

Report

Best Venues for a newbie

Introduction

On the request of one of the Techie who wants to settle in Bangalore, I had to make a model which contains the famous hotel for a temporary stay, best TechPark to kick start a career, restaurants near-by and the best automotive shop in Bengaluru(Bangalore), India. Requirements specified by the customer was that the program should have top 5 Restaurants in Bangalore, where the categories of the restaurants should include varied interests, with the required amenities. Nevertheless a map specifying all these places of interest was to be generated.

Data

Data used for the leverage of output was entirely the data provided by the Foursquare API. Clustering of data is done on the basis of the area. Every area specified in the cluster includes the data of the restaurants, PG, hotel and automotive shop.

Methodology

- Import the required libraries.
 - Define foursquare credentials.
 - Get the City's Longitude and Latitude.
 - Get Hotel and Clean dataframe, predict the best hotel.
 - Get Tech Park and Clean Dataframe.
 - Get Paying Guest details and refer the top best services.
 - Get Restaurants and filter top 5 restaurants.
 - Search for best Automotive shop.
 - Generate map including Hotel, Automotive shop and PG and cluster them.
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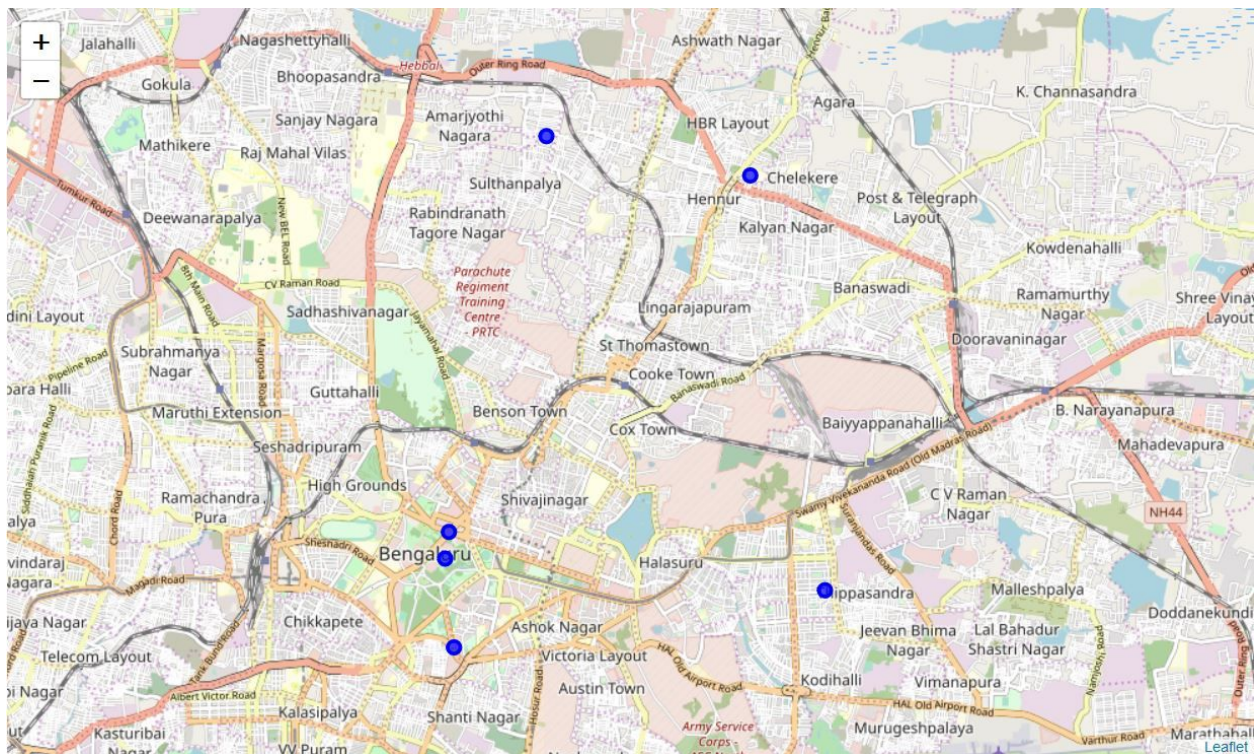
- Generate map including Restaurant, TechPark and PG and cluster them.

