

# **The Battle of Neighborhoods**

Applied Data Science Capstone Project

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## **1. Introduction**

Singapore, both an island and a country, is one of the smallest but yet most modern and urbanized city in Southeast Asia. From a developing country lacking natural resources, Singapore transformed into a prosperous country through international trades, tourism and become one of the major financial hubs in Asia. It is a multi-racial and multi-cultural country with close to 30% of the population are non-residents from all around the world.

Hong Kong, once a fishing village, became one of the most developed territory and transformed into a major financial and commercial port since 1990s. While majority of the population is ethnic Chinese, as being a trading, business and tourism hub, there is a considerable number of expatriates living in Hong Kong which forms close to 9% of total population.

Singapore and Hong Kong are both very diverse and are among the top 10 Global Financial Centres. Both cities shared a number of similarities - economies dominated by service sector, high per capita income, high population density, etc. Being 2 major cities in Asia, Singapore and Hong Kong have always been in comparison in different areas such as economy, living environment, education system.

With the changes in the economic and political environments, there are increasing number of people in Hong Kong who are planning to relocate to other countries, Singapore being one of the countries on the list. There are a number of factors when deciding on the city/country to relocate to - e.g. economic environment, political stability, education, cost of living, living environment... Living environment is utmost important as a similar neighborhood will make it easier for people to adapt to the changes during the relocation process.

### **1.1 Problem to be solved and Target Audience**

The target audience for this project is the people who are planning to relocate from Hong Kong to Singapore and need to decide which neighborhood to live in. Living environment is one of the important factors that they would need to consider during relocation. With more similarities between the current and future neighborhoods, it makes it easier for the people to adapt to the new environment during the relocation process.

While there have been a wide range of comparisons between Singapore and Hong Kong in different aspects, there are limited resources available when comparing neighborhoods between the 2 cities. This project will focus on comparing the different neighborhoods of Singapore and Hong Kong to explore the similarities and differences among the neighborhoods. By clustering the neighborhoods and analyzing the top venues in each neighborhood and the distance from city centres, we will be able to provide suggested neighborhoods for our target audience based on their preferences, and recommended venues to explore when they relocate there.

At the later part of the project, we will apply the clustering results to provide recommendations for a target customer. Below are their information and preferences:

- A young couple without any children
- Work in banking industry in CBD area
- Do not drive
- Currently staying in Sha Tin in Hong Kong
- Enjoy hanging out in cafes and shopping during their rest days

## 2. Data

In order to compare the neighborhoods in Singapore and Hong Kong, we have obtained the below information:

- List of neighborhood for Singapore and Hong Kong
- Coordinates for each of the neighborhoods
- Distance of each neighborhood from city centres
- Venue data in each neighborhood
- List of MRT stations in Singapore

### 2.2 Data sources

As there is no available dataset on the neighborhoods and their distance from city centres for both cities, I have scraped the data from the below Wikipedia pages and transform them into dataframe.

- [https://en.wikipedia.org/wiki/Planning\\_Areas\\_of\\_Singapore](https://en.wikipedia.org/wiki/Planning_Areas_of_Singapore)
- [https://en.wikipedia.org/wiki/Districts\\_of\\_Hong\\_Kong](https://en.wikipedia.org/wiki/Districts_of_Hong_Kong)
- [https://en.wikipedia.org/wiki/Central\\_Area,\\_Singapore](https://en.wikipedia.org/wiki/Central_Area,_Singapore)
- [https://en.wikipedia.org/wiki/Central,\\_Hong\\_Kong](https://en.wikipedia.org/wiki/Central,_Hong_Kong)

List of Singapore MRT Railway stations can be found in the below dataset from Singapore government website.

- <https://data.gov.sg/dataset/train-station-chinese-names>

Location data for venues in each neighborhood are retrieved using Foursquare API

## 2.3 Data cleaning

### Neighborhood data for Singapore and Hong Kong

I have leveraged on BeautifulSoup to scrape the neighborhood data from Wikipedia pages and transformed them into pandas dataframes. Once the tables from Wikipedia have been extracted, there were a lot of unnecessary columns including neighborhood names in other languages and population that are not required in our analysis. Data has then been cleaned by removing unnecessary columns with the list of neighborhoods remained. A new column “City” has also been added to the identify which city the neighborhoods belong to when the neighborhood data for Singapore and Hong Kong are merged.

After the neighborhood data are extracted, we have total of 55 neighborhoods in Singapore and 19 neighborhoods in Hong Kong.

### Coordinates data for each neighborhood

As there were no coordinates data for each neighborhood in the dataset, I have then obtained the latitudes and longitudes for each neighborhood using Nominatim geocoding API, and added those to our neighborhood dataset.

### Distance of neighborhoods from city centres

Besides venues information, we would also like to take into consideration of the distance of each neighborhoods from city centres when we segment the neighborhoods. Coordinates of the city centre of Singapore and Hong Kong were obtained from Wikipedia pages. Afterwards I have made use of the haversine formula to calculate the distance between the coordinates of each neighborhoods and their respective city centre and added this to our neighborhood dataset.

Table 1 and Table 2 shows the snapshots of Neighborhood datasets after cleaning.

	<b>City</b>	<b>Neighborhood</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Distance from city centre</b>
<b>0</b>	Singapore	Ang Mo Kio	1.370080	103.849523	8.713848
<b>1</b>	Singapore	Bedok	1.323976	103.930216	9.607766
<b>2</b>	Singapore	Bishan	1.350986	103.848255	6.594669
<b>3</b>	Singapore	Boon Lay	1.338550	103.705812	16.844590
<b>4</b>	Singapore	Bukit Batok	1.349057	103.749591	12.849412
<b>5</b>	Singapore	Bukit Merah	1.270439	103.828318	3.371441
<b>6</b>	Singapore	Bukit Panjang	1.379149	103.761413	13.833367
<b>7</b>	Singapore	Bukit Timah	1.354690	103.776372	10.768272
<b>8</b>	Singapore	Central Water Catchment	1.375708	103.801743	10.768461
<b>9</b>	Singapore	Changi	1.351080	103.990064	16.903210

Table 1: Snapshot of Singapore neighborhood dataset with coordinates and distance to city centre

	<b>City</b>	<b>Neighborhood</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Distance from city centre</b>
<b>0</b>	Hong Kong	Central and Western	22.284918	114.158304	0.331478
<b>1</b>	Hong Kong	Eastern Hong Kong	22.284918	114.158304	0.331478
<b>2</b>	Hong Kong	Southern Hong Kong	22.219263	114.225230	9.810707
<b>3</b>	Hong Kong	Wan Chai	22.279015	114.172483	1.518831
<b>4</b>	Hong Kong	Sham Shui Po	22.328190	114.160854	5.147140
<b>5</b>	Hong Kong	Kowloon City	22.330160	114.189937	6.280976
<b>6</b>	Hong Kong	Kwun Tong	22.312937	114.225610	7.752648
<b>7</b>	Hong Kong	Wong Tai Sin	22.341654	114.193859	7.587756
<b>8</b>	Hong Kong	Yau Tsim Mong	22.307404	114.165526	2.931598
<b>9</b>	Hong Kong	Islands Hong Kong	22.244541	114.205376	6.399822

Table 2: Snapshot of Hong Kong neighborhood dataset with coordinates and distance to city centre:

## Venue/Location data from Foursquare

In order to obtain a list of venues for each neighborhood for our analysis and recommendation, I leveraged on the Explore function in Foursquare API and

obtained a list of venues and their location data. I have set the limit to 100 results within 500m radius from the latitudes and longitudes of each neighborhood for the venue results. From the Foursquare location data results, I have extracted the names of the venues as our point of interest, the venues' coordinates and their categories. Singapore venues' addresses have also been extracted as they will be useful for the recommendation to our customers.

Table 3 and Table 4 shows the snapshot of neighborhoods venues datasets for Singapore and Hong Kong respectively.

	<b>Neighborhood</b>	<b>Neighborhood Latitude</b>	<b>Neighborhood Longitude</b>	<b>Venue</b>	<b>Venue Latitude</b>	<b>Venue Longitude</b>	<b>Venue Category</b>	<b>Venue Address</b>
0	Ang Mo Kio	1.37008	103.849523	Old Chang Kee	1.369094	103.848389	Snack Place	[AMK Hub (53 Ang Mo Kio Avenue 3), 569933, Sin...]
1	Ang Mo Kio	1.37008	103.849523	FairPrice Xtra	1.369279	103.848886	Supermarket	[#B2-26 AMK Hub (53 Ang Mo Kio Ave 3), 569933,...]
2	Ang Mo Kio	1.37008	103.849523	MOS Burger	1.369170	103.847831	Burger Joint	[#01-33, AMK Hub (53 Ang Mo Kio Ave 3), 569933...]
3	Ang Mo Kio	1.37008	103.849523	Face Ban Mian 非板面 (Ang Mo Kio)	1.372031	103.847504	Noodle House	[722 Ang Mo Kio Ave 8 (Ang Mo Kio Central), 56...
4	Ang Mo Kio	1.37008	103.849523	PLAYe	1.369109	103.848225	Hobby Shop	[#02-30/31, AMK HUB (53 Ang Mo Kio Ave 3), 569...

Table 3: Snapshot of Singapore neighborhoods venues dataset

	<b>Neighborhood</b>	<b>Neighborhood Latitude</b>	<b>Neighborhood Longitude</b>	<b>Venue</b>	<b>Venue Latitude</b>	<b>Venue Longitude</b>	<b>Venue Category</b>
0	Central and Western	22.284918	114.158304	Four Seasons Hotel Hong Kong (香港四季酒店)	22.286554	114.156929	Hotel
1	Central and Western	22.284918	114.158304	Apple ifc mall	22.284612	114.159070	Electronics Store
2	Central and Western	22.284918	114.158304	The Spa at Four Seasons	22.286279	114.157623	Spa
3	Central and Western	22.284918	114.158304	ifc mall (國際金融中心商場)	22.284613	114.158156	Shopping Mall
4	Central and Western	22.284918	114.158304	city'super	22.286319	114.157806	Supermarket

Table 4: Snapshot of Hong Kong neighborhoods venues dataset

For each neighborhood in both Singapore and Hong Kong, venues under the same category were then combined together using one hot encoding. The dataframe in Table 5 consists of the frequency of different venue categories for each neighborhood, which will be used for further analysis on the patterns of the neighborhoods from and clustering of neighborhoods.

