Where to rent in Singapore?

Capstone Project
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2019

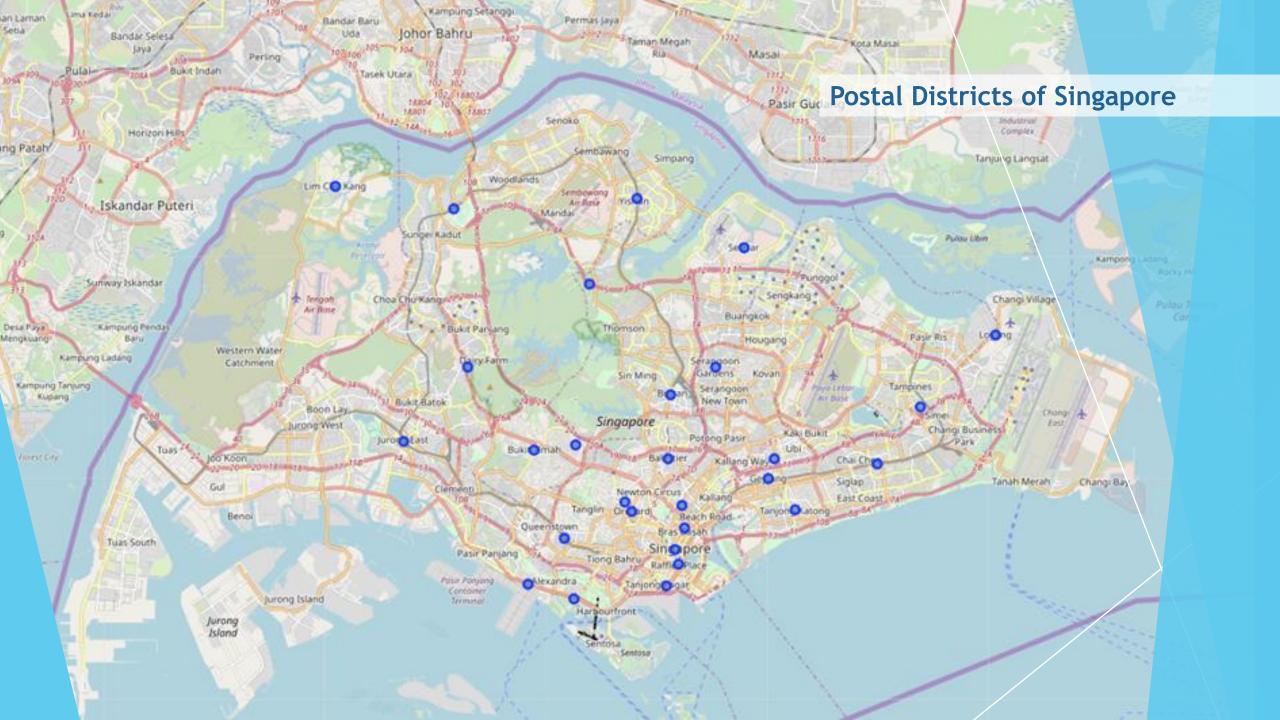
Property Search

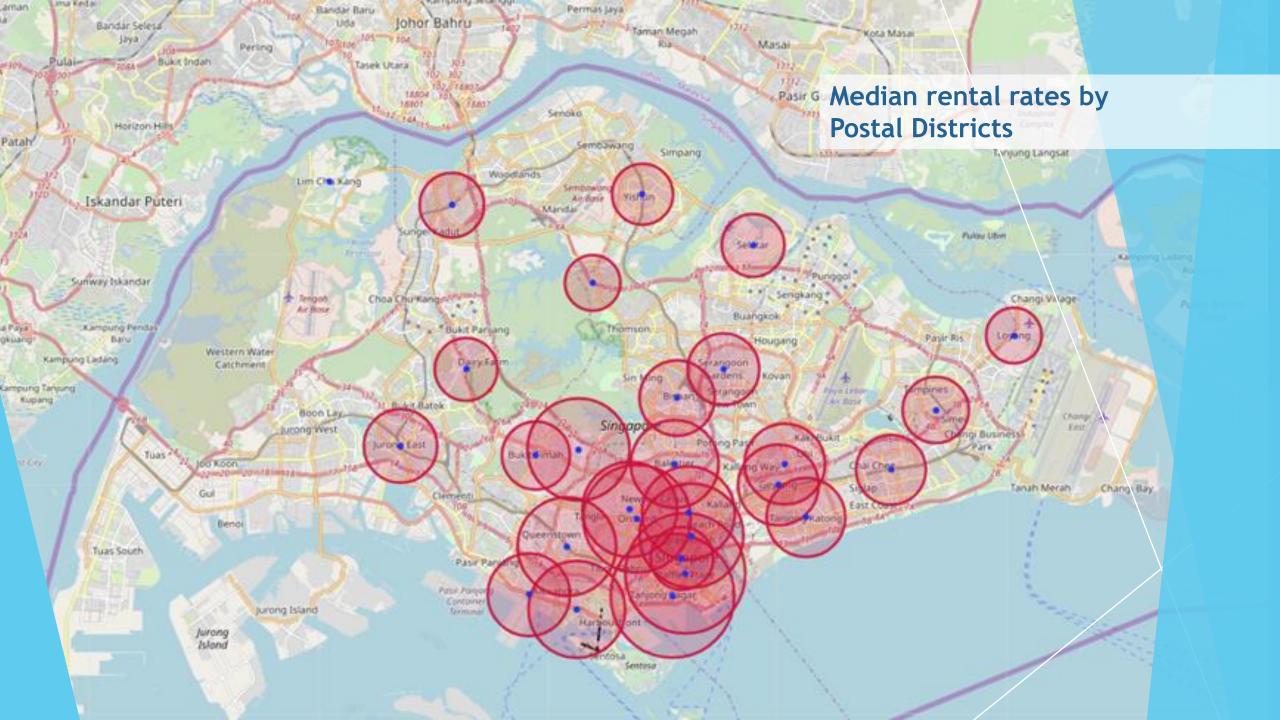
- Prior to arrival and starting work in the city state many worldwide renters approach the internet and limited resources attempting a wide variety of research in consideration of which location to settle in.
