Exploring Optimal Location in Bangalore City for a Residence

About Bangalore

Bangalore, officially known as Bengaluru is the capital of the Indian state of Karnataka.

It is a commercial, industrial, educational, healthcare and startup hub. Day by day the population of the city is increasing and there are more visitors to the city.

There is ample scope for opening for building Residential Apartments /investing on property.
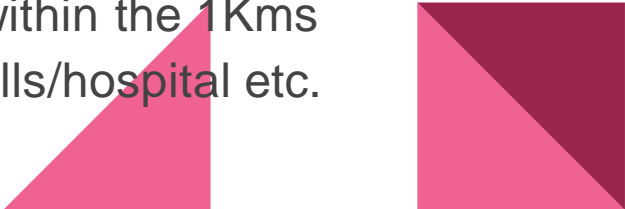
Business Problem

Identifying the optimal location for building Residential Apartment/investing in property is the business problem of this project.

Restaurants, schools, colleges, bus stop, metros, shopping malls, pharmacy and Hospitals normally Residences nearby these places are considered as ideal spot.

We need to identify the optimal location, that should be within the 1Kms (ideal distance) from the main spot such as shopping malls/hospital etc.
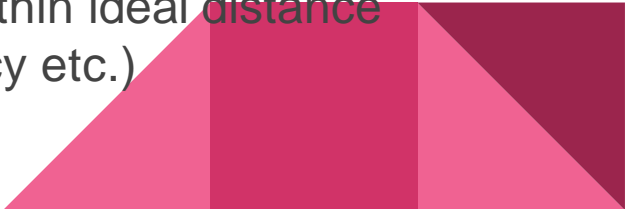
Identifying the best Suited locations

Generally we see people tend to buy houses/invest in property where you have nearby restaurants, schools, colleges, bus stop,shopping malls, pharmacy and hospitals. We look for the top 5 locations corresponding to these categories

With the help of Foursquare API we can search for nearby venues with provided latitude and longitude.

We search for category based top 5 locations within 5 KM range from Bangalore city center.
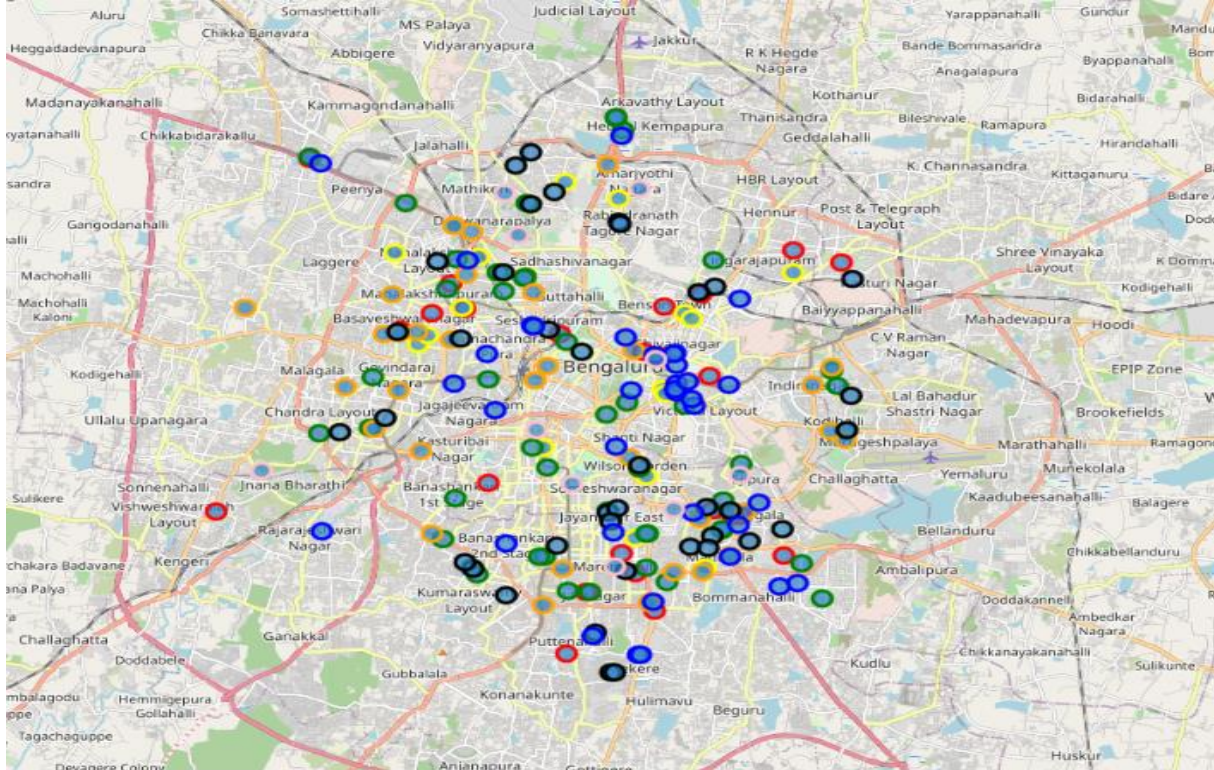
Data acquisition and cleaning

