In this week, you will continue working on your capstone project. Please remember by the end of this week, you will need to submit the following:

1. A full report consisting of all of the following components (**15 marks**):

* Introduction where you discuss the business problem and who would be interested in this project.
* Data where you describe the data that will be used to solve the problem and the source of the data.
* Methodology section which represents the main component of the report where you discuss and describe any exploratory data analysis that you did, any inferential statistical testing that you performed, if any, and what machine learnings were used and why.
* Results section where you discuss the results.
* Discussion section where you discuss any observations you noted and any recommendations you can make based on the results.
* Conclusion section where you conclude the report.

2. A link to your Notebook on your Github repository pushed showing your code. (**15 marks**)

3. Your choice of a presentation or blogpost. (**10 marks**)

Capstone Project- The Batter of Neighbourhoods

Analysing Singapore’s restaurants’ cuisine to identify best site to set up restaurant for Turkish Cuisine

A view of a city

Description automatically generated

Where Is Singapore:

Singapore is located in Southeast Asia. In Singapore, it is well-known for being a cosmopolitan and diverse country. There are different races and religions here.

Problem/Project Description: As such, the diversity and variety of restaurants are also in huge amounts from Western cuisine to Japanese cuisine to French cuisine. The problem would be that individuals with a particular tastebud or cuisine preference may not know where best to go and this can be solved if the country is segmented into different parts which shows which area has more of a particular cuisine. Also, another problem is that restaurants owners have a huge variety of option as to decide where to start the business. Hence, with this, they will know where is most suitable place in Singapore to open the restaurant. Thus target audience are potential restaurant owners and customers.

Methodology:

Four Square API will be used to analyse the places/regions of Singapore. It also allows us to engage in location search and to know more about businesses and their vicinity

Steps to Achieve:

Acquire the Data and cleansing it

* 1. Obtain the geographic location’s recognition number of regions in Singapore
  2. Finding the locations within Singapore

Next, k-clustering technique is used as there is unsupervised data and we can segment the locations into clusters since there are similar regions in Singapore.

Based on the k-means cluster algorithm, Singapore will be separated into 4 clusters