



HDB Room Rental Prices and Venues Data Analysis in Singapore

Introduction

- ▶ Rental are expensive in Singapore.
- ▶ A lot of decision factor such as rental price, accessibility to supermarkets, accessibility to good food with cheap price
- ▶ How to choose the best town in Singapore to stay in by analysing the open source data

Data

- ▶ Open source rental price index provided by Singapore Government.
- ▶ The geospatial .json file that divides the Singapore into several towns that aids the choropleth plot.
- ▶ Foursquare API to search and explore the available restaurant and supermarket in a town. The count of supermarket and count of affordable meal option will be used to determine whether a town is favourable.

Accessibility to supermarket

	town	price_per_room	latitude	longitude	number_of_supermarket
21	KALLANG	588.162037	1.310759	103.866262	37
16	GEYLANG	558.754630	1.318186	103.887056	27
7	YISHUN	461.898148	1.429384	103.835028	26
11	TAMPINES	506.712963	1.354653	103.943571	24
24	DOWNTOWN CORE	693.680556	1.287475	103.856033	22
19	BISHAN	562.175926	1.351452	103.848250	21
8	HOUGANG	479.657407	1.371904	103.892725	21
4	SENGKANG	429.903846	1.391432	103.895314	20
10	JURONG WEST	495.444444	1.339636	103.707339	18
14	ANG MO KIO	524.078704	1.370073	103.849516	18
12	BEDOK	510.949074	1.323976	103.930216	18
1	PUNGGOL	420.366667	1.405258	103.902330	17
13	JURONG EAST	514.055556	1.333115	103.742297	16
9	BUKIT BATOK	481.259259	1.349057	103.749591	15
17	TOA PAYOH	560.652778	1.335391	103.849741	15
5	BUKIT PANJANG	432.689815	1.378629	103.762136	14
20	CLEMENTI	574.555556	1.315100	103.765231	14
18	MARINE PARADE	560.714286	1.302689	103.907395	13
3	WOODLANDS	426.342593	1.436897	103.786216	12
2	CHOA CHU KANG	423.142857	1.384749	103.744534	12
15	SERANGOON	533.217593	1.349862	103.873729	10
6	PASIR RIS	454.041667	1.373031	103.949255	9
23	BUKIT MERAH	641.784091	1.270439	103.828318	9
0	SEMBAWANG	416.979167	1.449093	103.820055	9
22	QUEENSTOWN	639.722222	1.294623	103.806045	6

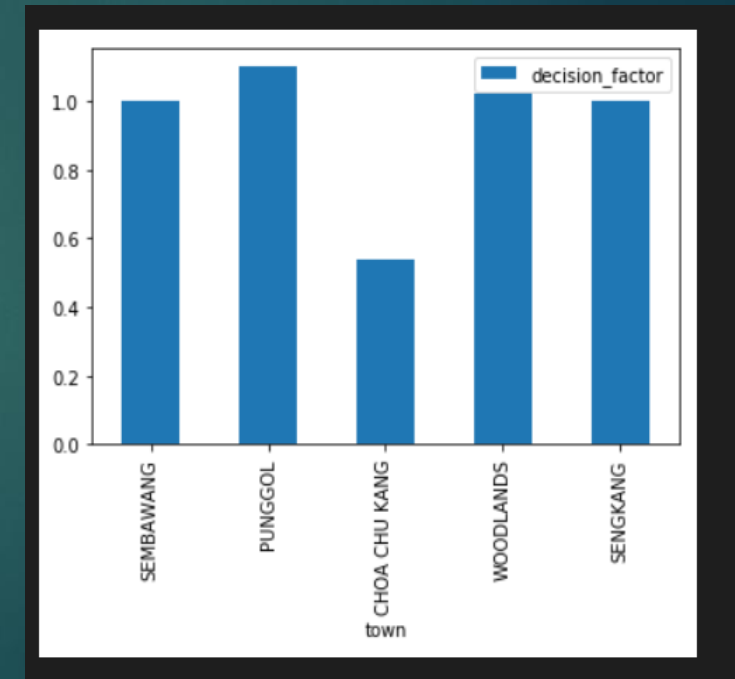
5 Cheapest towns to stay in Singapore

	town	price_per_room	latitude	longitude	number_of_supermarket	food_worthiness
0	SEMPAWANG	416.979167	1.449093	103.820055	9	2.986111
1	PUNGGOL	420.366667	1.405258	103.902330	17	2.723810
2	CHOA CHU KANG	423.142857	1.384749	103.744534	12	2.677778
3	WOODLANDS	426.342593	1.436897	103.786216	12	2.880952
4	SENGKANG	429.903846	1.391432	103.895314	20	2.566667

Food worthiness in these towns

- ▶ Food worthiness is determined by the rating and price tier of each restaurant that appears in the search query, within 2km radius away from the town center

	town	price_per_room	latitude	longitude	number_of_supermarket	food_worthiness	decision_factor
1	PUNGGOL	420.366667	1.405258	103.902330	17	2.723810	1.101918
3	WOODLANDS	426.342593	1.436897	103.786216	12	2.880952	1.022018
0	SEBAWANG	416.979167	1.449093	103.820055	9	2.986111	1.000000
4	SENGKANG	429.903846	1.391432	103.895314	20	2.566667	1.000000
2	CHOA CHU KANG	423.142857	1.384749	103.744534	12	2.677778	0.537628



Best choice (cheapest) - Punggol

- ▶ Best price, accessibility to supermarket and good food