- This can often lead to confusion and missed opportunities for a better homelife.
- This Project attempts to relieve the pressure of the 1.64 million renters and provide a structured answer to which neighbourhood (or district as they are referred in Singapore) they can focus property search efforts.

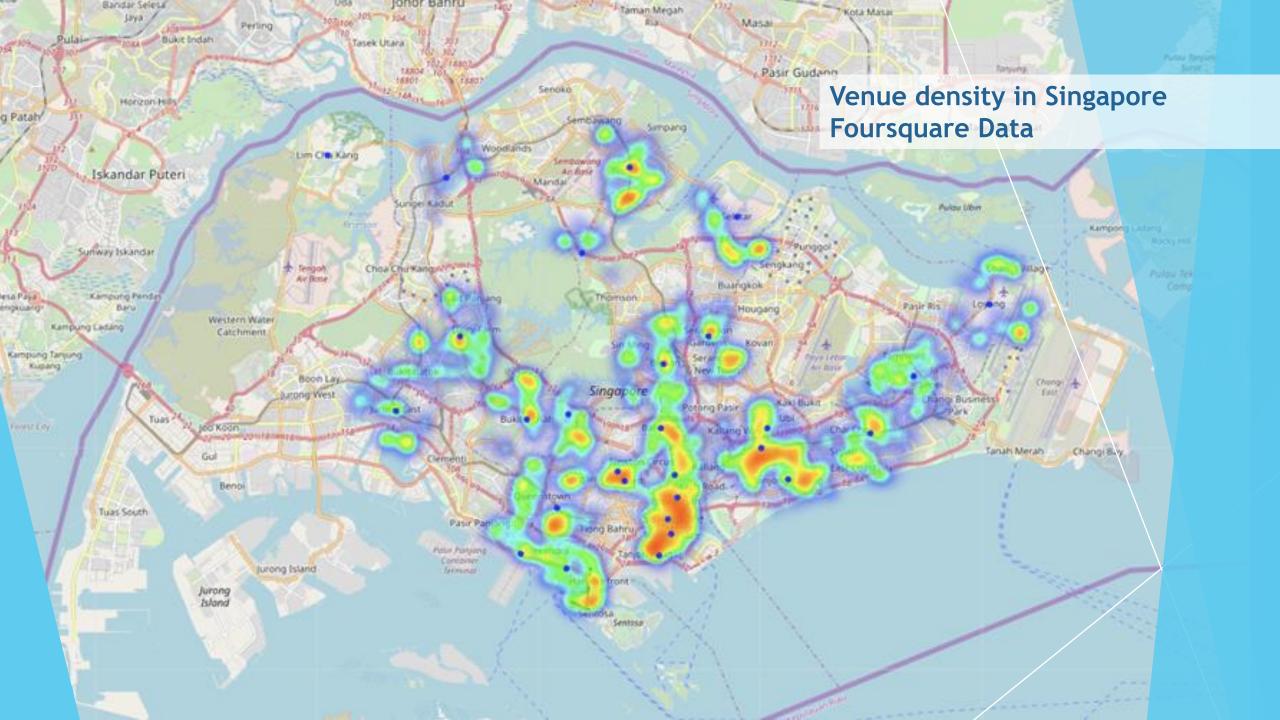


Specific datasets used are:

