Capstone Project
The Battle of Neighborhoods (Week 1)

1 Description of the data

The position of our new restaurant must satisfy two conditions:

- It belongs to a popular neighborhood so that we can attract the maximum amount of customers

- It should not be surrounded by too many other Vietnamese restaurants. This will lead to an excess in competitors as well as confusion in new customers.

We address these two criteria by analyzing the data from Foursquare as follows:

- We measure the popularity of a neighborhood by averaging the ratings of its venues. More precisely we will skim through the venues in the radius of 500 meters of each neighborhood and extract their rating. Their mean value will give us an idea of how popular the neighborhood is.

- We also count the number of Vietnamese restaurants in the radius of 500 meters of each neighborhood. We then sort the neighborhoods according to its number of Vietnamese restaurants.

By looking at the obtained data, we can choose a neighborhood that satisfies the two criteria. If two neighborhoods happen to be equally popular and have the same number of Vietnamese restaurants we can look for the ratings of these restaurants. If the restaurants in one neighborhood have lower ratings then we should avoid this neighborhood. The reason is that bad restaurants often bring negative reputation to customers and they tend to avoid the neighborhood as a consequent.