The Battles of Neighborhoods in Singapore Final Project - 26/04/2020



1. Introduction

- 2. Data
- 3. Choropleth map of Singapore
- 4. Accessibility to supermarket
- 5. Cheapest towns to stay in Singapore
- 6. Food worthiness in these towns
- 7. Best choice (cheapest) Punggol

1. 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 analyzing the open source data

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2. Data

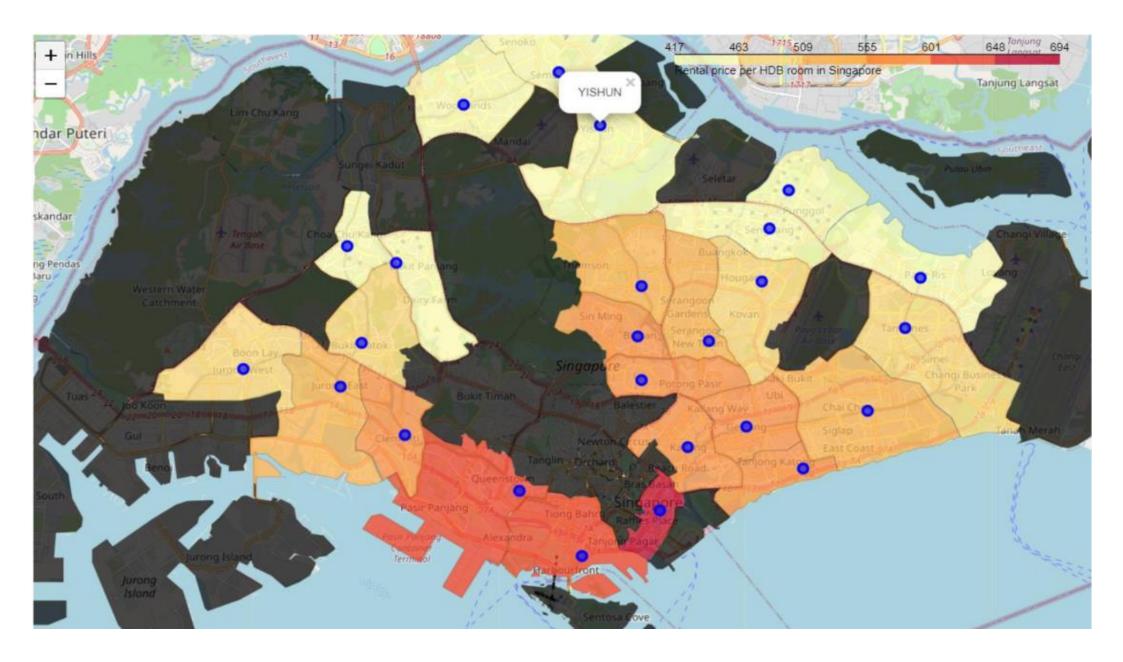
Open source rental price index provided by Singapore Government.

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 favorable.

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3. Choropleth map of Singapore



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4. Accessibility to supermarket

| -3 | 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 |

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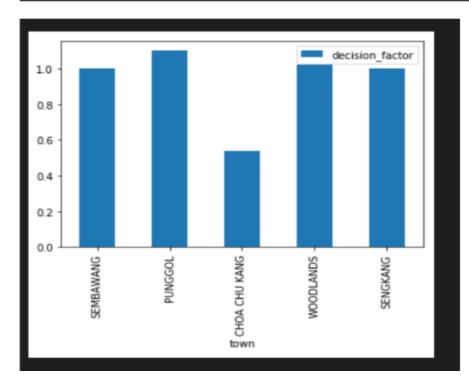
5. Cheapest towns to stay in Singapore

| | town | price_per_room | latitude | longitude | number_of_supermarket | food_worthiness |
|---|---------------|----------------|----------|------------|-----------------------|-----------------|
| 0 | SEMBAWANG | 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 |
| | | | | | | |

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6. Food worthiness in these towns

| | 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 |
| 9 | SEMBAWANG | 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 |
| | | | | | | | |



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7. Best choice (cheapest) - Punggol