- Foursquare location data (https://developer.foursquare.com/)
- Data.gov.sg (https://data.gov.sg/)
 Rentals of Non-Landed Residential Buildings, Quarterly
- Urban Redevelopment Authority (https://www.ura.gov.sg)
 District Code and District Map of Singapore

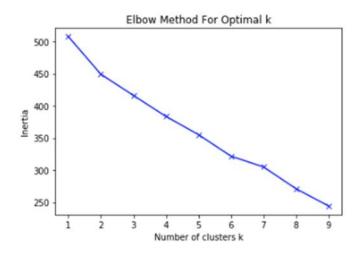




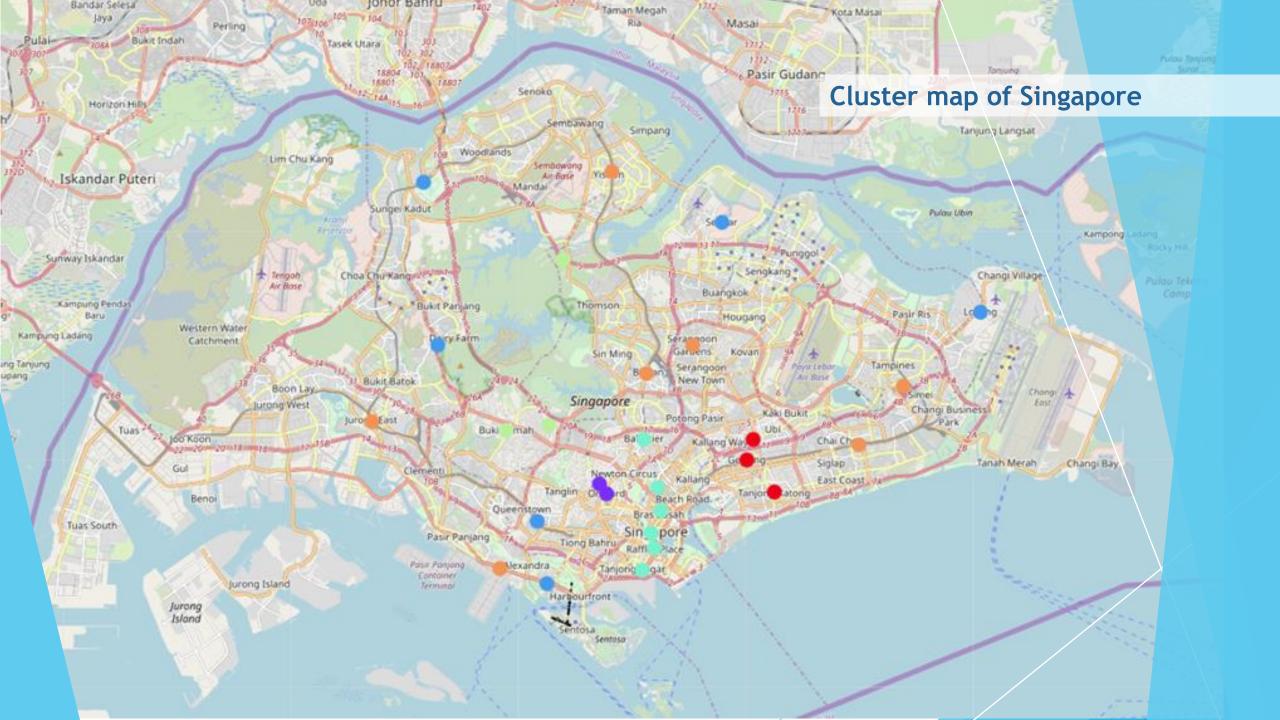


Clustering

K-means algorithm identifies k number of centroids, and then allocates every data point to the nearest cluster, while keeping the centroids as small as possible.



- MinMaxScaler as the feature matrix
- Inertia attribute used to identify proximity to nearest cluster centre
- Elbow at k=6



Conclusion

The report provides a basis for its intended audience to locate suitable Postal Districts to further property searches. It also helps to answer the main query and provide similar areas a user may not have initially considered. Whilst it does complete its goal a greater and more developed dataset would provide further insight to each of the districts and enhance the decision making process.

Improvements

- Increase other venues
 (The main venue types in Singapore are eating establishments)
- Transportation links and time to travel from each point
- Type of schooling available in each location