Capstone Project

The Battle of Neighborhoods (Week 1)

Which neighborhoods are best suited for the elderly?

Instructions

Now that you have been equipped with the skills and the tools to use location data to explore a geographical location, over the course of two weeks, you will have the opportunity to be as creative as you want and come up with an idea to leverage the Foursquare location data to explore or compare neighborhoods or cities of your choice or to come up with a problem that you can use the Foursquare location data to solve. If you cannot think of an idea or a problem, here are some ideas to get you started:

1. *In Module 3, we explored New York City and the city of Toronto and segmented and clustered their neighborhoods. Both cities are very diverse and are the financial capitals of their respective countries. One interesting idea would be to compare the neighborhoods of the two cities and determine how similar or dissimilar they are. Is New York City more like Toronto or Paris or some other multicultural city? I will leave it to you to refine this idea.*
2. *In a city of your choice, if someone is looking to open a restaurant, where would you recommend that they open it? Similarly, if a contractor is trying to start their own business, where would you recommend that they setup their office?*

These are just a couple of many ideas and problems that can be solved using location data in addition to other datasets. No matter what you decide to do, make sure to provide sufficient justification of why you think what you want to do or solve is important and why would a client or a group of people be interested in your project.

A description of the problem and a discussion of the background

The city of Utrecht has a lot of different neighborhoods. We want to group these neighborhoods so that we can gain more insight in which neighborhoods are more suited towards the elderly.

This information will be useful for the elderly to choose where they would like to live. It might also be helpful for the city council to decide where to build more hospitals or other

necessities for the elderly. It will also be helpful for general practitioners to decide on where to start a new practice.

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

We will be using data from the Central Bureau of Statistics in the Netherlands. We will use date from two different places. We will therefore have to clean the data correctly and merge them together.

One source will provide data on the amount of citizens and also on the amount of citizens of 65 years of age and older. By using this information we can calculate the percentage of citizens of 65 years of age and older in each neighborhood ourselves.

The other source will provide us with information on the average distance to a general practitioner. This is important for the elderly. It will also provide the city council and general practitioners on where there are opportunities.

- https://www.cbs.nl/nl-nl/reeksen/kerncijfers-wijken-en-buurten-2004-2019
- https://opendata.cbs.nl/statline/portal.html?_la=nl&_catalog=CBS&tableId=84463NED&_theme=401

We will locate the geographical coordinates of Utrecht by using geolocator. As the original data is in Dutch, we will have to translate it to English.