Results

The results obtained were two clusters of different domains put together under certain scenarios.

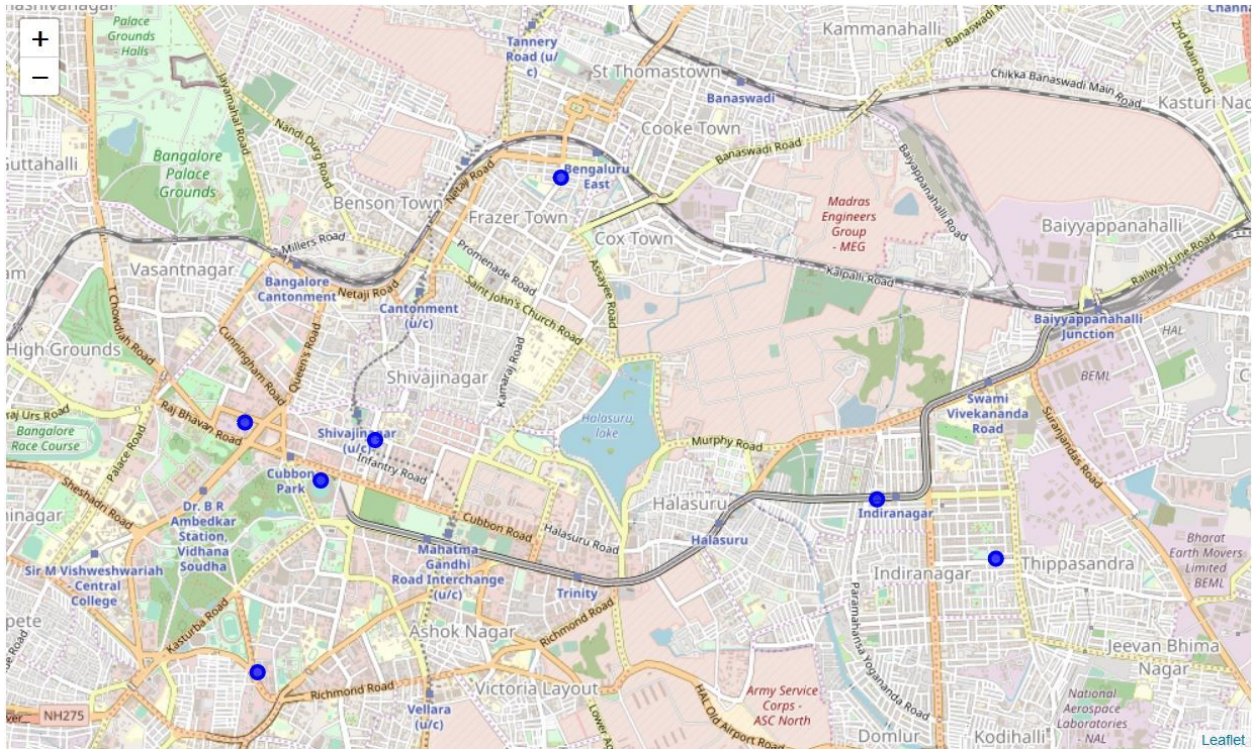
Scenario 1:

The techie initially needs a nearest comfortable hotel for temporary stay, an automotive shop to hire a car from and a PG for a long stay. This is represented by the first cluster:



Scenario 2:

After settling down, the techie needs to find a new PG, a techpark to kick-start his career and near-by restaurants for the refreshments. This is represented by the clusters:



Discussions

It is interesting to note how the two clusters can provide the customer with varied locations. Further developments can be made using the ML algorithms, to bring out the best locations for all the categories specified by the customer. Distance covered each day by from each of the clusters. Recommendation models can be built to suggest for the best cost and comfortable places based on the money invested by the customer.

Conclusion

By the study of the data we can conclude that Bangalore being an IT hub, provides lots of scope for the IT professionals. Lodging and recreation is not an issue in the city. The 24 carats hotel proves to be the best hotel, with fastest means of commute(metro). 6 Paying Guest accommodations as requested by the techie, Manyata Embassy Business park being a good place with many IT companies to kick start a career with, 6 good restaurants for recreation, Best automotive shop for repair of cars, given by its website, the above are the conclusions of the project. Clustering provides a detailed study of each location visually.