

# CAPSTONE PROJECT

Battle of the Neighbourhood

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# INTRODUCTION

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Being a Certified Personal Trainer, I dreamt of owning my own Gym in future. One major success of running a Gym is selecting its location. You can have a world-class Gym but if it is in an inaccessible area, the Gym will not be visited and it will hardly take off. Thus, I would like to take this opportunity to find the most suitable location to set up a Gym. So this report is for anyone who is interested in setting up a fitness facility around Singapore.

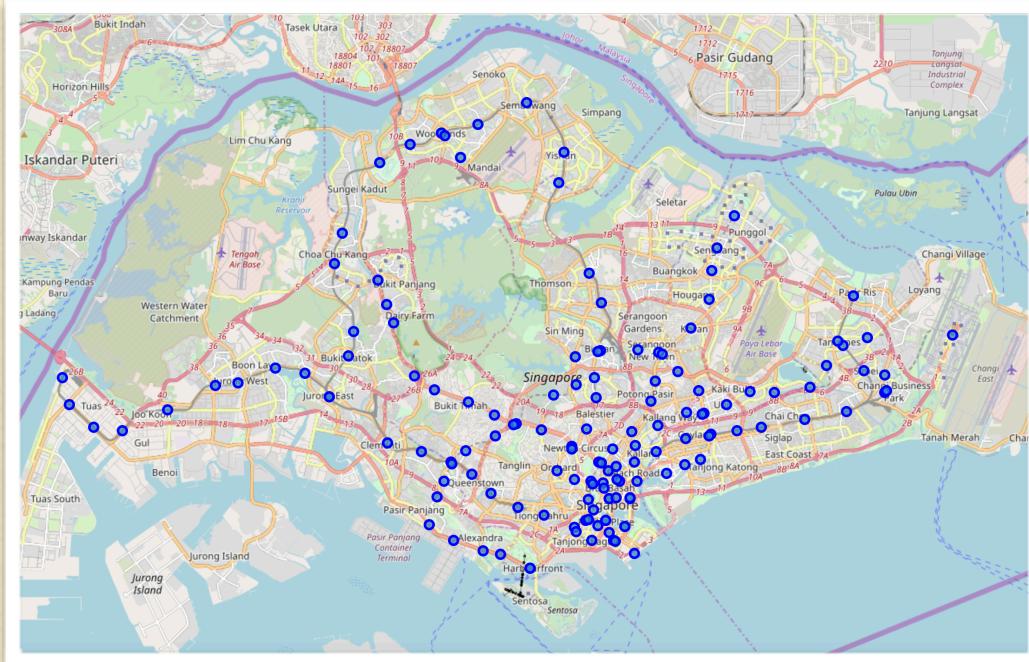
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# DATA

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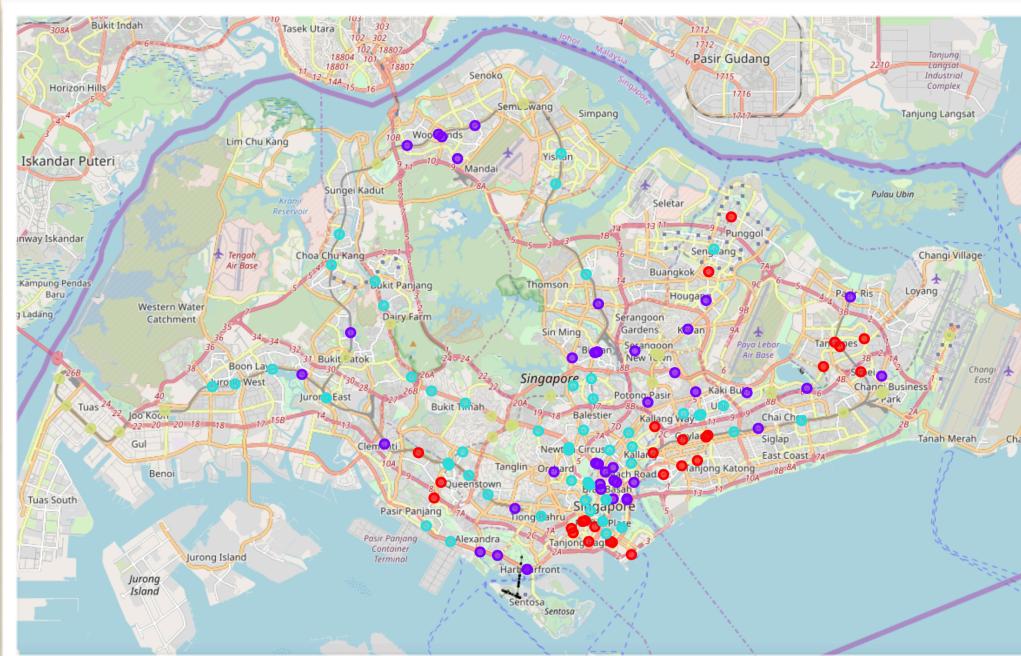
Since Singapore is well-connected by the Mass Rapid Transit (MRT) System, one key data is a pre-consolidated locations (Longitude & Latitude) of all MRT Stations in Singapore. This data was consolidated and made available on GitHub, link provided below. An enquiry to Foursquare will locate the nearby fitness facilities and identify which MRT Station lack fitness facilities and will be a suitable Gym location. As the Venue Category in Foursquare might refer to fitness facilities as "Climbing Gym", "Yoga Studio", etc., it will be necessary to consider them as well before analyse and concluding on the location.

# METHODOLOGY



- Based on the Latitude and Longitude above to ensure all MRT stations are represented in the data.
- We then map data on fitness facilities from Foursquare to identify which areas are not equipped with fitness facilities.

# RESULTS



- This map shows the different clusters based on how well-equipped they are with fitness facilities

## Legend

- Red - Well-equipped
- Blue - Sufficiently-equipped
- Purple - Equipped
- Green - Not equipped

# DISCUSSION & CONCLUSION

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- Based on the analysis, Cluster 0 (Red) is the most crowded with fitness facilities while Cluster 3 (Green) lacks fitness facilities. Cluster 2 (Blue) is sufficiently equipped, while Cluster 1 (Purple) is equipped. This shows that Central Singapore and East Singapore are crowded with fitness facilities already and I should avoid those areas. While the western part of Singapore might have opportunity for me to set up a Gym.
  - With the help of Foursquare, I am able to get a quick sense of where the opportunities for a Gym are. It seems like Western Singapore, such as Jurong East, Chinese Gardens MRT Stations are possible areas for a new Gym.
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