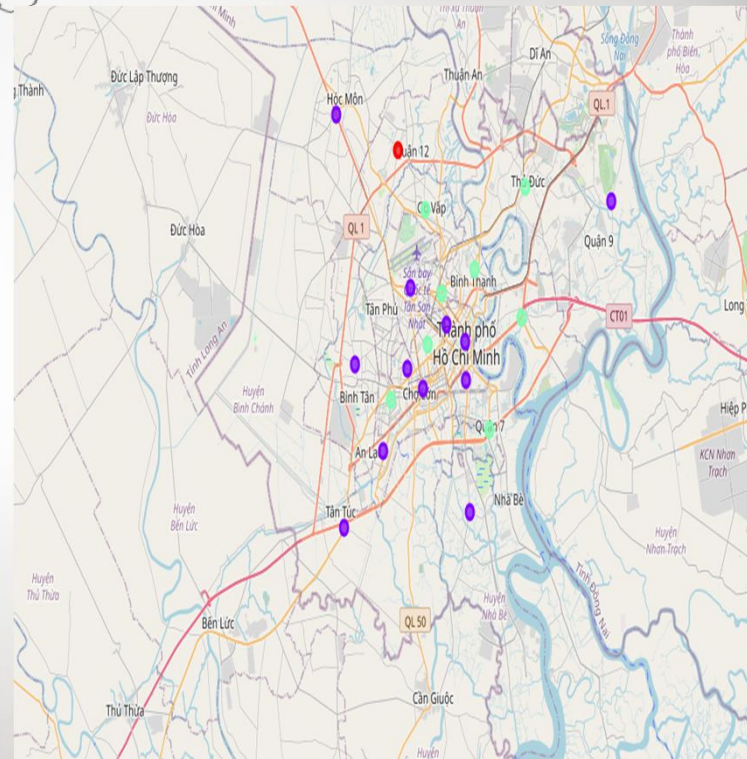
# METHODOLOGY

- ❖ Web scraping Wikipedia page for neighbourhoods list
- ❖ Get latitude and longitude coordinates using Geocoder
- ❖ Use Foursquare API to get venue data
- ❖ Group data by neighbourhood and taking the mean of the frequency of occurrence of each venue category
- ❖ Filter venue category by Asian Restaurant
- ❖ Perform clustering on the data by using k-means clustering
- ❖ Visualize the clusters in a map using Folium

# RESULTS

❖ Categorized the neighbourhoods into 3 clusters :

- Cluster 2: Neighbourhoods with moderate number of asian restaurant
- Cluster 1: Neighbourhoods with low number to no existence of asian restaurant
- Cluster 0: Neighbourhoods with high concentration of asian restaurant





# DISCUSSION

- ❖ Most of the asian restaurant are concentrated in the suburb area of the city
- ❖ Highest number in cluster 0 and moderate number in cluster 2
- ❖ Cluster 1 has very low number to no asian restaurant in the neighbourhoods
- ❖ Oversupply of asian restaurant mostly happened in the suburb area of the city, with the center area still have very few asian restaurant

# RECOMMENDATIONS

- ❖ Open new asian restaurant in neighbourhoods in cluster 1 with little to no competition
- ❖ Can also open in neighbourhoods in cluster 2 with moderate competition if have unique selling propositions to stand out from the competition
- ❖ Avoid neighbourhoods in cluster 0, already high concentration of asian restaurant and intense competition

# CONCLUSION

- ❖ Answer to business question: The neighbourhoods in cluster 1 are the most preferred locations to open a new asian restaurant.
- ❖ Findings of this project will help the relevant stakeholders to capitalize on the opportunities on high potential locations while avoiding overcrowded areas in their decisions to open a new asian restaurant.





**THANK YOU**