	Neighborhood	Zoo Exhibit	ATM	Accessories Store	Airport	Airport Service	American Restaurant	Arcade	Art Gallery	Art Museum	Arts & Crafts Store	Asian Restaurant	Astrologer	Athletics & Sports
0	Ang Mo Kio	0.0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.024390	0.0000	0.00000
1	Bedok	0.0	0.000000	0.000000	0.000000	0.000000	0.016949	0.000000	0.000000	0.000000	0.000000	0.050847	0.0000	0.00000
2	Bishan	0.0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.046512	0.0000	0.00000
3	Boon Lay	0.0	0.000000	0.000000	0.000000	0.000000	0.014085	0.000000	0.000000	0.000000	0.000000	0.084507	0.0000	0.00000
4	Bukit Batok	0.0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00000	0.00000
5	Bukit Merah	0.0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00000	0.00000
6	Bukit Panjang	0.0	0.000000	0.000000	0.000000	0.000000	0.027027	0.000000	0.000000	0.000000	0.000000	0.054054	0.0000	0.00000
7	Bukit Timah	0.0	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00000	0.00000
8	Central and Western	0.0	0.000000	0.000000	0.000000	0.013514	0.000000	0.000000	0.013514	0.000000	0.000000	0.013514	0.00000	0.00000
9	Changi	0.0	0.000000	0.000000	0.428571	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00000	0.00000

Table 5: Snapshot of dataframe with frequency of venue categories for each neighborhood

Table 6 shows a dataframe with the top 10 common venues in each neighborhood for our easy reference.

	Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
0	Ang Mo Kio	Coffee Shop	Dessert Shop	Bubble Tea Shop	Japanese Restaurant	Snack Place	Supermarket	Sandwich Place	Food Court	Multiplex	Hobby Shop
1	Bedok	Japanese Restaurant	Coffee Shop	Asian Restaurant	Sandwich Place	Food Court	Chinese Restaurant	Sushi Restaurant	Noodle House	Fast Food Restaurant	Supermarket
2	Bishan	Food Court	Coffee Shop	Chinese Restaurant	Bubble Tea Shop	Café	Cosmetics Shop	Ice Cream Shop	Supermarket	Japanese Restaurant	Asian Restaurant
3	Boon Lay	Japanese Restaurant	Asian Restaurant	Fast Food Restaurant	Chinese Restaurant	Dessert Shop	Coffee Shop	Park	Indian Restaurant	Gym / Fitness Center	Café
4	Bukit Batok	Coffee Shop	Food Court	Chinese Restaurant	Fast Food Restaurant	Department Store	Frozen Yogurt Shop	Mobile Phone Shop	Malay Restaurant	Sandwich Place	Café
5	Bukit Merah	Resort	Beach	Wine Shop	Clothing Store	Cafeteria	Farm	Flea Market	Fast Food Restaurant	Filipino Restaurant	Fish & Chips Shop
6	Bukit Panjang	Coffee Shop	Sushi Restaurant	Fast Food Restaurant	Shopping Mall	Light Rail Station	Asian Restaurant	Bubble Tea Shop	Bookstore	Supermarket	Fried Chicken Joint

Table 6: Top 10 common venue categories in each neighborhood

## List of MRT Stations in Singapore

The dataset with the list MRT Stations in Singapore have been downloaded from the government website. As the dataset consists of columns that are not required in our analysis e.g. station codes, station name in Chinese, the dataset has been cleaned by removing those columns. A dataset consist of MRT Station names (Table 7) is now obtained.

MRT_Station	
0	Jurong East
1	Bukit Batok
2	Bukit Gombak
3	Choa Chu Kang
4	Yew Tee

Table 7: Snapshot of MRT Station names

### 3. Methodology

During data acquisition and data cleaning, we have obtained and cleaned all the data that we will require for our analysis - neighborhood data, venue data for each neighborhood and MRT Station names. We have merged the data to obtain a dataframe with the list of neighborhoods, frequency of different venue categories, and the distance from city centre.

Based on the data collected, I have analyzed the similarities and dissimilarities of the different neighborhoods in Singapore and Hong Kong by the composition of different venue categories for each neighborhood, and their distances from city centre. I have leveraged on K-means clustering algorithm to group all the neighborhoods into clusters according to their similarities. Elbow method has been used to obtain the optimal K for the clustering of neighborhoods in this project.

After similar neighborhoods are grouped into clusters, Folium map has been used to create maps for Singapore and Hong Kong to visualize the distribution of clusters in the neighborhoods.

According to the current neighborhood that our target customer lives in Hong Kong, a group of neighborhoods in Singapore which are in the same cluster group has been obtained. I have then filtered the results by public transport accessibility and the lifestyle preferences of our target customer to obtain a list of recommended neighborhoods for our customers. Using the explore function in Foursquare API, a list of recommended point of interest with corresponding address and maps indicating the venues have been prepared for our target customers.

## **4. Analysis**

In this project, I have analyzed the different neighborhoods in Singapore and Hong Kong by their venue data and their distance from city centre.

From the table showing the top 10 common venue categories in each neighborhood (Figure 6) that we created earlier, we can roughly see that the each neighborhoods seems to be quite similar in terms of the categories of venues available - with most common venues being restaurants, coffee shops and cafes.

Proximity to city centre has been taken into consideration in the analysis other than solely the venue data. If the neighborhoods are closer to city centre, it bring more convenience to our target customers to commute for work or other necessities. On the other hand, some people prefer to live away from city centres to get away from the busy city life. Hence proximity to city centre is one of the factor is put in consideration when I cluster the neighborhoods into groups.

### **4.1 K-means clustering**

K-means clustering algorithm has been used to segment the neighborhoods into similar clusters. In order to determine the optimal K for the segmentation, I have used the elbow method to determine the optimal K. From the graph below (Figure 1), it indicated that the "elbow" is at k=3, which is the optimal K for our neighborhoods. After I run the K-means clustering algorithm, the neighborhoods have been grouped into 3 clusters as shown in Table 8.

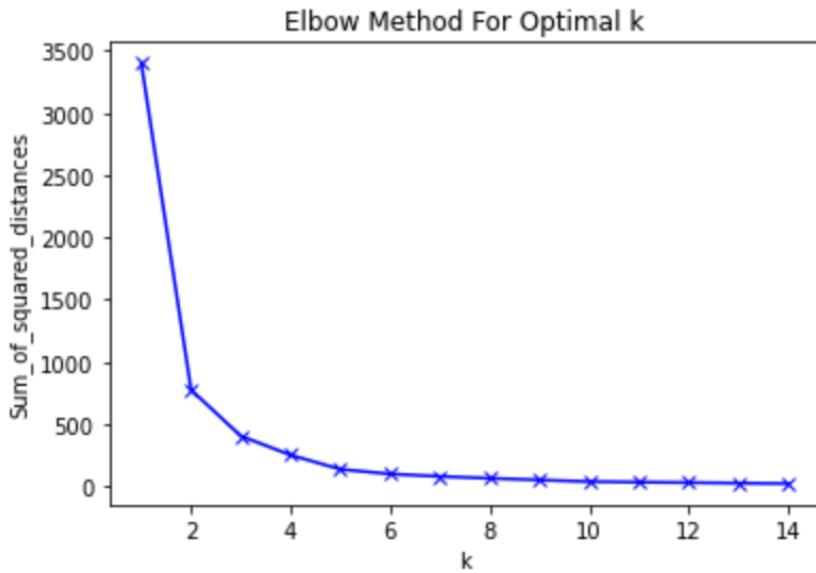


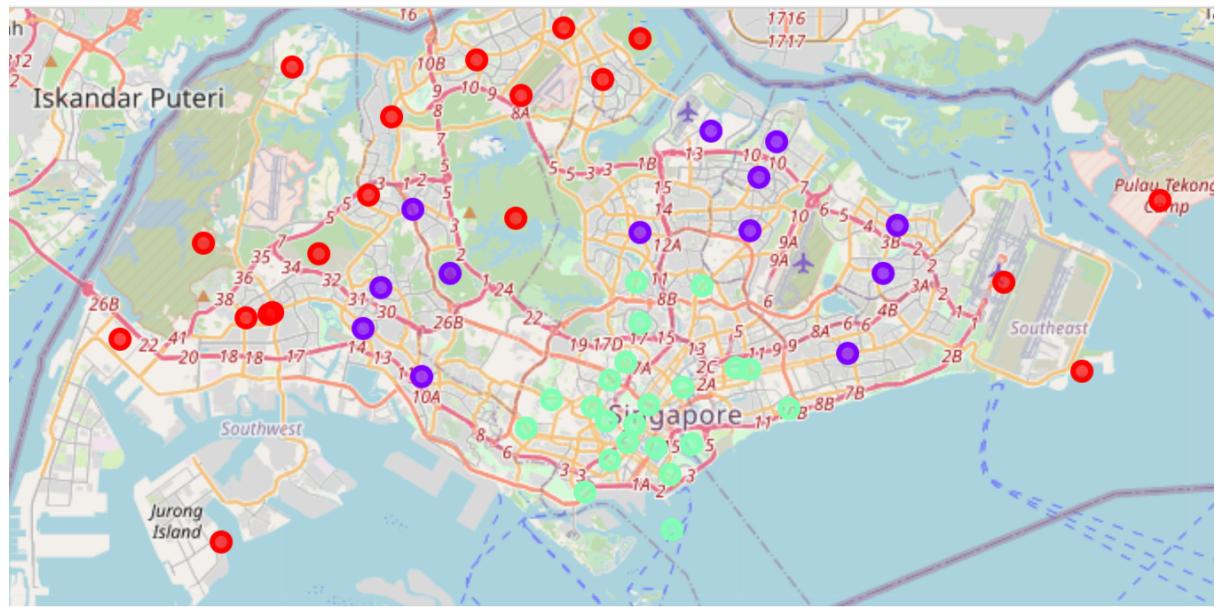
Figure 1: Elbow Method for Optimal k

	City	Neighborhood	Latitude	Longitude	Distance from city centre	Cluster Labels	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue
0	Singapore	Ang Mo Kio	1.370080	103.849523	8.713848	1	Coffee Shop	Dessert Shop	Bubble Tea Shop	Japanese Restaurant	Snack Place	Supermarket
1	Singapore	Bedok	1.323976	103.930216	9.607766	1	Japanese Restaurant	Coffee Shop	Asian Restaurant	Sandwich Place	Food Court	Chinese Restaurant
2	Singapore	Bishan	1.350986	103.848255	6.594669	2	Food Court	Coffee Shop	Chinese Restaurant	Bubble Tea Shop	Café	Cosmetics Shop
3	Singapore	Boon Lay	1.338550	103.705812	16.844590	0	Japanese Restaurant	Asian Restaurant	Fast Food Restaurant	Chinese Restaurant	Dessert Shop	Coffee Shop
4	Singapore	Bukit Batok	1.349057	103.749591	12.849412	1	Coffee Shop	Food Court	Chinese Restaurant	Fast Food Restaurant	Department Store	Frozen Yogurt Shop
5	Singapore	Bukit Merah	1.270439	103.828318	3.371441	2	Resort	Beach	Wine Shop	Clothing Store	Cafeteria	Farm

