

Finding Similar Neighborhoods in different cities

Capstone project for Coursera

Himank Kavathekar

June, 2021

Introduction

Relocating to a new city is a stressful task. People are used to a certain level of comfort that come from living in a known city, neighborhood. They know nearby places; like shops, restaurants or parks, etc. So when it comes to leaving that comfort and move to a completely unknown city, it is better to have some help to explore the new city. This project demonstrates how one can leverage the data available for the city to find a similar neighborhood to their current place of residence.

For the demonstration purposes, some specific locations are chosen in this project. Target audience is people that are looking to move from and to those specific locations. These people can directly use the findings of this project to their advantage, without any changes. But one can easily use the same methodology to analyse any other locations they see fit. The purpose of this project is to demonstrate the method in which one can use data to their advantage and make the process of moving to a new city a little easier.

In this project, we will look for a neighborhood similar to 'Baner, Pune, IN' in Bangalore and Delhi.

Data

We make use of the following data in this project:

1. List of neighborhoods in Bangalore, IN
2. List of Neighborhoods in Delhi, IN
3. Geological coordinates of all the neighborhoods
4. Nearby venues like restaurants, cafes, etc. in the above mentioned neighborhoods and in Baner, Pune.

We can get the neighborhoods data in Bangalore and Delhi from wikipedia. Using web-scraping and cleaning the data, we get fairly exhaustive lists of the neighborhoods in both these cities. Using python's geocoder package, we obtain the coordinates of these places. For nearby venues, we make use of the [Foursquare API](#).

The foursquare API consists of venues data collected from over 100k sources and arranged according to the venue category. For any given place, one can explore upto 100 nearby venues in desired radius from the location. E.g. for Baner, Pune, we use foursquare api to get a list of nearby venues in within a distance of 750 meters. This list includes restaurants, cafes, fast food chains, etc. One can also explore ratings of venue given by Foursquare's city guide users.