**Recommend the neighborhood for given type of cuisine**

1. **Introduction/Business Problem**

As modern consumers, we greatly benefit from restaurant recommendation applications. It is so convenient to get a list of restaurants that match our preferences without much clicking, comparing, and browsing through a long list of reviews for each single business.

In this project, I want to apply the algorithms to develop predictive models learned from the past courses in this IBM Data Science certification. A Recommendation System to build a restaurant recommendation system that suggests the most suitable/popular neighborhoods for given type of cuisine/category by users.

1. **Data Description**

The dataset that I am going to use for this project is available free on the web. Here is the link to the dataset: <https://geo.nyu.edu/catalog/nyu_2451_34572>. I downloaded the json file from this link. This dataset contains information about the 5 boroughs of New York city and its neighborhoods. It also contains the latitude and longitude coordinates of each neighborhood.

In this json file, all the relevant information is stored in the ‘feature key’. I am going to extract this required information and convert it into python pandas dataframe format for easy analysis of the data. I will be using the Foursquare location data and run a query on it for the required type of cuisine/category by the user. The information which is needed will be extracted from the ‘item’ key and will convert this as well in pandas dataframe.

I will be using kmeans clustering and will use requested ‘categories’ to cluster the neighborhoods.