Table 8: Snapshot of neighborhoods with cluster labels

Figure 2 and Figure 3 visualize the distribution of the clusters for Singapore and Hong Kong. Each marker represents a neighborhood and the marker color represent the cluster it is in. Further look into the 3 clusters, below are some of the similarities:

- Cluster 0 (red marker) - Countryside area, close to nature (e.g. mountains, parks, seaside), further away from city centre
- Cluster 1 (purple marker) - Suburban area, with plenty of eateries, shops and markets
- Cluster 2 (light green marker) - Urban area, with tourist attractions and shopping malls



## **4.2 Filtering of clustering results**

After the neighborhoods are grouped into 3 clusters according to their similarities, the clustering results are used to provide recommendations for our target customer. Just to recap their information and preferences:

- A young couple without any children
- Work in banking industry in CBD area
- Do not drive
- Currently staying in Sha Tin in Hong Kong
- Enjoy hanging out in cafes and shopping during their rest days

According to the clustering results, our target customers currently move in Sha Tin which falls under Suburban Cluster. From the clustering results, in Singapore, there are 20 neighborhoods in Countryside cluster, 13 neighborhoods in Suburban cluster and 22 neighborhoods in Urban cluster. I have explored further on the 13 neighborhoods in Singapore which is under the Suburban cluster. The 13 Suburban neighborhoods are Ang Mo Kio, Bedok, Bukit Batok, Bukit Panjang, Bukit Timah, Clementi, Hougang, Jurong East, Pasir Ris, Punggol, Seletar, Sengkang and Tampines.

### **4.2.1. MRT accessibility**

As our target customers will not be driving in Singapore, accessibility to MRT Network (railway) is particularly important. MRT (Mass Rapid Transit) is the railway network which connects different parts of Singapore. Access to MRT Network will allow them to commute to work in city centre or travel around Singapore easily.

Using the list of MRT Stations in Singapore, I have filtered the Singapore Suburban neighborhoods with the accessibility to MRT network. Out of the 13 Suburban neighborhoods, 11 of them are accessible via MRT network – Ang Mo Kio, Bedok, Bukit Batok, Bukit Panjang, Clementi, Hougang, Jurong East, Pasir Ris, Punggol, Sengkang and Tampines.

### **4.2.2 Lifestyle preferences**

To further personalize our recommendations, further analysis has been made based on the target customers' lifestyle preferences. From our target customers' profile, we can see that they enjoy shopping and hanging out in cafes. Using the venue location data obtained from Foursquare API, I have explored the 11 neighborhoods on the availability of shopping malls and cafes.

Filtering results show that there are 5 neighborhoods with "Shopping Mall" or "Café" as their top 5 common venue categories - Bukit Panjang, Hougang, Jurong East, Punggol and Tampines. A folium map is created (Figure 4) indicating the location of the 5 recommended neighborhoods in blue markers, and the city centre in green marker.

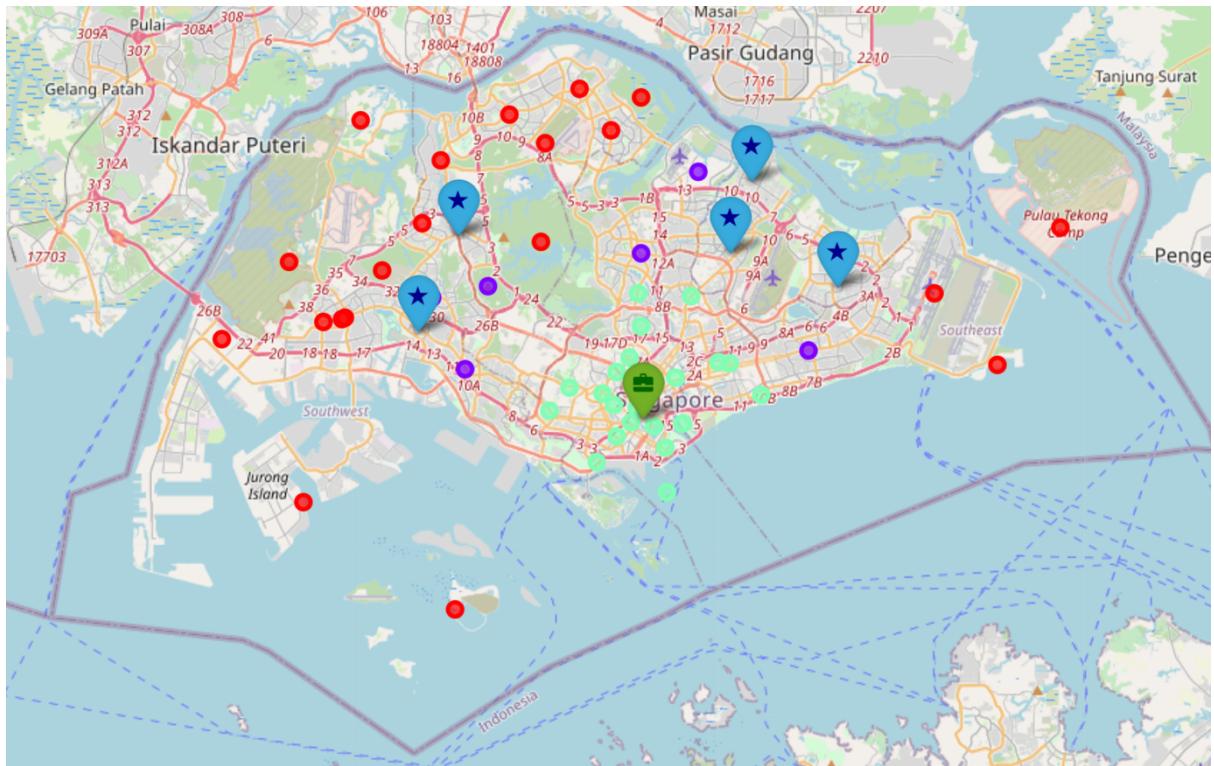


Figure 4: Singapore map with recommended neighborhoods

## 5. Results

Our analysis shows that neighborhood distributions for both Singapore and Hong Kong share quite a number of similarities. Out of 55 neighborhoods in Singapore, we grouped them into 3 clusters - Urban (22 neighborhoods), Suburban (13 neighborhoods) and Countryside (20 neighborhoods). The urban areas are located

in the southern parts of the 2 cities, where the city centres are located. Countryside areas are located furthest away from the city centres, while suburban areas are located in between urban and countryside areas. Venue data from Foursquare API also shows that composition of venues between the 2 cities are quite similar - there are wide range of restaurants and shopping malls in majority of the neighborhoods in Singapore and Hong Kong.

As the purpose of this project is to provide recommendations on Singapore neighborhoods to our customer for their relocation, customer lifestyle preferences, similarity in neighborhoods and public transport accessibility are our main consideration when identifying the suitable neighborhoods. Using the clustering results and filtered by their preferences, we have identified 5 recommended neighborhoods that our customers would be interested in - Bukit Panjang, Hougang, Jurong East, Punggol and Tampines.

## 6. Discussion

According to our analysis results and the distribution map (Figure 4), the 5 neighborhoods (Bukit Panjang, Hougang, Jurong East, Punggol and Tampines) are distributed in different parts of Singapore. They share some similarities:

- Located in suburban area, away from the busy urban environment while easily accessible via public transport (e.g. MRT railway)
- There are shopping malls and cafes available in the neighborhood, other than many more other dining options

These 5 neighborhoods would be our recommendation for our customers. The environments for these 5 neighborhoods are similar to Sha Tin (their current neighborhood in Hong Kong) as they are in the same suburban cluster. Similar neighborhoods will allow them to adapt to the new environment with more ease. The recommended neighborhoods also have easy access to MRT railway network for them to get around Singapore or commute to work to city centre easily as they will be leveraging on public transport. There are also shopping malls and cafes in these neighborhoods which match their needs as well.

To help them in exploring the recommended neighborhoods, a list of venues and an interactive map for each neighborhood have been prepared, indicating all the venues in the neighborhood, with Cafes and Shopping Malls showing as different icons and colors to easy identification. Venue addresses are also included in the marker labels. For the map and list of venues for each recommended neighborhood, see Appendix.

There are other factors that our customers will consider when choosing the neighborhood for the relocation, e.g. housing prices, neighborhood environments. Our recommendations aim to provide a starting point for them to explore further to decide on the suitable for their family.

The model in this project was mainly based on the current preferences and requirement of our target customers. Other considerations or additional requirements (e.g. housing prices, availability of schools) can be added to the analysis to improve on the recommendation or provide recommendations to a different customer in future.

