

# Capstone Project - Where to rent in Singapore?

## Data

The data used for this project will segment Singapore into its 28 postal districts for comparison. The use of postal codes is a general method adopted within Singapore to categorise properties and services, it is therefore deemed a suitable method to answer the main project query. Each of the districts will then be compared and clustered using venues, places, transportation and rental rates to determine outcomes of areas to consider.

Specific datasets used are:

Foursquare location data (<https://developer.foursquare.com/>)

### Data Provider

*Back in 2009, Foursquare invented the check-in. Today, those 13+ billion check-ins are the foundation of our powerful, proprietary Pilgrim technology that helps make sense of where phones go for the more than 150,000 partners who have registered to use our developer tools, including Uber, Tencent, Apple, Samsung, and Twitter. (extract from website <https://foursquare.com/about>)*

### Data Set

Location data provided by calls to Foursquare API based on a specific location (latitude, longitude) to demonstrate Amenities, Transport, Schools, Places, Venues etc.

<https://developer.foursquare.com/docs/api/endpoints>

Data.gov.sg (<https://data.gov.sg/>)

### Data Provider

*Data.gov.sg was first launched in 2011 as the government's one-stop portal to its publicly-available datasets from 70 public agencies. (extract from website <https://data.gov.sg/>)*

### Data Set

Rentals of Non-Landed Residential Buildings, Quarterly

<https://data.gov.sg/dataset/rentals-of-non-landed-residential-buildings-with-at-least-10-rental-contracts-signed-in-1q2016>

This listing contains summary statistics (median, 25th percentile, 75th percentile, and number of rental contracts) of major non-landed private residential projects with at least 10 rental contracts signed in a quarter.

Whilst this does not contain minor developments it is deemed appropriate in answering the projected question as smaller developments are a low consideration and potentially not open to the target audience. In addition minor development details are not readily available without cost.

This data is available in csv format.

#### Schema

Name	Type
Quarter	String
Project Name	String
Postal District	String
25th Percentile (S\$ psm pm)	Float
Median (S\$ psm pm)	Float
75th percentile (S\$ psm pm)	Float
Rental Contracts (Count)	Float

The dataset is provided under licence:

[Contains information from { Rentals of Non-Landed Residential Buildings, Quarterly } accessed on { 17/11/2019 } from { <https://data.gov.sg/> } which is made available under the terms of the Singapore Open Data Licence version 1.0 { <https://data.gov.sg/open-data-licence>}]

Urban Redevelopment Authority (<https://www.ura.gov.sg>)

#### Data Provider

*At URA, we adopt a long-term and comprehensive planning approach to formulate strategic plans such as the Concept Plan and the Master Plan to guide the physical development of Singapore in a sustainable manner. Our plans and policies are focused on achieving a quality living environment for Singapore. (extract from website [https:// www.ura.gov.sg](https://www.ura.gov.sg))*

#### Data Set

District Code and District Map of Singapore

[https://www.ura.gov.sg/realEstateIIWeb/resources/misc/list\\_of\\_postal\\_districts.htm](https://www.ura.gov.sg/realEstateIIWeb/resources/misc/list_of_postal_districts.htm)

A table containing the postal codes in Singapore used to create latitude and longitude details for each respective district. Where a postal district covers multiple locations the first named location will be used as its target.

The data is available in a tabular format and will be pulled using Beautiful Soup.

#### Schema

Name	Type
Postal District	String
Postal Sector	String
General Location	String