

CHOOSING IDEAL NEIGHBOURHOOD IN BANGALORE

DATA SCIENCE PROJECT BY AROHAN AJIT

April 2020

BUSINESS PROBLEM

OBJECTIVE

■ **Business Problem:**

- Bangalore is one of the key destination for IT sector companies and experts. City has a huge population most of which are IT sector employees. It is also a preferred location for all the aspiring Software Engineers, Data Scientists and ML Engineers in India.
- As such finding proper neighbourhood which satisfies all the needs of an individual can be a challenging task. This report aims to tackle this very problem

■ **Interested Business:**

- This project can of use to Real Estate companies in Bangalore in order to find proper real estate in ideal locations for their customers

■ **Target Audience**

- All the future would-be residents of Bangalore who are looking for proper locality to reside in

DATA

■ **Location Data:**

- Location Data was scraped from Wikitable in Wikipedia using Beautiful Soup
- Neighbourhood Location Data: 'https://en.wikipedia.org/wiki/List_of_wards_in_Bangalore'

■ **Location Coordinates Data:**

- Location data was taken from ARCGIS Geocoder API

■ **Places of Interest Location Data:**

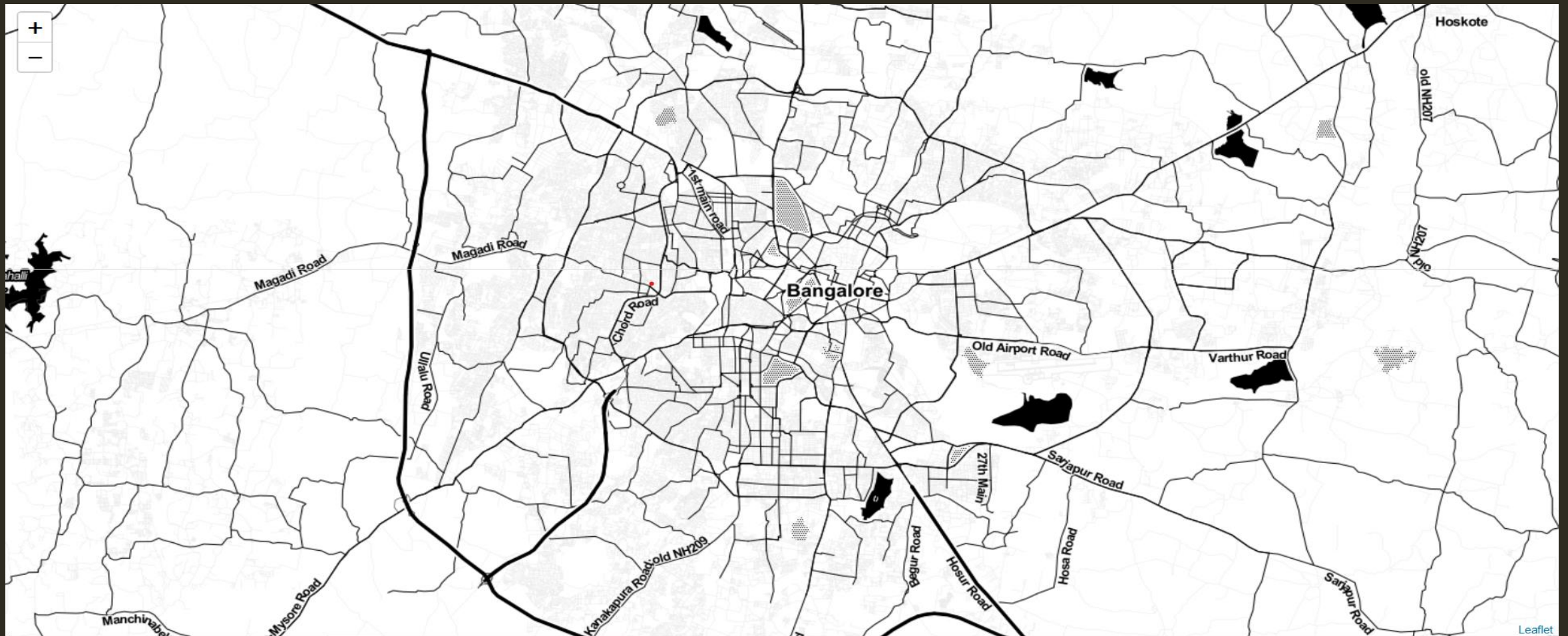
- Coordinates of all the POI were taken Foursquare developers API
- FourSquare API