## 7. Conclusion

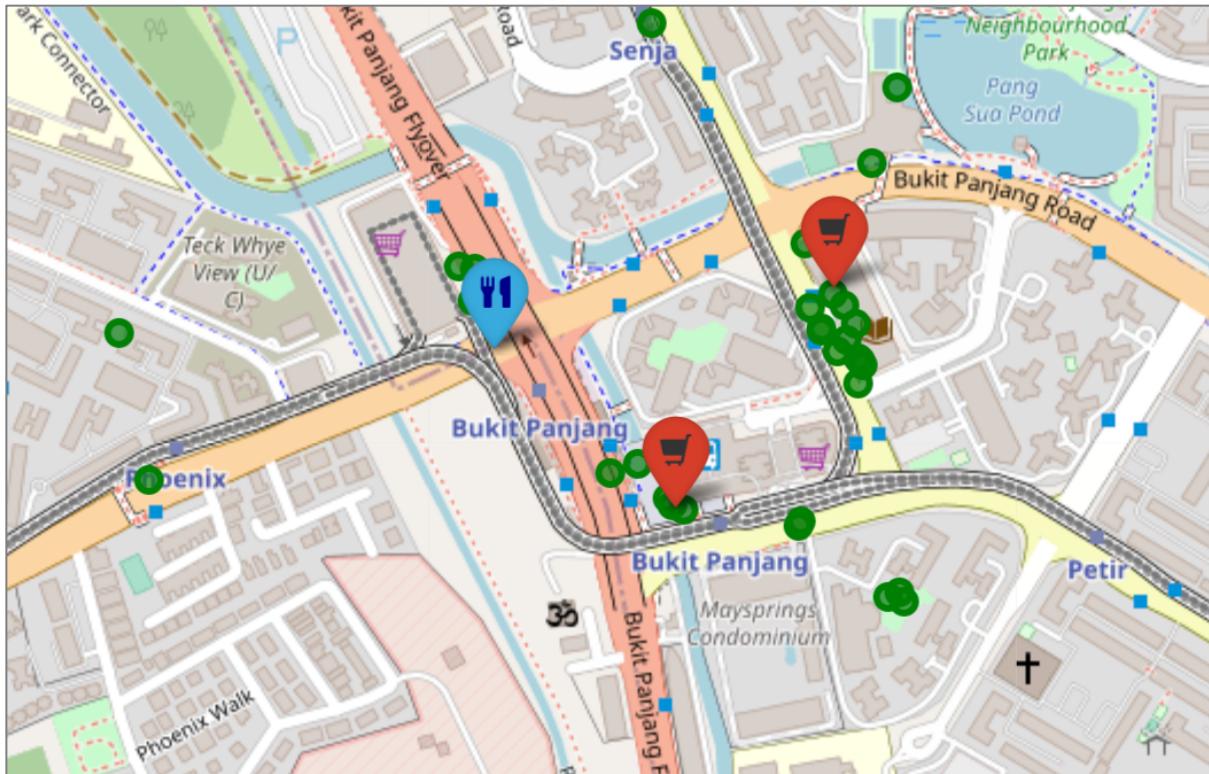
In this project, we aim to provide recommendations on neighborhoods in Singapore to our customers who are relocating from Hong Kong. We studied on different neighborhoods in Singapore and Hong Kong on their venue composition data from Foursquare and distance from city centre and grouped the neighborhoods into 3 clusters. By clustering the neighborhoods, we have identified a group of suburban neighborhoods in Singapore that is in general similar to the neighborhood in Hong Kong where our customers are currently living in. We then further analyzed on the suburban neighborhoods according to the preferences of our customers (accessible via MRT railway network, availability of cafes and shopping malls) and identify 5 neighborhoods as recommendations to our customers.

There are many factors that our customers will consider when choosing the neighborhood for the relocation, e.g. housing prices, neighborhood environments. For this project we mainly aim to provide recommendations to our customers as an overview of which neighborhoods that they would be interested in according to their

preferences. With these recommendations they will be able to further explore and decide on the neighborhood that is most suitable for their family.

## 8. Appendix

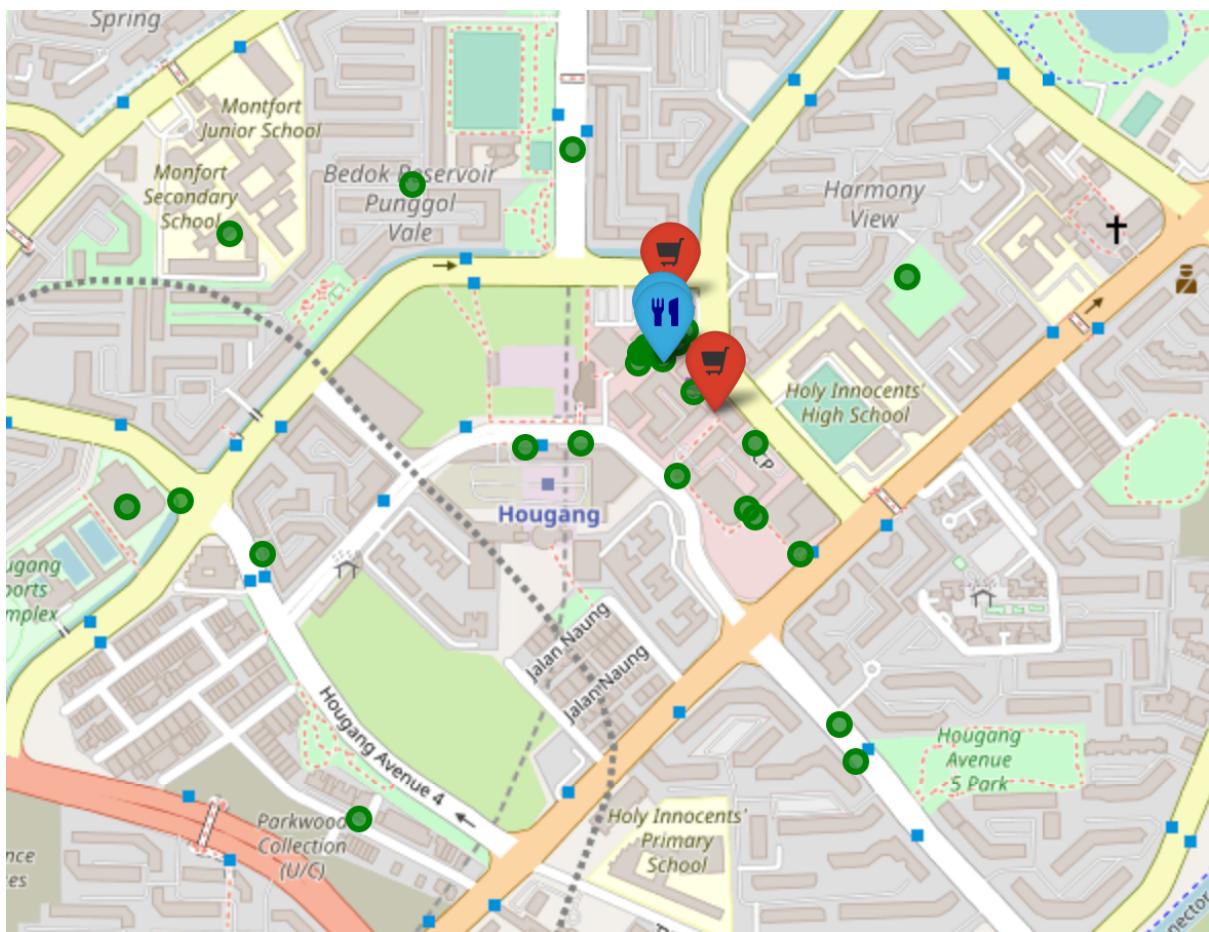
### Recommendation 1 – Bukit Panjang



Venue	Venue Category	Venue Address
Starbucks	Coffee Shop	['#B1-28, Hillion Mall (17 Petir Road)', '678278', 'Singapore']
Penyet Town	Indonesian Restaurant	['#01-31, Junction 10 (1 Woodlands Rd.)', '677899', 'Singapore']
Starbucks	Coffee Shop	['#02-09/09A Bukit Panjang Plaza (1 Jelebu Road)', '677743', 'Singapore']
Old Street Bak Kut Teh 老街肉骨茶	Diner	['Bukit Panjang Plaza (1 Jelebu Road)', 'Singapore']
McDonald's	Fast Food Restaurant	['#B1-25/26/27, Hillion Mall (17 Petir Road)', '678270', 'Singapore']
Teo Heng Karaoke	Karaoke Bar	['Junction 10', '677899', 'Singapore']
Hillion Mall	Shopping Mall	['17 Petir Road', '678278', 'Singapore']
The Gym Nation	Gym	['Senja-Cashew Community Club', 'Singapore']
Hai Xian Zhu Zhou 海鲜 煮粥	Noodle House	['Choh Dee Place (163A Gangsa Road)', '670163', 'Singapore']
Subway	Sandwich Place	['#01-38, Bukit Panjang Plaza (1 Jelebu Rd)', '677743', 'Singapore']
Osaka Ohsho	Restaurant	['Bukit Panjang Plaza (1 Jelebu Rd.)', 'Singapore']
Churros Factory	Café	['#01-25 Junction 10 (1 Woodlands Road)', 'Singapore']
LiHO	Bubble Tea Shop	['#01-19, Junction 10 (1 Woodlands Rd.)', '677899', 'Singapore']

Fun Toast	Chinese Breakfast Place	['Junction 10 (Woodlands Road)', 'Singapore']
KFC	Fried Chicken Joint	['Hillion Mall (17 Petir Road)', '678268', 'Singapore']
Bukit Panjang Plaza	Shopping Mall	['1 Jelebu Road', '677743', 'Singapore']
Sushi Express 爭鮮迴轉壽司	Sushi Restaurant	['Hillion Mall (17 Petir Road)', 'Singapore']
Swensen's	American Restaurant	['#03-04, Bukit Panjang Plaza (1 Jelebu Road)', '677743', 'Singapore']
Phoenix LRT Station (BP5)	Light Rail Station	['40 Choa Chu Kang Rd', '689483', 'Singapore']
Shan Cheng Ipoh Delicacies (Shan Cheng)	Asian Restaurant	['#01-56/57 Bukit Panjang Plaza (1 Jelebu Rd.)', '677743', 'Singapore']
Nice Cafe	Asian Restaurant	['Senja-Cashew Community Club #01-04 (101 Bukit Panjang Rd)', '679910', 'Singapore']
Maki-san	Sushi Restaurant	['#B1-23 Hillion Mall (17 Petir Road)', '678278', 'Singapore']
McDonald's	Fast Food Restaurant	['#02-01, Bukit Panjang Plaza (1 Jelebu Rd)', '677743', 'Singapore']
Eighteen Chefs	Bistro	['#02-19, Bukit Panjang Plaza (1 Jelebu Road)', '677743', 'Singapore']
Burger King	Fast Food Restaurant	['#01-28, Bukit Panjang Plaza (1 Jelebu Road)', 'Singapore']
Ichiban Sushi	Sushi Restaurant	['#01-37, Bukit Panjang Plaza (1 Jelebu Rd)', '677743', 'Singapore']
Saizeriya Ristorante E Caffe	Italian Restaurant	['#B1-20/21/22 Hillion Mall (17 Petir Road)', '588181', 'Singapore']
i love yoo!	Dim Sum Restaurant	['#B2-59 Hillion Mall (17 Petir Road)', 'Singapore']
Popular Bookstore	Bookstore	['#03-01 Bukit Panjang Plaza (1 Jelebu Rd.)', '677743', 'Singapore']
BBQ Express	BBQ Joint	['Bukit Panjang Plaza (1 Jelebu Road)', '677743', 'Singapore']
Blk 163 Bukit Panjang Coffee Shop	Coffee Shop	['163A Gangsa Road', '671163', 'Singapore']
FairPrice Finest	Supermarket	['#01-15/#02-20, Bukit Panjang Plaza (1 Jelebu Rd)', '677743', 'Singapore']
Wang Cafe	Café	['#01-53/54, Bukit Panjang Plaza (1 Jelebu Rd)', '677743', 'Singapore']
Men-ichi Japanese Ramen	Ramen Restaurant	['#01-01/02 Hillion Mall (17 Petir Road)', 'Singapore']
Ju Hao Xiao Long Bao 聚豪拉面小龙虾 (Ju Hao Xiao Long Bao)	Dumpling Restaurant	['Bukit Panjang Plaza (1 Jelebu Road)', '677743', 'Singapore']
7-Eleven	Convenience Store	['160A Jln. Teck Whye Ln. #01-02', '681160', 'Singapore']
Gym@Maysprings	Gym	['4 Petir Road', 'Singapore']
163 雲吞面	Coffee Shop	['Singapore']

