

Capstone Project - The Battle of Neighborhoods

Finding Apartment in Utrecht, NL

Data Acquisition:

To develop the recommendation engine for this data-driven project I will need different types on locations, venues, rentals, apartment price, size, zip code etc. I have selected below sources to get all required data for this project.

1. **Rental Data:** I will use the most popular website www.pararius.com to collect the available rental locations in Utrecht. The rental data will help me analysis the price based on geographical location, size and other facilities. The fields I will be using from the site are as below:
 - a. Rental location,
 - b. Size of the apartment,
 - c. The number of rooms,
 - d. Furnished/non-furnished,
 - e. Price.
2. **Venue Data:** Foursquare API provides will provide venue data along with the popularity, which will help me locate suitable locations. The targeted data fields from FourSquare are as follow:
 - a. Venue location,
 - b. Categories,
 - c. Popularity and trending.
3. **Location Data:** To get Geolocation along with Neighborhood of Utrecht I will have to use multiple sources. First I will use WorldPostcode (<https://worldpostalcode.com/netherlands/utrecht/>) to find the Zip codes of Utrecht. After collecting all the zip code will need to find the neighbourhood information from Postcode.site (<https://postcode.site/utrecht/utrecht>). And later I will use Geonames.org (<https://www.geonames.org/postalcode-search.html?q=3512&country=NL>) and google API to find the latitude and longitude of the locations. The targeted fields for location data are as below:
 - a. Zip Codes
 - b. Location/neighbourhood names
 - c. GEO data: Latitude, Longitude