**The Battle of Neighborhoods**

**IBM Data Science Professional Certificate Course**

**Capstone Project**

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**Introduction**

Yangon is the capital city of Myanmar with over seven million population. It is located at the strategic place and central to all kind of major business such as banking, trading, hub for travel and tourism, entertainment, food and beverage, etc. Competition is very demanding for all business and data-driven decision making and planning is the only way for the benefits for the new business. This is the reason why the data scientists are getting more popular to generate valuable inputs for new business and providing consultation services for market analysis and business evaluation.

**Problem Statement**

One of my clients would like to invest his new business in food and beverage sectors and would like to open new restaurant in Yangon city. But he neither know how many of restaurants has been operating in Yangon nor where exactly and which type of food should be selected for his new restaurant. In this regard, I was asked to assist with available information for new business planning. According to this request, I got started make ideation to be more understanding on the business and explored the data requirement for appropriate report for this assignment.

**Data Sources**

First of all, I do need the list of restaurants, types of food, locations, and the distribution of different restaurants across the Yangon city. So, decided to use maps API supported by fourSquare.com and python libraries such as pandas, numpy for data frame and folium library for generation of map. Ski-learn was the additional library for clustering. Python geocoder library was also essential for getting geographical coordinates of neighborhoods.

Prior to the data wrangling, I downloaded townships and geocoordinates data from <http://themimu.info/place-codes> in which townships data, postal code, latitude and longitude data was provided. I removed all the data apart from Yangon data. ­