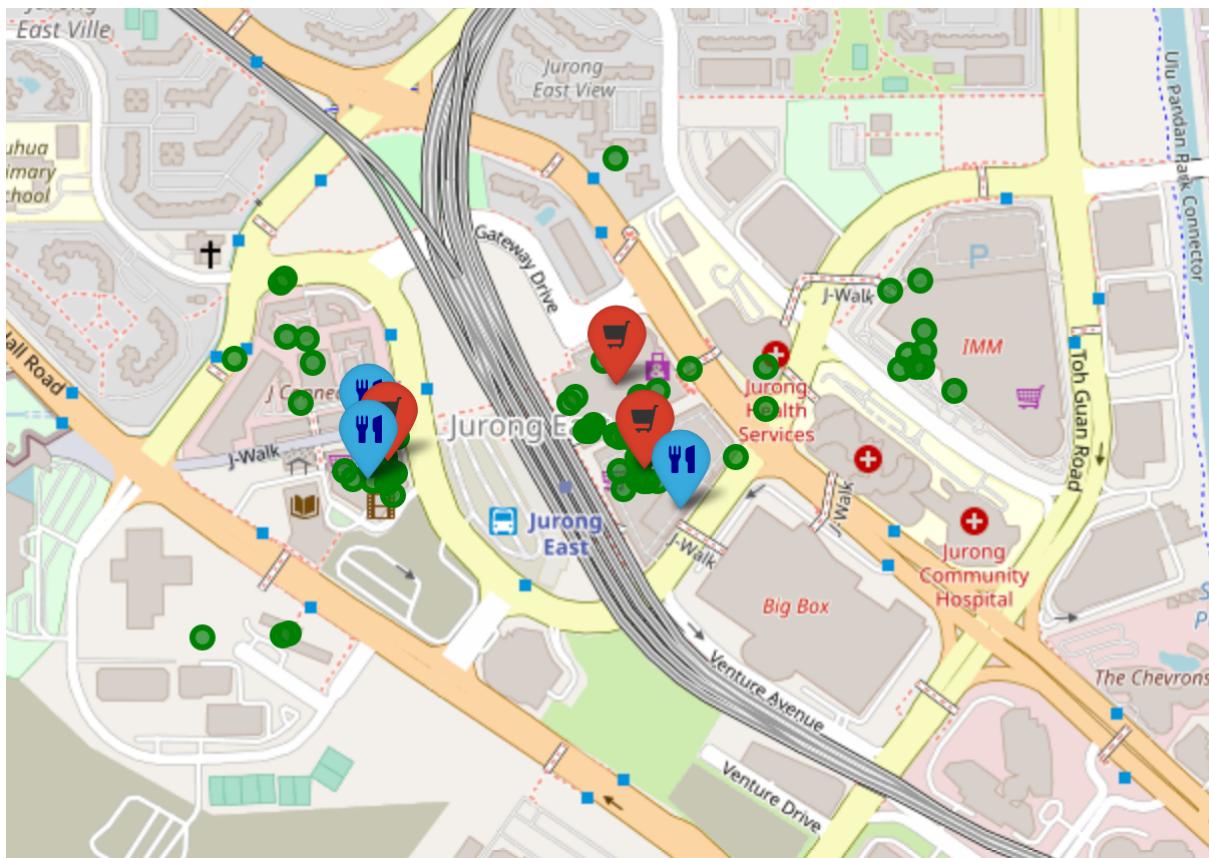
## Recommendation 2 - Hougang



Venue	Venue Category	Venue Address
Phoon Huat & Co	Kitchen Supply Store	['804 Hougang Central #01-134', '278116', 'Singapore']
Dessert Story	Dessert Shop	['#02-18 Hougang Mall (90 Hougang Ave. 10)', '538766', 'Singapore']
Tiew Mai Thai Boat Noodle	Thai Restaurant	['1187 Upper Serangoon Road (#01-22 The Midtown)', '533971', 'Singapore']
成發咖啡屋 Seng Huat Coffee House	Food Court	['811 Hougang Central. #01-206.', '530811', 'Singapore']
Qiji	Asian Restaurant	['#01-41 Hougang Mall (90 Hougang Ave 10)', '538766', 'Singapore']
Soup Restaurant 三盅兩件	Chinese Restaurant	['#02-21, Hougang Mall (90 Hougang Avenue 10)', '538766', 'Singapore']
Subway	Sandwich Place	['#02-10, Hougang Mall (90 Hougang Ave 10)', '538766', 'Singapore']
5 Star Corner Western Food	Coffee Shop	['805 Hougang Central', '530805', 'Singapore']
Yolé	Frozen Yogurt Shop	['#01-15 Hougang Mall (90 Hougang Avenue 10)', '538766', 'Singapore']
Pepper Lunch	Fast Food Restaurant	['#B1-24/25/26 Hougang Mall (90 Hougang Ave 10)', '538766', 'Singapore']
NTUC FairPrice	Supermarket	['#01-01 & #02-01, Kang Kar Mall (100 Hougang Ave 10)', '538767', 'Singapore']

Old Street Bak Kut Teh 驰名老街肉骨茶	Chinese Restaurant	['90 Hougang Avenue 10 #02-22 Hougang Mall', '538766', 'Singapore']
Toast Box 土司工坊	Café	['#B1-29/K12-15/K17, Hougang Mall (90 Hougang Ave. 10)', '538766', 'Singapore']
805 Hougang Coffeeshop	Food Court	['805 Hougang Central', '530805', 'Singapore']
Hougang Sports Hall	Athletics & Sports	['93 Hougang Ave 4 (Hougang Ave 10)', '538832', 'Singapore']
Starbucks	Coffee Shop	['#02-11\xa0Hougang Mall (90 Hougang Ave. 10)', '538766', 'Singapore']
Watsons	Pharmacy	['#03-02 Hougang Mall (90 Hougang Ave. 10)', '538766', 'Singapore']
Peng Restaurant Catering Service	Chinese Restaurant	['30 Lorong 1 Realty Park', '536953', 'Singapore']
Popular Bookstore	Bookstore	['#03-15 Hougang Mall (90 Hougang Ave. 10)', '538766', 'Singapore']
McDonald's	Fast Food Restaurant	['#01-17, Hougang Mall (90 Hougang Ave 10)', '538766', 'Singapore']
NTUC FairPrice	Supermarket	['#B1-07, Hougang Mall (90 Hougang Ave 10)', '538766', 'Singapore']
Hougang MRT Station (NE14)	Metro Station	['80 Hougang Central', '538758', 'Singapore']
KFC	Fast Food Restaurant	['#01-19, Hougang Mall (90 Hougang Ave 10)', '538766', 'Singapore']
Kawa Cafe	Café	['#01-03, Kang Kar Mall (100 Hougang Ave 10)', 'Singapore']
Ichiban Sushi	Sushi Restaurant	['#02-23, Hougang Mall (90 Hougang Avenue 10)', '538766', 'Singapore']
The Manhattan Fish Market	Fish & Chips Shop	['Hougang Mall (Level 4)', '534785', 'Singapore']
Pizza Hut	Pizza Place	['#02-25 Hougang Mall (90 Hougang Ave 10)', '538766', 'Singapore']
Hougang Mall	Shopping Mall	['90 Hougang Ave. 10', '538766', 'Singapore']
Ah Seng Bak Kut Teh 阿成肉骨茶	Soup Place	['806 Hougang Central #01-158', '530806', 'Singapore']
Kang Kar Mall	Shopping Mall	['100 Hougang Ave 10', '538767', 'Singapore']
Top Bean @ Hougang Central Bus Interchange	Dessert Shop	['Hougang Central', 'Singapore']
Hougang ActiveSG Gym	Gym	['93 Hougang Ave 4', '538832', 'Singapore']
The Paper Stone	Arts & Crafts Store	['#03-01 Hougang Mall (90 Hougang Ave 10)', 'Singapore']
Kimly Coffeeshop	Food Court	['327 Hougang Ave 5', '530327', 'Singapore']
精英 Jing Ying Coffee Shop	Coffee Shop	['Blk 524 hougang ave 6', '530524', 'Singapore']
Bus Stop 64379	Bus Station	['Hougang Avenue 6', 'Singapore']
Bus Stop 63069 (Nativity Ch Ctr)	Bus Station	['Upp Serangoon Rd', 'Singapore']

