Introduction/Business Problem

In this capstone project the concept of opening a new Greek restaurant in New York City is explored. A restaurant entrepreneur is looking for a recommended area that would be more suitable for this project. Greek food is becoming more and more popular worldwide and the idea is to open the restaurant at a neighborhood where not many other similar options are available. So, it may be a very good opportunity to attract new market segments from different cultures too. Choosing a proper location for a new restaurant is very important since it is considered to be a key for a successful and beneficial business.

The business Problem that this project is trying to solve, is to find the most suitable location for the opening of a new Greek restaurant in New York City. The objective of the proper selection is to enhance the profitable ability of the restaurant by maximizing the possible attracted customers.

This project targets but not limits to aspire restaurant owners that looking to open new places in the New York City and makes a proposal of how a selection of the desired opening location can be done.

Data

This problem would be solved using Data Science and machine learning clustering method. Therefore, the required data in order to achieve the objective are firstly the total neighborhoods of New York City, among with their corresponding lateral and longitudinal coordinates. In addition, the venue data of existed greek restaurants in the city. So, based on the venue data the neighborhoods of the city will be classified in clusters with respect to the density of the Greek resturants using the correspodning method.

The data of the New York City are got form the NYU Spatial Data Repository, while the corresponding coordinates are extracted from the Geocoder imported package. Finally, the venue data for each neighborhood of the city are got through the Foursquare API.