■ **Map Data:**

- https://github.com/datameet/Municipal_Spatial_Data/blob/master/Bangalore/BBMP.GeoJSON

METHODOLOGY

BANGALORE

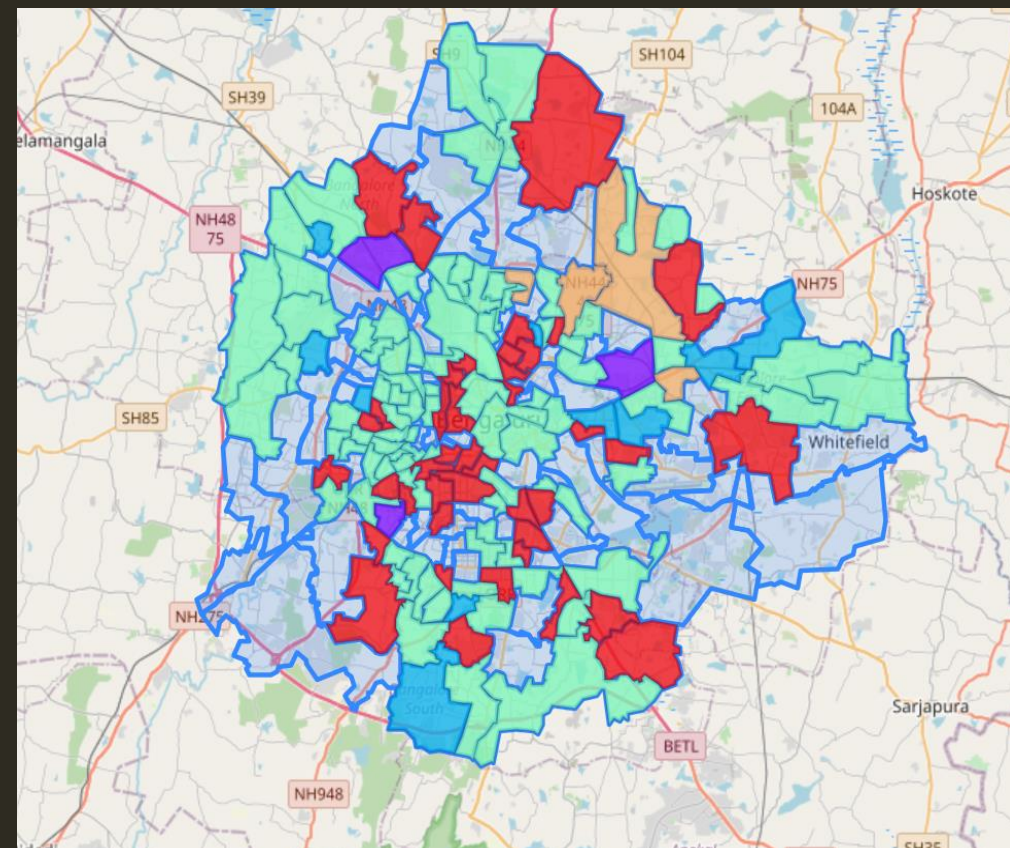
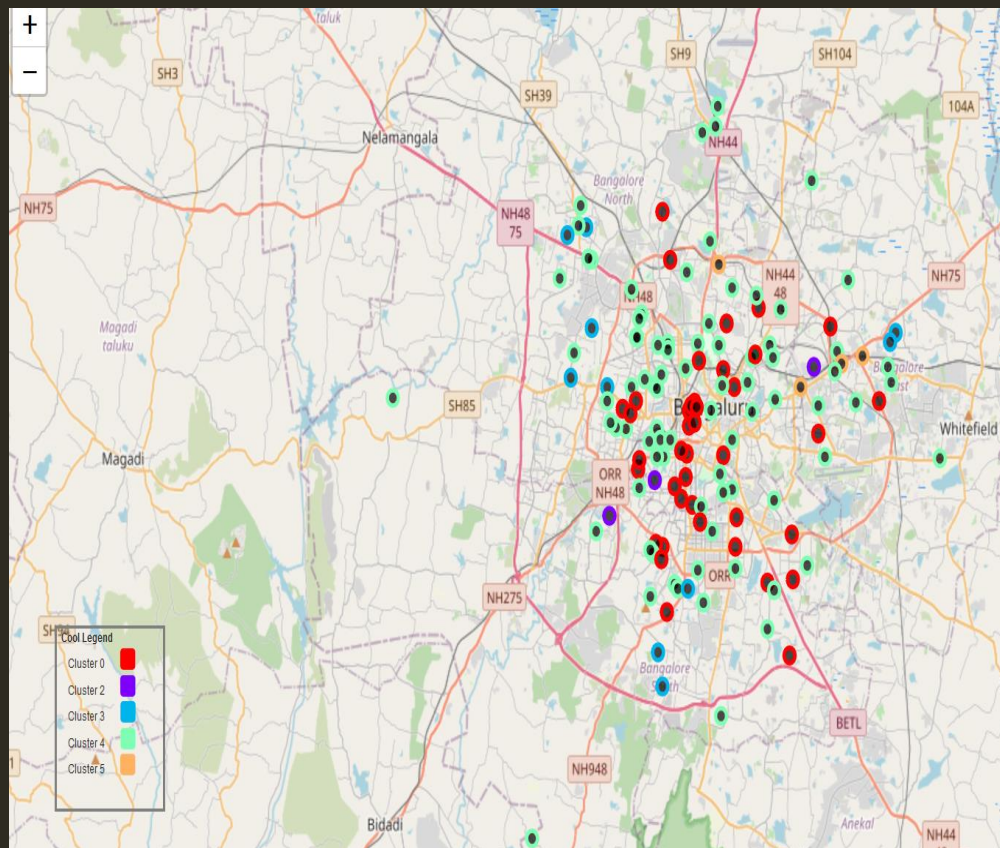


