1. Introduction/Business Understanding

1.1 Description of the problem

The business problem we are currently posing is : As being the capital of 3 Empires in the history, lstanbul has different cuisines from various cultures. You cannot find the cultural diversity of Istanbul in any other city in Turkey so how could we provide support to different visitors to list and visualize Istanbul districts that fit their needs in term of culinary/ food venues.

1.2 Discussion of the background

Istanbul is one of the most cosmopolitan cities in the world. While the majority of the population are Muslims, it's a mix of cultures and backgrounds fused together in one city. It has a mix of Jewish, Greek and Armenian populations. It is a city where one can truly experience Middle Eastern and Western cultures all at once. From fashionable boutiqes of Nisantasi to the merchants of the Covered Bazaar, this busy city is home to many people from very diverse backgrounds, with the commonality of it's rich history. Turkey's geography makes it a wonderful blend of peoples and places. Magnificent scenery along the Bosphorus has drawn people from the ancient world to the contemporary. Istanbul, comprising both the European and Asian sides of the Bosphorus is a stunning amalgam of sights and sounds .

I believe it’s difficult for a traveler, especially restaurant-goers, to make a choice from among many options since there is also too much information on the web because everybody’s got their own take of where to go and it’s all so fragmented that you have to assemble it yourself especially if you’re interested in non-touristy recommendations.

So, how could we leverage Foursquare location data and machine learning to help us make decision and find appropriate neighborhoods? This is the problem I would like to address in this capstone project taking Istanbul as an example. In this project, I am going to use Foursquare location data and clustering methods to group the districts to different group by their restaurant venues information.