The Required data for the analysis

Datasets required for the Project:

1) **New York Data (Boroughs + Neighbourhoods)**
    a. The first Dataset we will be using would contain all the required geographical data about New York City. Namely, we would be using 'Borough', 'Neighbourhood', 'Latitude', and 'Longitude' among all the other data elements present in the data. For convenience, we would be using the same data set which was provided to us in Week 3 of this course (Applied Data Science Capstone)
        https://geo.nyu.edu/catalog/nyu_2451_34572
        We will use the same link like we did to load this data from where it is downloaded and hosted on (https://cocl.us/new_york_dataset)
    b. New York City has a total of 5 boroughs and 306 neighbourhoods. In order to segment the neighbourhoods and explore them, we will essentially need a dataset that contains the 5 boroughs and the neighbourhoods that exist in each borough as well as the latitude and longitude coordinates of each neighbourhood. The 'Latitude' and 'Longitude' extracted from this dataset will also be pivotal when we use it perform Clustering using K-Means. All the relevant data is in the features key, which is basically a list of the neighbourhoods. If we dive into the elements of this features key, we will find all of its components.

2) **Four Square City Guide Data (Venues)**
    a. Foursquare City Guide, commonly known as Foursquare, is a local search-and-discovery mobile app which provides search results for its users. The app provides personalized recommendations of places to go near a user's current location based on users' previous browsing history and check-in history.
    b. So using the Foursquare API, we can search for specific type of venues or stores around a given location. it is important to remember that for this data, we make a regular call to the API, and if you have a free personal developer account, you can make up to approximately 99 thousand regular calls per day. We can also learn more about a specific venue or store or shop, like their full address, their working hours, and their menu if they have one, and so on. It's also important to remember that for this data, we would need to make a premium call and with the personal developer account, you can make approximately 500 calls per day. Also with the Foursquare API, we can learn more about a specific Foursquare user, their full name, and any tips or photos that they have posted about venues and stores. For this data, a regular call to the API would be made. Furthermore, we can explore a given location by finding what popular spots exist in the vicinity of the location, and for this data a regular call to the API would be made. And finally, with the Foursquare API, we can explore trending venues around a given location. These are venues with the highest foot traffic at the time this regular call to the API is made