## Recommendation 3 – Jurong East



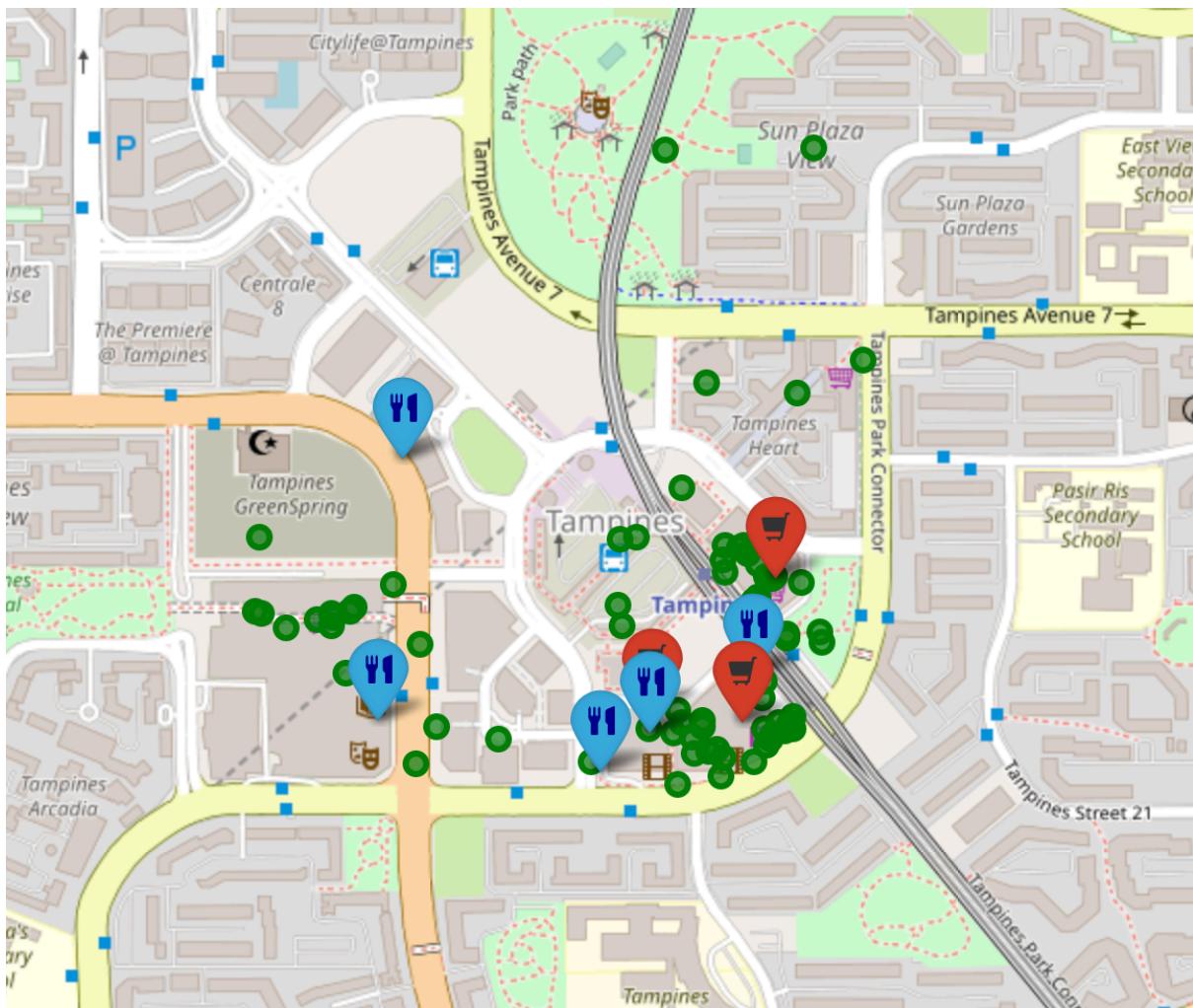
Venue	Venue Category	Venue Address
UNIQLO	Clothing Store	[#02-37 & #03-30, Jem (50 Jurong Gateway Rd)', '608549', 'Singapore']
MUJI 無印良品	Furniture / Home Store	[#04-33, JEM (50 Jurong Gateway Rd)', '608549', 'Singapore']
Johan Paris	Bakery	[#B2-01. Westgate (3 Gateway Dr.), '608532', 'Singapore']
Song Fa Bak Kut Teh 松發肉骨茶	Chinese Restaurant	[JEM 50 Jurong Gateway Road #B1-09(S)', '608549', 'Singapore']
Tonkatsu by Ma Maison とんかつ マメゾン (Tonkatsu by Ma Maison)	Japanese Restaurant	[#04-06, Westgate (3 Gateway Dr.), '608532', 'Singapore']
The Rink	Skating Rink	[#03-11, JCube (2 Jurong East Central 1)', '609731', 'Singapore']
Dian Xiao Er 店小二 (Dian Xiao Er)	Chinese Restaurant	[#03-08 JEM (50 Jurong Gateway Road)', '608549', 'Singapore']
Books Kinokuniya	Bookstore	[#04-23, Jem (50 Jurong Gateway Rd), '608549', 'Singapore']
Cathay Cineplexes	Multiplex	[#05-04, Jem (50 Jurong Gateway Rd), '608549', 'Singapore']
Platinum Movie Suites	Movie Theater	[Cathay Cineplex Jem, Lv 5, Jem (50 Jurong Gateway Rd.)', '608549', 'Singapore']
Zaffron Kitchen	Indian Restaurant	[Westgate (3 Gateway Dr.), '608532', 'Singapore']

Tsukada Nojo 塚田農場 Japanese "Bijin Nabe" Restaurant	Japanese Restaurant	[#"03-04, Westgate (3 Gateway Dr.)', '608532', 'Singapore']
Westgate	Shopping Mall	[#3 Gateway Dr (Jurong Gateway Rd)', '608532', 'Singapore']
Yolé	Frozen Yogurt Shop	[#"03-02, Westgate (3 Gateway Dr.)', '608532', 'Singapore']
Pepper Lunch	Japanese Restaurant	[#"04-10/11/12, Jem (50 Jurong Gateway Rd)', '608549', 'Singapore']
Paradise Dynasty 樂天皇朝 (Paradise Dynasty)	Chinese Restaurant	[#"02-13, Westgate (3 Gateway Dr)', '608532', 'Singapore']
FairPrice Xtra	Supermarket	[#B1-21, Jem (50 Jurong Gateway Road)', '608549', 'Singapore']
Jem	Shopping Mall	[#50 Jurong Gateway Rd', '608549', 'Singapore']
Beng Hiang Restaurant	Chinese Restaurant	[#135 Jurong Gateway Rd #02-337', 'Singapore']
J-Walk	Trail	[#Jurong Gateway', 'Singapore']
H&M	Clothing Store	[#50 Jurong Gateway Rd (50 Jurong Gateway Rd)', '608549', 'Singapore']
Green Dot	Vegetarian / Vegan Restaurant	[#"01-08, Westgate (3 Gateway Drive)', '608532', 'Singapore']
Robinsons	Department Store	[#"01-07, #02-12, #03-15 & #04-20, Jem (50 Jurong Gateway Rd)', '608549', 'Singapore']
Sabar38	Seafood Restaurant	[#DON DON DONKI Food Court (2 Jurong East Central 1)', '609731', 'Singapore']
KOI Café	Bubble Tea Shop	[#B1-27 Westgate (3 Gateway Dr)', '608532', 'Singapore']
The Coffee Bean & Tea Leaf	Coffee Shop	[#"01-06, Jem (50 Jurong Gateway Rd)', '608549', 'Singapore']
Aburi Sushi Heishirou	Sushi Restaurant	[#3, Gateway Drive, #03-05', '608532', 'Singapore']
MOS Burger	Burger Joint	[#"05-03, Jem (50 Jurong Gateway Road)', '608549', 'Singapore']
Saizeriya Ristorante E Caffe	Italian Restaurant	[#"02-09B, JCube (2 Jurong East Central 1)', '609731', 'Singapore']
Teo Heng KTV Studio	Karaoke Bar	[#"03-14/15/16, JCube (2 Jurong East Central 1)', '609731', 'Singapore']
Chir Chir	Korean Restaurant	[#JEM (50 Jurong Gateway Road)', '608550', 'Singapore']
Soi 19 Thailand Wanton Mee	Coffee Shop	[#Block 130 Jurong East', 'Singapore']
一風堂 Ippudo	Ramen Restaurant	[#3 Gateway Drive #03-03 Westgate, Westgate (3 Gateway Dr.)', '608532', 'Singapore']
Sushi Tei	Japanese Restaurant	[#"03-18, Jem (50 Jurong Gateway Rd)', '608549', 'Singapore']
IMM Garden Plaza	Playground	[#Level 3, IMM Building (2 Jurong East St 21)', '609601', 'Singapore']
Hai Di Lao 海底捞火锅 (Hai Di Lao)	Hotpot Restaurant	[#"03-01 IMM Building (2 Jurong East Street 21)', '609601', 'Singapore']
Din Tai Fung 鼎泰豐	Dumpling Restaurant	[#"02-07 Jem (50 Jurong Gateway Rd)', '608549', 'Singapore']
Brotzeit German Bier Bar & Restaurant	German Restaurant	[#Westgate (3 Gateway Dr.)', '608532', 'Singapore']

Coach Factory Outlet	Accessories Store	['IMM Building (2 Jurong East St. 21)', 'Singapore']
Shaburi And Kintan	Japanese Restaurant	['Singapore']
Starbucks	Coffee Shop	['#02-04/04A, Westgate (3 Gateway Dr.)', '608532', 'Singapore']
Starbucks	Coffee Shop	['#02-08, Ng Teng Fong General Hospital (1 Jurong East Street 21)', '609606', 'Singapore']
Paris Baguette	Café	['#02-20, Jem (50 Jurong Gateway Rd)', '608549', 'Singapore']
Soup Restaurant Teahouse 三盅兩件 茶樓	Chinese Restaurant	['#01-101B IMM Building (2 Jurong East St. 21)', 'Singapore']
Nike Factory Store	Outlet Store	['IMM, 2 Jurong East (Street 21)', '609601', 'Singapore']
Share Tea 歇脚亭	Bubble Tea Shop	['#B1-K01 JCube (2 Jurong East Central 1 Jurong Gateway Rd)', '609731', 'Singapore']
Starbucks	Coffee Shop	['#01-02, Jem (50 Jurong Gateway Rd)', '608549', 'Singapore']
Fitness First Platinum	Gym / Fitness Center	['#05-01, Westgate (3 Gateway Dr.)', '608532', 'Singapore']
Nipong Naepong	Asian Restaurant	['#01-16 Jem (50 Jurong Gateway Road)', '608549', 'Singapore']
Oppa Korean Grill BBQ	Korean Restaurant	['#03-10 JCube (2 Jurong East Central 1)', '609731', 'Singapore']
Timberland Outlet	Shoe Store	['#01-120 IMM Building (2 Jurong East St. 21)', '609601', 'Singapore']
Subway	Sandwich Place	['IMM Building', 'Singapore']
Subway	Sandwich Place	['#B1-K04, JCube (2 Jurong East Central 1)', '609731', 'Singapore']
Astons Specialities	Steakhouse	['#03-18, JCube (2 Jurong East Central 1)', '609731', 'Singapore']
Shaw Theatres	Multiplex	['#04-11, JCube (2 Jurong East Central 1)', '609731', 'Singapore']
Ichiban Sushi	Japanese Restaurant	['#02-23, IMM Building (2 Jurong East St 21)', '609601', 'Singapore']
JCube	Shopping Mall	['2 Jurong East Central 1 (Jurong Gateway Rd)', '609731', 'Singapore']
The Coffee Bean & Tea Leaf	Café	['#01-22/23, JCube (2 Jurong East Central 1)', '609731', 'Singapore']
McDonald's	Fast Food Restaurant	['#01-09, JCube (2 Jurong East Central 1)', '609731', 'Singapore']
Itacho Sushi	Sushi Restaurant	['#02-15, JCube (2 Jurong East Central 1)', '609731', 'Singapore']
Eighteen Chefs	Bistro	['#02-13, JCube (2 Jurong East Central 1)', '609731', 'Singapore']
OldTown White Coffee	Café	['#01-19, JCube (2 Jurong East Central 1)', '609731', 'Singapore']
Singtel (Exclusive Retailer)	Mobile Phone Shop	['#02-11B, JCube (2 Jurong East Central 1)', '609731', 'Singapore']
Happy Hawkers 喜多福 (Food Court) (Happy Hawkers)	Food Court	['132 Jurong Gateway Rd #01-271', '600132', 'Singapore']
SkateSports	Sporting Goods Shop	['#03-13, JCube (2 Jurong East Central 1)', 'Singapore']
FoodClique	Food Court	['132 Jurong East St 13 (Jurong East Central)', '600132', 'Singapore']

