A description of the data and how it will be used to solve the problem.

This project employs a longitudinal dataset from Foursquare, a location-based social network, to analyze urban growth and explore neighborhoods in two major cities. This project further aims to exploit the data sourced from location-based services to reveal urban growth patterns in the two cities. Furthermore, it aims to track and compare the urban activities in the two cities and analyze the growth of a specific community in a neighborhood of a specific borough with the maximum urban growth based on the pattern of increase in customers in the corresponding restaurant type of that area. By tracking these patterns with respect to two specific cities, using k-means clustering analysis this project aims to reveal interesting trends in urban development where the role of geography and culture remains important, even in an era where centralized city planning is dominant.

The New York neighborhood has a total of 5 boroughs and 306 neighborhoods. To segment the neighborhoods and explore them, a dataset containing the 5 boroughs and the neighborhoods that exist in each borough as well as the latitude and longitude coordinates of each neighborhood. On the other hand, the Canada neighborhood has a total of 5 boroughs and 210 neighborhoods.