- Foursquare API is used to get the top 100 locations for restaurants, schools, colleges, bus stop, metros, shopping malls, pharmacy and Hospitals within 10km range.
- Duplicate, highly similar or highly correlated locations were dropped.
- Top 5 locations are selected for each category
- For each such locations, nearby existing Residential Apartment/location are identified
- These Residential Apartment/ location are present within ideal distance from the necessary places(shopping malls/pharmacy etc.)

Methodology

- In the first step we have collected top 100 locations data for different categories. We then cleaned the data for each category.
- Second step is getting the nearby residential apartment/location within 1km distance from each of these locations.
- Third step is to analyse the consolidated data which we obtained in step 2.
- Final step is to recommend the optimal location to the stakeholders.

Map Displaying hotspot locations

Result dataset

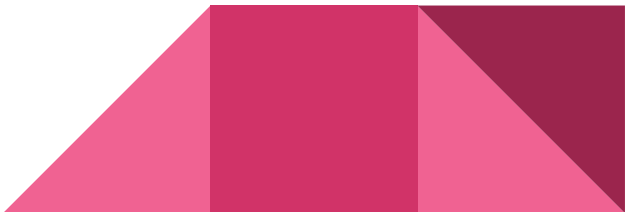|	location	Number of Restraunts	Number of Bus stops	Number of schools	Number of Colleges	Number of hospitals	Number of Pharmacy	Number of Shopping Malls
0	Brigade Gateway	1	3.0	3.0	1.0	3.0	5.0	3.0
1	Renaissance Temple Bells	2	4.0	4.0	1.0	2.0	5.0	2.0
2	Esteem Park Apartments	2	2.0	2.0	1.0	4.0	3.0	4.0
3	Diamond District	2	2.0	1.0	1.0	5.0	5.0	5.0
4	Surabhi Appts.	3	2.0	3.0	1.0	3.0	4.0	3.0
5	11th Cross First Block Rajajinagar	3	1.0	3.0	1.0	3.0	5.0	3.0
6	Mantri Terrace	3	2.0	3.0	1.0	3.0	4.0	3.0

Result Data Observations

- We found few ideal location which has all the basic hotspots nearby.

- **Total of 7 locations** are having all the basic necessary amenities **within 1km**

Recommendations

Based on the obtained result, i would recommend following Residential Apartments /locations:

- Below 7 locations which has all the basic necessary locations nearby
    1. **Brigade Gateway**
    2. **Renaissance Temple Bells**
    3. **Esteem Park Apartments**
    4. **Diamond District**
    5. **Surabhi Appts**
    6. **11th Cross First Block Rajajinagar**
    7. **Mantri Terrace**

Conclusion

- Purpose of this project is to identify the optimal location for building Residential Apartments /investing on property within 5 km range of Bangalore city.

- Initially, I identified the top locations for different categories.

- Then we identified the nearby location/Residential Apartments for such hotspot locations.

- My finding and recommendations are already in prev slide.

- It is upto the stakeholder to decide which location to pick.