**Coursera Capstone**

**The Battle of the Neighborhoods**

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**Business Problem**

New York is a magnet for tourists from all around the globe. It allures international spotlight where it is one of the most sought after travel destination due to its cultural, ethnic and natural diversity, world best museums and art galleries, developed infrastructure and fine educational institutions. Also, New York is the heart of trade as economic growth as well as the best technological, medical and scientific minds in the world which makes it a strong competitor on the world map. This project will focus on Manhattan because the possibilities are endless where it has a dense population, beautiful skyscrapers, lavish shopping, tourist attractions, iconic historical structures, fine and performing arts, beautiful parks, recreational facilities and some of best restaurants in the world.

Since New York is host to culinary experts from all across the globe and has one of the most competitive and diverse restaurant scenes in the world, it will not be easy to casually predict if opening a certain restaurant/café in Manhattan will be successful or not. This is where this project makes a breakthrough in helping food business seekers to decide the best locations for their restaurant/café. So, the aim of this project is to use clustering techniques to group neighborhoods in Manhattan and support food business seekers to decide which neighborhood will be best suited for their business. This project helps food business seekers to analyze neighborhoods in Manhattan, which was rather hard to do without algorithm, and identify a place for their business after analysis. The user is prompted to input a cuisine they are interested in then the analysis starts based on this user’s entry. As an example, in this project the user will enter Italian. After that, the data sources will be used accordingly to analyze neighborhoods, popular venues and food venues then cluster the neighborhoods accordingly. These clusters will help anyone who is seeking to open a restaurant/café to decide on the location of his/her business. In the example of the user entering Italian cuisine, the clusters will indicate which are the best Neighborhoods in Manhattan the user can open an Italian restaurant.