

# The Battle of Neighborhoods Project

After practicing with course material for exploring location data and familiarized with Foursquare company that provides these data, I am going to introduce my Capstone Project to complete this certificate.

## Introduction of Capstone Project

These days travelling to different places in the world is faster and easier than before. There are different reasons for a tourist to visit a new city. There are tourists that like to visit different countries to experience different cultures which includes museum, arts, food. There are travelers who love nature and would like to spend most of their time in the nature. Also, couple of friends would like to have parties and nightlife in a city for an occasion. And at the end some cities are perfect for shopping.

As we can see there are different purposes for each tourist to visit a new city. After arriving to a new city, the most important things that tourists need to arrange before arriving is accommodation. It could be time consuming to check all hotels in a city within your budget and find the best one that addresses all your preferences. I called my project as **Hotel Recommendation** application.

In this project, I am trying to collect both visitor's preference data and the city's data to recommend a list of hotels that better fit for the visitor.

For an example, if a visitor like to spend more time in museums, so maybe it is better to book a hotel in an area that it is closer to most of the museums. Another visitor may prefer to spend most of the time in museums but also prefer to be try different restaurants available nearby. So, the application can recommend a different list of hotels.

In this project, first the visitor is going to complete a questionnaire which prioritize his/her preferences. These are the available interesting points:

- 1- Food
  - a. Italian
  - b. Indian
  - c. Mediterranean
  - d. Seafood
  - e. Asian
  - f. Pizza
- 2- Nightlife
  - a. Night club
  - b. Bar
- 3- Shopping Center
- 4- Art and Culture
  - a. Museum
  - b. Music
- 5- Park and Nature

- a. Park
  - b. Beach
- 6- Top Picks. This option gives the visitor to stay in an area where most of the interesting places are located that other visitors spend their time.

The next part of the project is to assign different characteristics to a hotel. If a hotel belongs to a cluster of museum and food, but not belong to a Park and nature cluster, then it has a museum and food properties with a better rate than park and nature.

And at the end, based on this two information, this application recommends a list of hotels to the visitor to save travel time and spend more time for those things that s/he prefers.