Genting Hotel Jurong	Hotel	['2 Town Hall Link', '608516', 'Singapore']
ZTP	Grocery Store	['132 Jurong Gateway Rd.', 'Singapore']
Fu Chan Food Paradise	Food Court	['134 Jurong Gateway Rd. #01-309. (Jurong East)', '600134', 'Singapore']
Festive Cafe	Buffet	['Genting Hotel Jurong', 'Singapore']
BGAIN130 Eating House	Food Court	['130 Jurong Gateway Road', '600130', 'Singapore']
Ho Kee Pau	Asian Restaurant	['130 Jurong Gateway Road', 'Singapore']
Pet's Republic	Pet Store	['Blk 134 Jurong East St. 13. #01-311.', '600134', 'Singapore']

## Recommendation 4 – Punggol

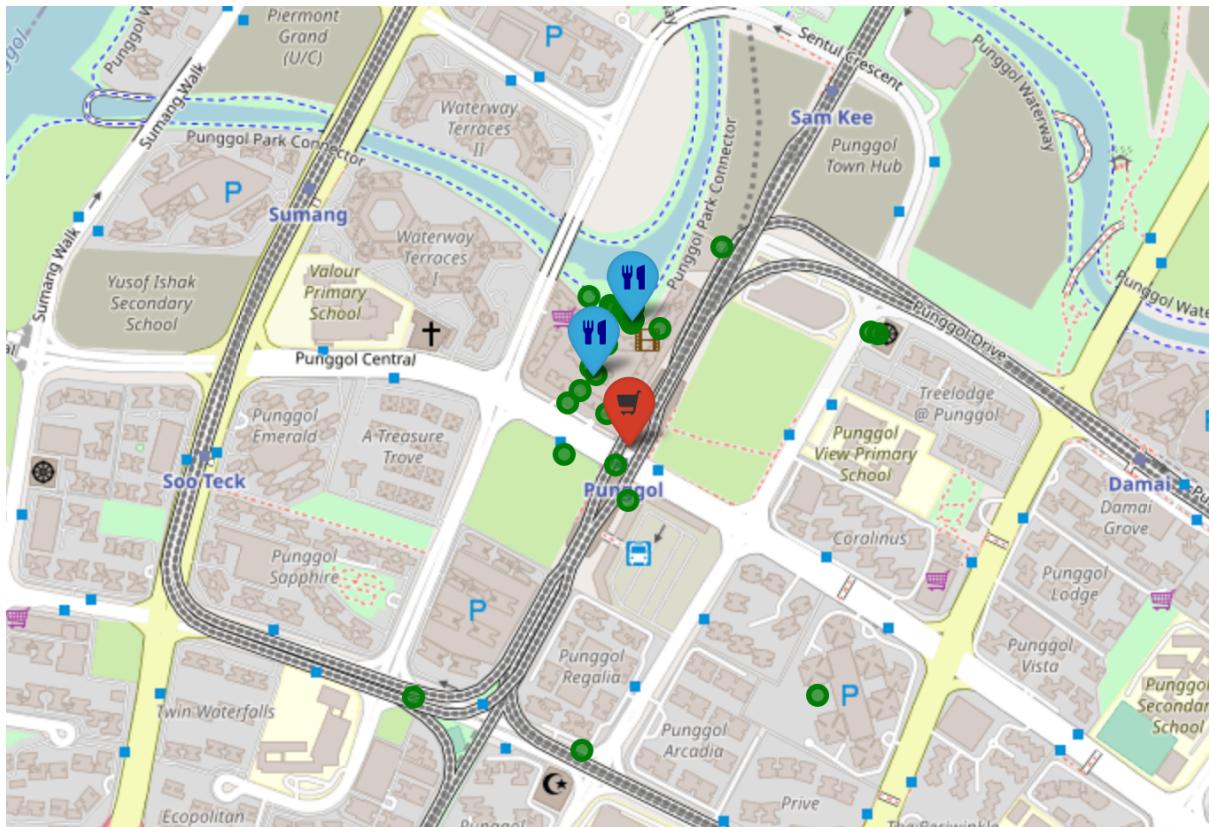


Venue	Venue Category	Venue Address
Waterway Point	Shopping Mall	['83 Punggol Central (Punggol Walk)', '828761', 'Singapore']
Uniqlo	Clothing Store	['L1 Waterway Point (83 Punggol Central)', '828761', 'Singapore']
Shaw Theatres	Multiplex	['#B2-11 Waterway Point (83 Punggol Central)', '828761', 'Singapore']
Fairprice Finest	Supermarket	['#B2-32, Waterway Point (83 Punggol Central)', '828761', 'Singapore']
Swensen's	Ice Cream Shop	['#02-35, Waterway Point (83 Punggol Central)', '828761', 'Singapore']
Din Tai Fung 鼎泰豐	Chinese Restaurant	['#01-22, Waterway Point (83 Punggol Central)', '828761', 'Singapore']
Uncle Leong Signatures	Seafood Restaurant	['Waterway Point (83 Punggol Central)', 'Singapore']
Social Square	Japanese Restaurant	['#01-26, Waterway Point (83 Punggol Central)', '828761', 'Singapore']
PappaRich	Asian Restaurant	['Waterway Point (83 Punggol Central)', 'Singapore']
So Pho	Vietnamese Restaurant	['Waterway Point (83 Punggol Central)', 'Singapore']
Genki Sushi	Sushi Restaurant	['#02-23 Waterway Point (West wing)', '828761', 'Singapore']

Toast Box 土司工坊	Breakfast Spot	['Waterway Point (83 Punggol Central)', 'Singapore']
Daiso	Discount Store	['#B1-09, Waterway Point (83 Punggol Central)', '828761', 'Singapore']
Starbucks	Coffee Shop	['#01-67, Waterway Point (83 Punggol Central)', '828761', 'Singapore']
Subway	Sandwich Place	['Waterway Point (83 Punggol Central)', 'Singapore']
Cookhouse by Koufu	Food Court	['#02-20, Waterway Point (83 Punggol Central)', '828761', 'Singapore']
The Soup Spoon Union	Soup Place	['#B3-12, Waterway Point (83 Punggol Central)', 'Singapore']
Rong Hua Bak Kut Teh	Chinese Restaurant	['#B1-23 Waterway Point (83 Punggol Central)', '828761', 'Singapore']
McDonald's / McCafe	Fast Food Restaurant	['#B2-07, Waterway Point (83 Punggol Central)', '828761', 'Singapore']
Buddy Hoagies Café & Grill	Steakhouse	['#02-22, Waterway Point (83 Punggol Central)', '828761', 'Singapore']
KFC	Fast Food Restaurant	['#B2-08 Waterway Point (83 Punggol Central)', '828761', 'Singapore']
Ichiban Boshi	Japanese Restaurant	['Waterway Point (83 Punggol Central)', '828761', 'Singapore']
Tenderfresh Classic	Fried Chicken Joint	['Waterway Point #B2-04 (83 Punggol Central)', '828761', 'Singapore']
The Coffee Bean & Tea Leaf	Café	['#01-27, Waterway Point (83 Punggol Central)', '828761', 'Singapore']
Cedele	Café	['#01-66, Waterway Point (83 Punggol Central)', '828761', 'Singapore']
Sheng Siong Supermarket 昇菘超市	Supermarket	['#01-01, Coralinus (301 Punggol Central)', '820301', 'Singapore']
Venus Beauty	Health & Beauty Service	['Waterway Point #B1-17 (83 Punggol Central)', '828761', 'Singapore']
Kitchen+Ware	Furniture / Home Store	['Waterway Point, West B1-03', 'Singapore']
Punggol Bus Interchange	Bus Station	['70A Punggol Pl', '828865', 'Singapore']
Kiddy Palace	Baby Store	['Waterway Point (83 Punggol Central)', 'Singapore']
Raffles Medical	Pharmacy	['#02-29, Waterway Point (83 Punggol Central)', 'Singapore']
Doraemon Theme Park	Theme Park	['271B PUNGOL WALK', '822271', 'Singapore']
SBS Transit: Punggol LRT (West Loop)	Light Rail Station	['Singapore']
Nam Kee Pau 南記	Snack Place	['#01-K3 Waterway Point, 83 Punggol Ctrl', '828761', 'Singapore']
Best Denki	Electronics Store	['#B1-24, Waterway Point (83 Punggol Central)', '828761', 'Singapore']
DANRO Japanese Hotpot	Restaurant	['Waterway Point (#01)', 'Singapore']
Heartwave Wall	Park	['Punggol Waterway', 'Singapore']
Bus Stop 65221 (opp Blk 293)	Bus Stop	['Punggol Central', 'Singapore']
Punggol Discovery Cube	Plaza	['85 Punggol Central', 'Singapore']

Playground @ Coralinus	Playground	['Punggol Place', '824302', 'Singapore']
Water Drop Teahouse 滴水坊	Tea Room	['Fo Guang Shan (Singapore), No.1 Punggol Place (3rd floor) (Pungol Drive)', '828844', 'Singapore']
Gymnasium @ PRIVÉ	Gym	['Singapore']
Punggol block 272 Park	Botanical Garden	['Singapore']

