Predicting the suitable areas in Singapore to live

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1. Introduction

I am currently living in Singapore within walking distance to Downtown Sixth Avenue MRT metro station and I could find some places to eat out in the area. However, we do not have any places around here such as supermarkets and hawkers which are traditional food court in Singapore where we could enjoy a variety of meals at reasonable price. I would like to use this opportunity to practice my learnings in Coursera. My question for this learning practice is : How can I find a convenient and enjoyable place where I could enjoy food from hawkers and easily go to supermarkets in Singapore?
I assume that I could utilize available real estate apps and Google but the idea is to use and apply myself the learned tools during the course.

Whether hawkers are or is located within walking distance such as within 1.0 mile(1.6km)
Whether supermarkets are or is located within walking distance such as within 1.0 mile(1.6km)

Business Problem: The challenge is to find a suitable rent in Singapore that compiles with the demands on location. The data required to resolve this challenge is described in the following section.

For those interested as target: Even though due to the Covid-19 spread and strict border restriction which results in the difficulty where foreign people are struggling to come into Singapore, the outcome of this analysis that I conducted throughout this project may provide beneficial information for those who are still trying to come here and live.

2. Data acquisition and cleaning

- List of hawkers in Singapore with their geodata (latitude and longitude)
- List of Supermarkets('FairPrice' used for the definition of Supermarkets) in Singapore with their address location
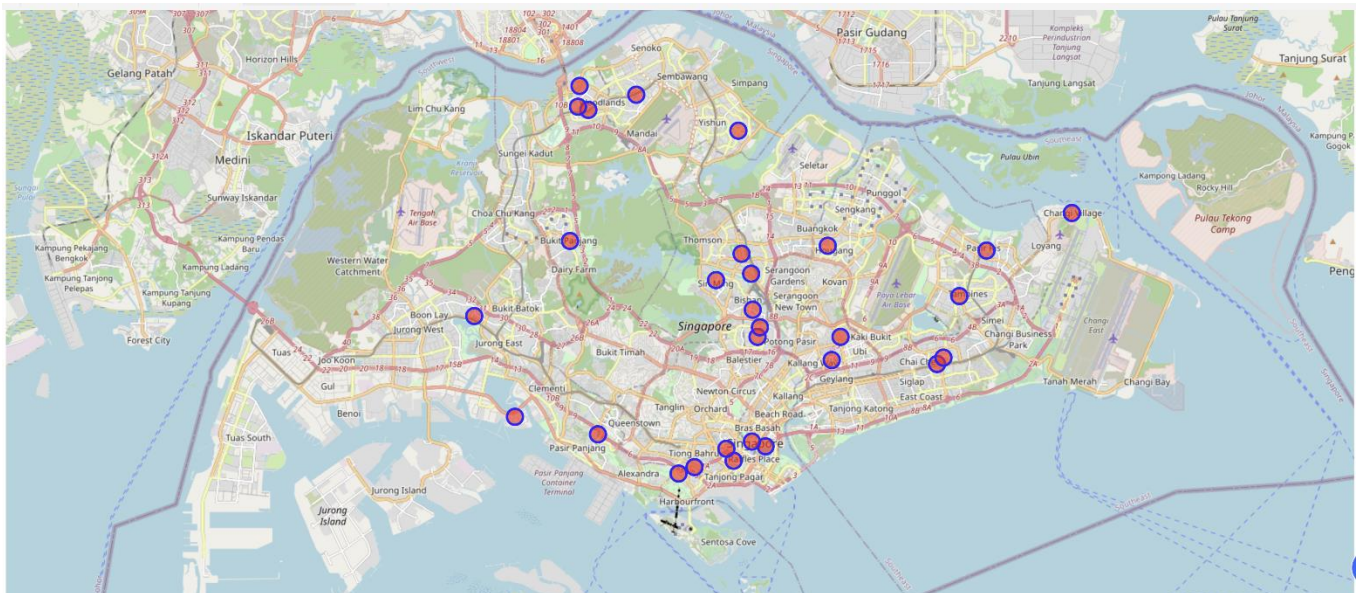
How the data will be used to solve the problem.
The data will be used as follow:
- Create a map that depicts around a radius of 1.0 mile (1.6km) around each hawker and supermarket.
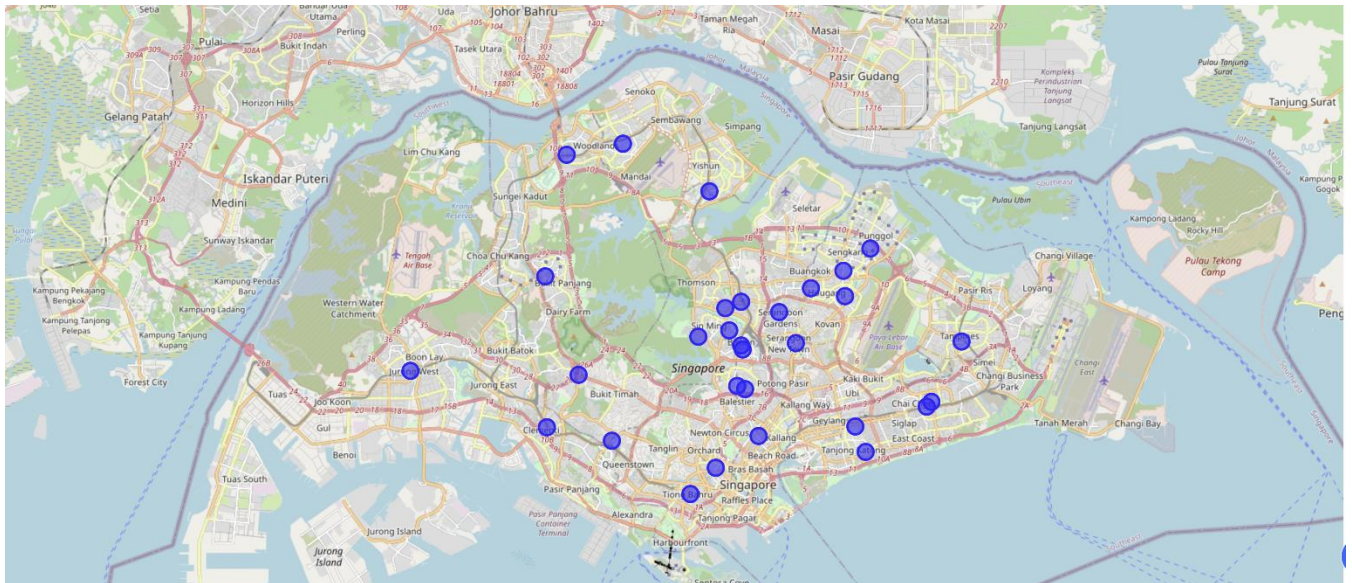
Data will be searched in open data sources if available, from real estate sites if open to reading.
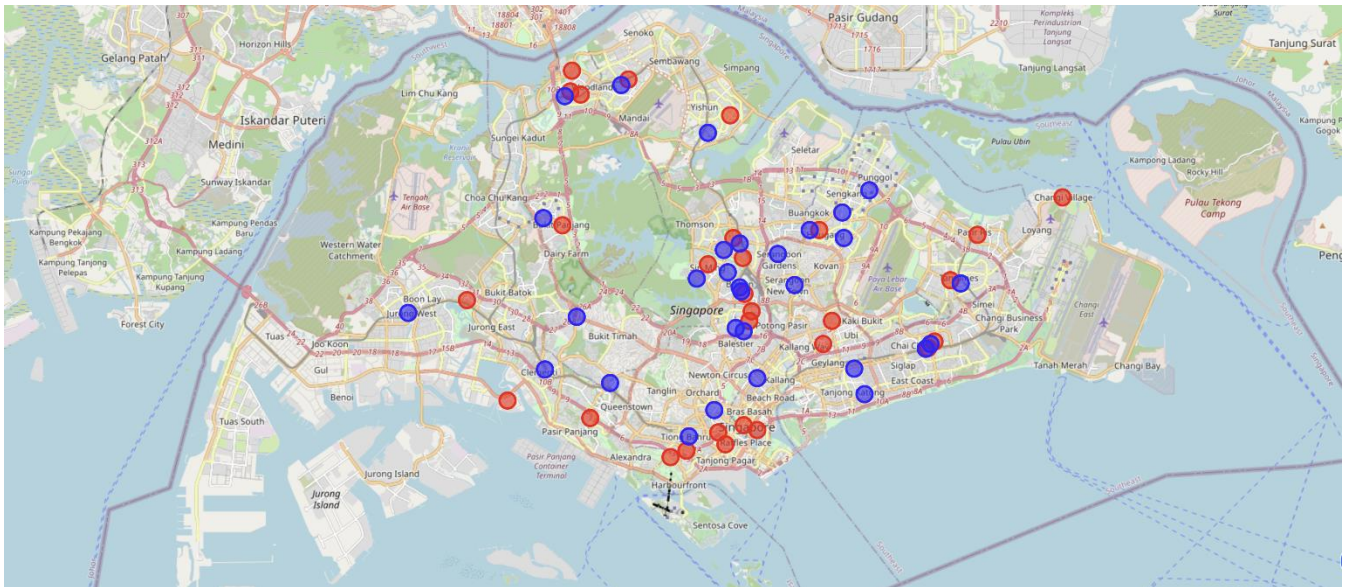
3. Exploratory Data Analysis

3.1 Mapping for hawkers in Singapore

3.2 Mapping for supermarkets in Singapore

3.3 Analysis for overlapped points of hawkers and supermarkets in Singapore.

4. Conclusions

From the analysis, we could conclude that following areas may have high likelihoods that we could enjoy hawkers' food and easily go to supermarkets.

- Bishan area
- Ang Mo Kio area
- Buangkok area
- Tampines area
- Chai Chee area
- Toa Payoh area
- Tiong Bahru area