LIST OF STEPS TAKEN FOR ANALYSIS

- The data for different wards was scraped using BeautifulSoup library
- Latitude and Longitude for each of the wards was taken using Geocoder API
- Places of Interest in each ward were identified and their locations mapped using Foursquare API
- Preferred features for an ideal neighbourhood were identified. This can vary person to person as everyone has different requirements.
- Top 10 most common venues at each ward were identified and then they were clustered on basis of similarity
- Priority of each ward was set on basis wards was that had maximum to offer from preferred features

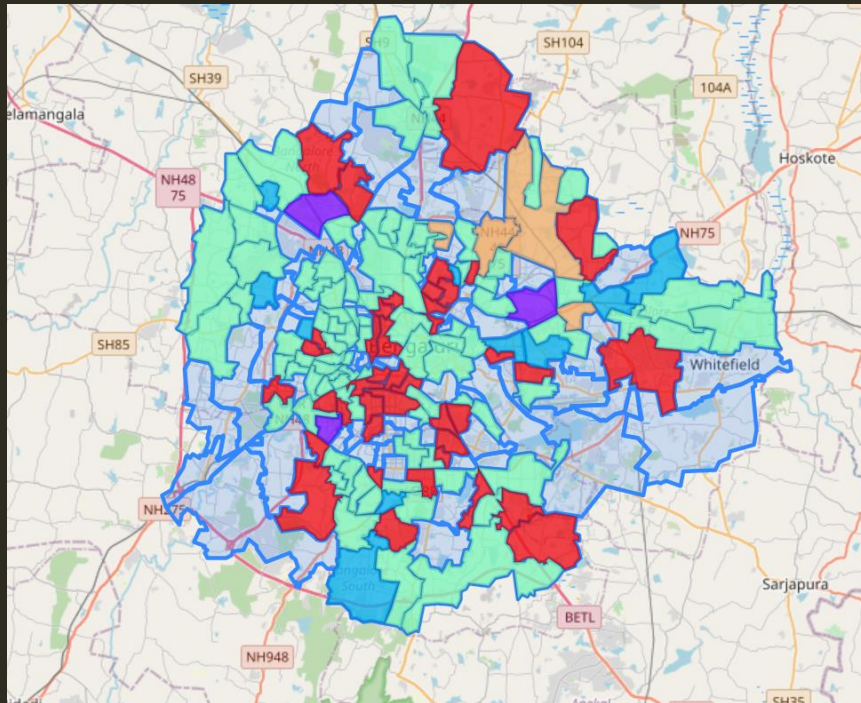
RESULTS

CLUSTERS IDENTIFIED

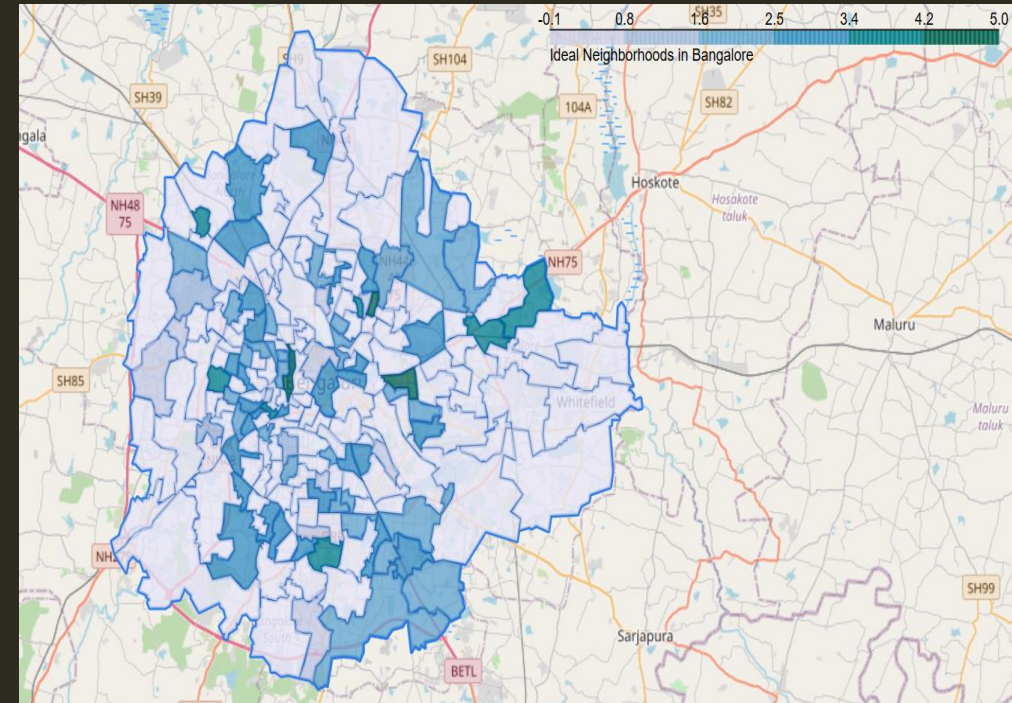


PREFERRED LOCATIONS

IDENTIFIED CLUSTERS



PREFERRED WARDS



INFERENCE

From observing the above maps, it is clear that the area around Central Bangalore that is Cluster 1 is preferred the most followed by Cluster 4

DISCUSSION

- It is quite pragmatic that locations around Central Bangalore are preferred for neighbourhoods. Being a planned city, most of the features preferred for ideal living conditions are situated there
- Some of clusters like Cluster 4 are situated on the suburbs as well since there's a sizeable population which prefers to live near their workplace which are normally situated on outer parts of the city
- Some parts in Central Bangalore are not preferred for living as these are considered 'Shopping Districts' and mostly consists of Markets and Shops

RECOMMENDATION

- It is recommended to take residence in Central Bangalore as it consists of most of the features preferable for comfortable living.
- Some areas in suburbs are also suitable for residence – which while lacking in some features inside the city, provide less commute time to workplace

CONCLUSION

- Suburbs can be further developed for better living conditions in order to increase wards with better housing facilities.
- Developing more such areas can provide more affordable options for residence while easing the pressure on core locations in central
- Better features can provided in up and coming locations in the city which are in process of becoming residential area

THANK YOU!