Applied Data Science Capstone Final Project



The Gym and Fitness Centres in Metropolis









Business Problem

• Since the traffic congestion in Kuala Lumpur causes the difficulty of commuting between residences and work offices. It is hard to find the optimal solution for going to gym and fitness centres. In this project, I will try to find an optimal location for a gym and fitness centre in the capital city of Malaysia, Kuala Lumpur. As we can all assume, KL has a lot of fitness centres. I am planning on opening a fitness centre, in the area that suits for metropolitans and without any of them nearby. I will try to find a place where there are fewer of them. Also, that location has to be popular for workers, because I want to solve the pain point of workers who find "Work Life Balance" solution. Hopefully, by applying the knowledge I've gained during this course I will try it by my best.









Data







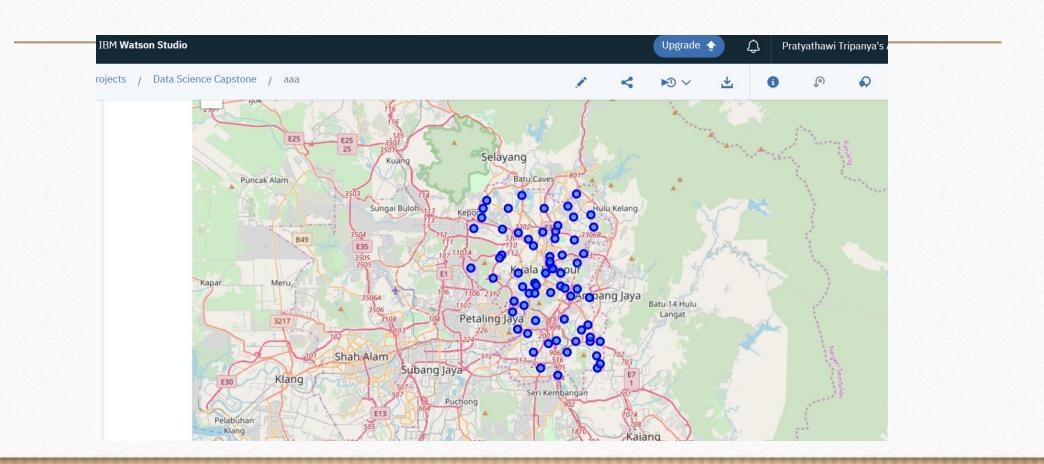








Map from geocoder

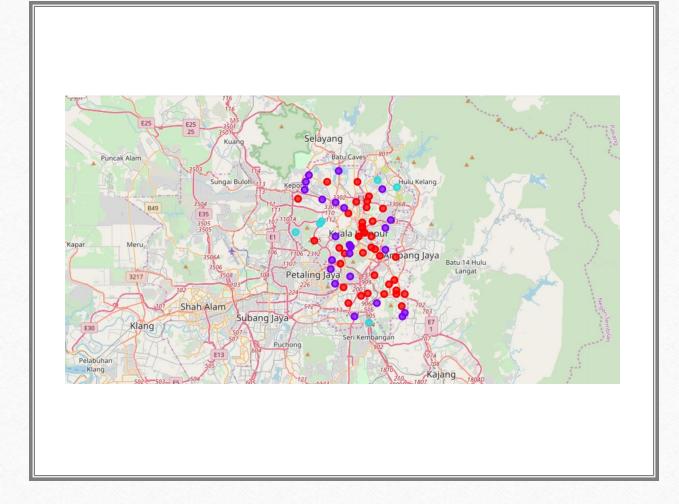












Result

- Cluster 0: no existence of fitness centres
- Cluster 1: low existence of fitness centres
- Cluster 2: moderate existence of fitness centres
- Cluster 3: high existence of fitness centres
- In the visualized map, there are representative dots by four colours naming; red colour for cluster 0, purple colour for cluster 1, blue colour for cluster 2, and yellow colour for cluster 3.









Conclusion

- As can be seen, there are a few areas that have high concentration of gym and fitness centres. Those areas are suburb areas for residency of labours in the city. However, there are many areas which have nothing or low concentration of gym and fitness centre. So, these are business opportunities that can solve the business problem or pain point which I mentioned in the introduction.
- Final decision on optimal fitness centre location will be made by stakeholders based on specific characteristics of neighbourhoods and locations in every recommended zone. Lastly, I think this project will solve the problem of the people who want to make "Work Life Balance".



