

The Battle of the Neighborhoods



Introduction

- ▶ In Module 3, we explored New York City and the city of Toronto and segmented and clustered their neighborhoods.
- ▶ Both cities are very diverse and are the financial capitals of their respective countries.
- ▶ One interesting idea would be to compare the neighborhoods of the two cities and determine how similar or dissimilar they are.
- ▶ Is New York City more like Toronto or Paris or some other multicultural city? I will leave it to you to refine this idea.



These are just a couple of many ideas and problems that can be solved using location data in addition to datasets



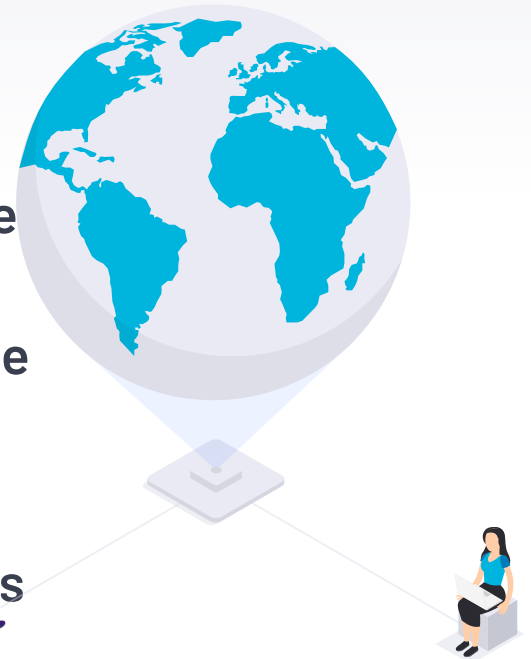
Problem Description (1)

- ▶ Singapore, an island city-state off southern Malaysia, is a global financial centre with a tropical climate and multicultural population. According to the United Nations World Bank Statistics, the city-state has a total population of 5.61 million in 2017.



Problem Description (2)

- ▶ According to the Housing and Development Board(HDB), 3.25 million people in Singapore live in HDB flats. Public housing also known as HDBs which has a lease of 99 years are managed by the HDB.
- ▶ Due to her small land size, prices of public flats have soared to record levels. As a result, this has led to increase in price of rentals over the years.



Problem Description (3)

We will attempt to apply data analysis methodologies to analyse Singapore's Property Market and as well as its correlation to the amenities in its surrounding. These amenities can be broken down into:

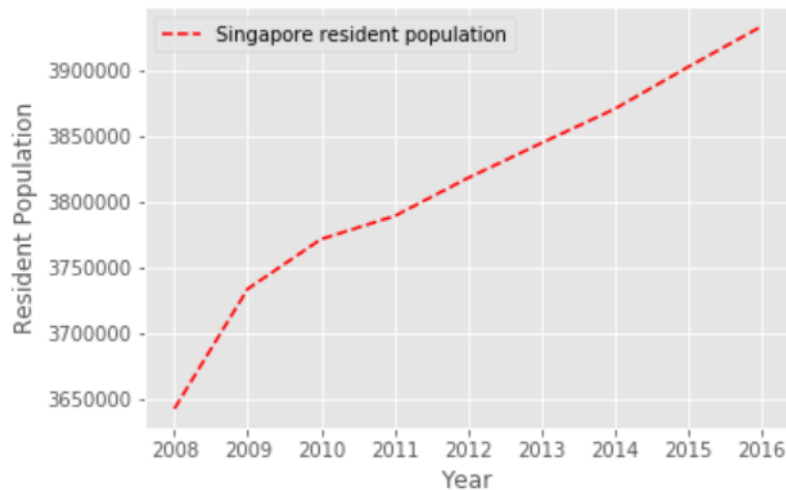
- ▶ Nearby Schools
- ▶ Transport Facilities
- ▶ Food locations
- ▶ Outdoors and recreation



Methodology

- ▶ The FourSquare API will be used to explore neighbourhoods in Singapore.
- ▶ The FourSquare explore function will be used to get the most common venue categories in each neighbourhood, and then use this feature to group the neighbourhoods into clusters.
- ▶ The following information are retrieved on the first query:
 - ▶ Venue ID
 - ▶ Venue Name
 - ▶ Coordinates: Latitude and Longitude
 - ▶ Category Name
- ▶ The second query will be performed to retrieve venue ratings for each location identified.

