

Capstone Project

The Battle of Neighborhoods

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Problem explanation

- The problem I would like to analyze arises from a personal need: where should I choose to live? In the next month I have to move for job in another city and I will deal with the problem of where taking home.
- This is the typical problem that a person who has to be relocated for job has to face.
- A person could say to choose a place not too far from the office, but this is not enough. I want to find an area where I can practice my hobbies.
- First of all since I am a swimmer I want an area full of swimming pools.
- Then since I love to practice sport in general I want to live in an area with gyms and parks where to run and do jogging.
- Another person who loves arts and exhibitions could prefer an area full of theaters or cinemas for example. Other people could like going and chilling out in the evening so an area with pubs and clubs would be perfect.
- So my problem is in general: find the better place where to live depending on the hobbies and interests of a person.

Data

- The data I want to use are the geographical coordinates of Milan city, retrieved from the geocoder or geolocator API. In particular I know that the postal codes of Milan city go from 20121 to 20162, so I will get the geographical coordinates of these postalcodes. Next, I will explore with the Forsquare API the different venues for each postal code paying particular attention to the gym, swimming pools, parks and at the end I will use K-means to cluster the data and choose the cluster that better fits to my hobbies.