

Data Acquisition and Understanding

This project faces several constraints and opportunities. There are not so many well-known or readily available datasets to help explore the city of London to arrive at the goals described above. To complete the project in full, we need the geographical location data for London. Postal codes in the city serve as a starting point. Using Postal codes, we can easily find out the neighborhoods, boroughs, venues and their most popular venue categories that can be used for this purpose.

For this project we decided to acquire information from [Wikipedia](#)

Finally, we will use the Foursquare API to gather information about venues inside each and every neighborhood. For each neighborhood, we have chosen the radius to be 500 meters.

Data Collected

The information acquired from this site includes:

- Location
- London Borough
- Post Town
- Postcode District
- Dial Code
- OS Grid ref

This Wikipedia page lacks information about the geographical locations. To solve this problem, we use ArcGIS API.

ArcGIS API

ArcGIS Online enables you to connect people, locations, and data using interactive maps. Work with smart, data-driven styles and intuitive analysis tools that deliver location intelligence. Share your insights with the world or specific groups.

More specifically, we use ArcGIS to get the geo locations of the neighborhoods of London. The following columns are added to our initial dataset which prepares our data.

- Latitude: Latitude for Neighborhood
- Longitude: Longitude for Neighborhood