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. Finally, he wants to be no more than 10 km away from where he lives (North Sydney).

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 data on the restauration business, within a certain radius of the future business owner home and within the limitation of API calls to the foursquare API. The restaurant data selected will include:

1. The number of reviews from restauration business in Sydney. This will allow to determine where there are a high density of customers. We assume here that a high number of reviews involve a high density of customer.
2. The ratings of the restauration business in Sydney. This will allow to determine where the competition is the lowest. We assume here that the owner’s business is more likely to succed where the other restauration businesses have low ratings.
3. The type of food served in the restauration business. This will help the owner to make sure he doesn’t sell the same type of food as his neighboors.
4. The distance from the restaurant to the business owner.