## Recommendation 5 – Tampines



Venue	Venue Category	Venue Address
Barcook Bakery	Bakery	['10 Tampines Central 1, B1-K7', '529536', 'Singapore']
Nakhon Kitchen	Thai Restaurant	['2 Tampines Central 5 01-42', '529509', 'Singapore']
Starbucks Reserve Store (Starbucks Reserve)	Coffee Shop	['Our Tampines Hub (25 Tampines Street 82)', '528988', 'Singapore']
4Fingers Crispy Chicken	Fried Chicken Joint	['#01-39 Tampines 1', 'Singapore']
Amore Fitness	Gym	['Tampines One Mall', 'Singapore']
Lao Ban Soya Beancurd 老伴豆花	Dessert Shop	['#01-31 Tampines MRT Station (20 Tampines Central 1)', '529538', 'Singapore']
Fitness First	Gym / Fitness Center	['#04-01 / #05-01, CPF Building (1 Tampines Central 5)', '529508', 'Singapore']
Dian Xiao Er 店小二	Chinese Restaurant	['10 Tampines Central 1, #04-07/08 Tampines 1 (10 Tampines Central)', '529537', 'Singapore']
H&M	Clothing Store	['4 Tampines Central 5', '529510', 'Singapore']
Healing Touch	Spa	['1 Tampines Central 5, #05-10', '529508', 'Singapore']
Tampines Skate Park	Skate Park	['70 Tampines Ave 4', '529681', 'Singapore']
Awfully Chocolate	Bakery	['10 Tampines Central 1 (10 Tampines Central 1)', '529536', 'Singapore']
Din Tai Fung 鼎泰豐	Dumpling Restaurant	['#02-01 Tampines Mall (4 Tampines Central 5)', '529510', 'Singapore']
Tori Q	Japanese Restaurant	['#B1-K20, Tampines Mall (4 Tampines Central 5)', '529510', 'Singapore']
Starbucks	Coffee Shop	['#01-50, Tampines Mall (4 Tampines Central 5)', '529510', 'Singapore']

Ya Kun Kaya Toast 亞坤	Café	['Century Square', 'Singapore']
Isteak @ Tampines 1	Steakhouse	['10 Tampines Central 1 #04-04/05 Singapore 529536', '529537', 'Singapore']
Toys"R"Us	Toy / Game Store	['#03-17A Tampines Mall (4 Tampines Central 5)', '529510', 'Singapore']
Four Leaves	Bakery	['#B1-22, Tampines Mall (4 Tampines Central 5)', '529510', 'Singapore']
UNIQLO	Clothing Store	['#02-28/29/30, Tampines 1 (10 Tampines Central 1)', '529536', 'Singapore']
Popular Bookstore	Bookstore	['#03-17 Tampines Mall (4 Tampines Central 5)', '529510', 'Singapore']
Tampines 1	Shopping Mall	['10 Tampines Central 1', '529536', 'Singapore']
Rocky Master	Café	['9 Tampines Grande #01-11', '528735', 'Singapore']
True Fitness	Gym	['NTUC Income Tampines Junction, 300 Tampines Ave 5, #08-01/04', 'Singapore']
NTUC Fairprice	Supermarket	['#B1-01, Our Tampines Hub (51 Tampines Ave 4)', '529684', 'Singapore']
Proofer Boulangerie	Bakery	['Tampines One. 10 Tampines Central 1, #B1-30 Singapore 529536 (10 Tampines Central 1)', '529536', 'Singapore']
Ayam Penyet President	Indonesian Restaurant	['2 Tampines Central 5 #B1-27', '529509', 'Singapore']
LiHO	Bubble Tea Shop	['#01-24 Tampines MRT Station (20 Tampines Central 1)', '529538', 'Singapore']
Fish & Co.	Seafood Restaurant	['#04-11, Tampines 1 (10 Tampines Ctrl 1)', '529510', 'Singapore']
Old Street Bak Kut Teh 老街肉骨茶	Asian Restaurant	['Tampines Mall Basement', '529510', 'Singapore']
Tampines Mall	Shopping Mall	['4 Tampines Central 5', '529510', 'Singapore']
McCafe	Café	['Tampines Mall', 'Singapore']
Nando's	Portuguese Restaurant	['#01-46, Tampines Mall (4 Tampines Central 5)', '529510', 'Singapore']
Watsons	Pharmacy	['#B1-07/08 Tampines Mall (4 Tampines Central 5)', '529510', 'Singapore']
J's Wok & Grill	Mediterranean Restaurant	['Tampines Ave 5', 'Singapore']
Sushi Express	Sushi Restaurant	['#B1-08, Tampines 1 (10 Tampines Central 1)', '529536', 'Singapore']
NTUC FairPrice	Supermarket	['#B1-12, Tampines Mall (4 Tampines Central 5)', '529510', 'Singapore']
JPOT Hotpot	Hotpot Restaurant	['#03-16, Tampines 1 (10 Tampines Central 1)', 'Singapore']
Sushi Tei	Sushi Restaurant	['10 Tampines Central 1, #04-13 Tampines 1 (Tampines Ave 4)', '529536', 'Singapore']
Seoul Garden	Korean Restaurant	['#04-02, Tampines Mall (4 Tampines Central 5)', '529510', 'Singapore']
J.Co Donuts & Coffee	Donut Shop	['#01-08/10, Tampines 1 (10 Tampines Ctrl 1)', '529536', 'Singapore']
PUTIEN Restaurant 蒲田菜馆	Chinese Restaurant	['#B1-01/27 Tampines Mall (4 Tampines Central 5)', '529510', 'Singapore']
Al Mahboob Indian Rojak	Indian Restaurant	['506 Tampines Central 1, #01-361, Singapore 520506', 'Singapore']
Hawker Centre	Food Court	['Our Tampines Hub (51 Tampines Ave 4)', '529684', 'Singapore']

Mr. YouTiao	Café	['#B1-18, Century Square (2 Tampines Central 5)', '529509', 'Singapore']
Häagen-Dazs	Ice Cream Shop	['#02-K3, Tampines Mall (4 Tampines Central 5)', '529510', 'Singapore']
Mr Bean	Snack Place	['#01-23, Tampines MRT Station (20 Tampines Central 1)', '529538', 'Singapore']
Watsons	Pharmacy	['#02-24, Tampines 1 (10 Tampines Central 1)', '529536', 'Singapore']
Itacho Sushi 板長壽司	Sushi Restaurant	['#04-32, Tampines Mall', '529510', 'Singapore']
The Soup Spoon	Soup Place	['#B1-K2, Tampines Mall (4 Tampines Central 5)', '529510', 'Singapore']
Saab Saab Thai	Thai Restaurant	['Our Tampines Hub', '529650', 'Singapore']
Swensen's	American Restaurant	['#03-30, Tampines Mall (4 Tampines Central 5)', '529510', 'Singapore']
Menya Musashi Niten	Japanese Restaurant	['#04-02 Tampines Mall (4 Tampines Central 5)', '529510', 'Singapore']
Isetan	Department Store	['#01-21, Tampines Mall (4 Tampines Central 5)', '529510', 'Singapore']
McDonald's/McCafé	Fast Food Restaurant	['#01-33/33A, Tampines Mall (4 Tampines Central 5)', '529510', 'Singapore']
ActiveSG Gym	Gym	['Tampines Swimming Complex (505 Tampines Ave 5)', '529652', 'Singapore']
Century Square	Shopping Mall	['2 Tampines Central 5', '529509', 'Singapore']
Crystal Jade Kitchen 翡翠小厨	Chinese Restaurant	['#B1-11, Tampines Mall (4 Tampines Central 5)', '529510', 'Singapore']
The Coffee Bean & Tea Leaf	Coffee Shop	['#01-14/15, Century Square (2 Tampines Central 5)', '529509', 'Singapore']
LiHO	Bubble Tea Shop	['#B1-K5 Tampines Mall (4 Tampines Central 5)', '529510', 'Singapore']
McDonald's Kiosk	Fast Food Restaurant	['Tampines Bus Interchange, #01-K1 (512 Tampines Central 1)', '520512', 'Singapore']
Al Mahboob Rojak Pte Ltd	Indian Restaurant	['300 Tampines Ave 5 (#01-02)', '592653', 'Singapore']
Encik Tan	Asian Restaurant	['Tampines Hub', 'Singapore']
Subway	Sandwich Place	['#B1-52A, Our Tampines Hub (51 Tampines Ave 4)', '529684', 'Singapore']
Kfc	Fried Chicken Joint	['#01-47 Tampines Mall (4 Tampines Central 5)', '529510', 'Singapore']
Golden Village	Multiplex	['Tampines Mall (#04-17/18)', '529510', 'Singapore']
The Food Market by Food Junction	Food Court	['#03-19 Century Square (2 Tampines Central 5)', '529509', 'Singapore']
BreadTalk	Bakery	['#B1-K7, Tampines Mall (4 Tampines Central 5)', '529510', 'Singapore']
KFC	Fast Food Restaurant	['#01-13/14, Our Tampines Hub (51 Tampines Ave 4)', '529684', 'Singapore']
KOI Café	Bubble Tea Shop	['Blk 510 Tampines Central 1 #01-250', '520510', 'Singapore']
Blackball Singapore 黑丸嫩仙草	Dessert Shop	['#02-K2, Tampines One (10 Tampines Central 1)', '529536', 'Singapore']
Yeo Chuan Huat Food Centre	Coffee Shop	['505 Tampines Central 1 #01-351/352', '520505', 'Singapore']
Sakura Family Halal Thai Chinese Cuisine	Restaurant	['506 Tampines Central 1 #01-361', '520506', 'Singapore']

Tampines Swimming Complex	Pool	['1, Our Tampines Hub, Tampines Walk', '529684', 'Singapore']
SunPlaza Park	Park	['9 Tampines Ave 7 (Tampines Ave 9)', 'Singapore']
Challenger	Electronics Store	['#04-22/23/24/25, Tampines 1 (10 Tampines Central 1)', '529537', 'Singapore']
The Editor's Market	Women's Store	['10 TAMPINES CENTRAL 1 #02-15/16', '529537', 'Singapore']
SBS Transit: Bus 291	Bus Line	['Singapore']
Chang Cheng Mee Wah 長城美華	Food Court	['406 Tampines St. 41, #01-07', '520406', 'Singapore']
Freshman @ Century Square	Juice Bar	['#01-38C Century Square (2 Tampines Central 5)', 'Singapore']
Commons	Café	['#01-103, Our Tampines Hub (51 Tampines Ave 4)', '529684', 'Singapore']
The Salad Box	Salad Place	['Singapore']