Final Assignment

# Business problem

The audience for this project are owners who want to open a restauration business in a new location (here, Sydney). The aim of this project is to help an owner deciding on what location would present the most pros to open his business. The location of a restaurant can have a huge impact on the profit made by the business as it will impact the amount of customers coming to the restaurant, as well as the type of customers.

# Introduction to the problem

A person wants to open a restauration business in the city of Sydney, Australia. He is looking for a strategic place to open his business, where they would be a potential large amount of customers. He also wants a place where they are some other restaurants around to attract customers, but offering different type of food to limit the competition.

The future owner wants to use the foursquare data to find the neighbourhoods with venues that have large amount of ratings, implying many potential customers. He also wants to use the foursquare data to put forward the location where the venues with large amount of ratings offers different type of food than what he plans to offer. In addition, he wants to promote the location where the venues have quite low ratings, to push the customer toward his new restaurant.

# Data

The data used are the data from the foursquare API. For this project, they will include:

1. The number of reviews from restauration business in Sydney. This will aloow to determine where there are a high density of customers.
2. The ratings of the restauration business in Sydney. This will aloow to determine where the competition is the lowest.
3. The type of food served in the restauration business. This will aloow to determine where the competition is the lowest.

A clustering of the venues can be established based on these data, and will help the owner to visualize where are the most interesting location to open a business.