**Final Report**

**Introduction/Business Problem:**

The crux of the problem that I am solving lies in the fact that we travel due to social or official reasons all the time throughout the world in different cities in different countries. While we do that, we book hotels for our temporary stay in the unknown, new cities and it is a time taking process. Over the years many systems have been developed to bring the list of hotels to your grip where you can choose from a uncountable options. But it takes a person to scour through a lot of data and choose the necessary option for him/her.

What if we could leave the responsibility to our machine and algorithm. That could save us a lot of time. The user that we can approach through this system is immeasurable. The hospitality industry is multi-billion dollar industry and one of the biggest in the world and by implementing our platform we can simplify a humungous task that will surely be appreciated by a huge number of users.

**Data:**

So here we shall use the location data from Foursquare. In the ultimate stage of execution of the idea there will be an app that will track your location and tell you the list of hotels near you. The app will show the rating of the hotel and the distance of the hotel from your current location. The idea is inspired by the mobile app called Mr. Jitters. The app looks for your current location and when it finds you an icon appears on the screen and when you tap the icon it tells you the location of the cafés near you in a walking distance with their ratings and the distances. The app is also open sourced on GitHub.

So we shall not take the headache of developing an app, as it is out of the scope of the course. Instead we shall establish that the backend of the idea works perfectly. So we shall feed fixed location through queries in Foursquare API and then explore the location for venues and then we shall look for venues that has category Hotel. We shall then look for the ratings of those hotels and the distance from our current co-ordinate and put it in a data-frame.