DATA DESCRIPTION

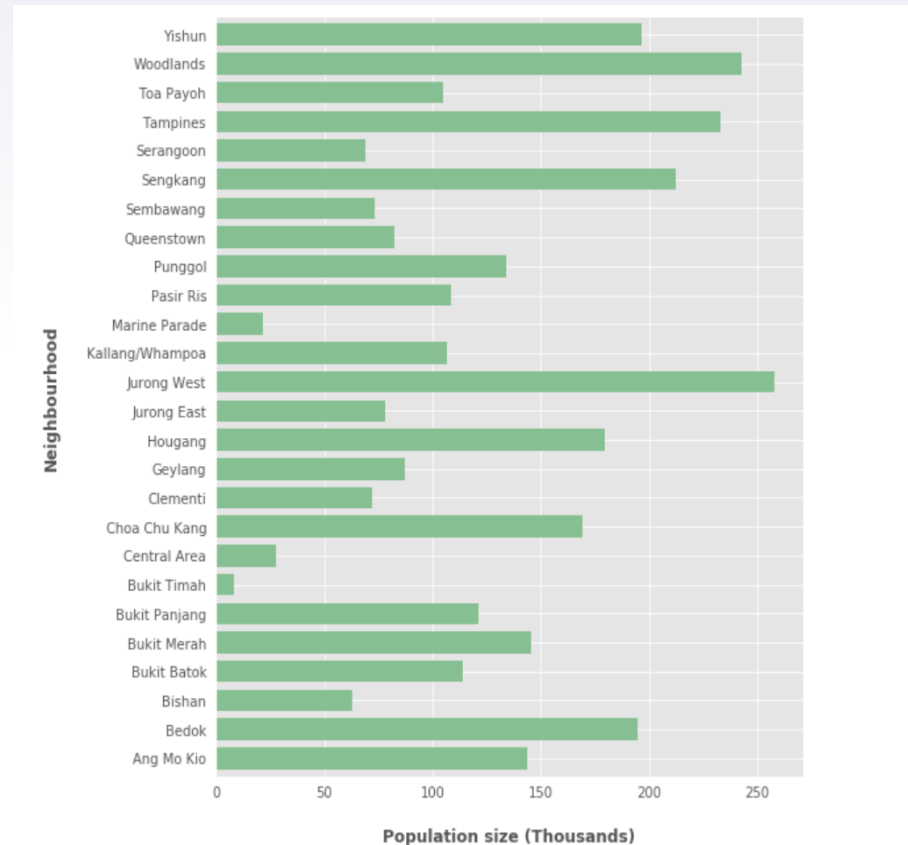


	financial_year	Town	population
243	2017	Ang Mo Kio	143800
244	2017	Bedok	194700
245	2017	Bishan	63200
246	2017	Bukit Batok	114000
247	2017	Bukit Merah	145700
248	2017	Bukit Panjang	121100
249	2017	Bukit Timah	8400
250	2017	Central Area	27700
251	2017	Choa Chu Kang	169000

RESULTS

- ▶ The Chinese population in Singapore has grown by 7.4 % between the period of 2008-2017, from a value of 2721779 to 2923172.
- ▶ The Malay population in Singapore has grown by 6.22 % between the period of 2008-2017, from a value of 495110 to 525888.
- ▶ The Indian population in Singapore has grown by 10.34 % between the period of 2008-2017, from a value of 323431 to 356876.
- ▶ Minority Ethnic Population in Singapore has grown by 24.71 % between the period of 2008-2017, from a value of 102339 to 127623.

Exploring Neighbourhood in Singapore



THANKS!

Any questions?

You can find me at:

- ▶ luckysithole92@gmail.com

