

The Battle of The Neighborhoods

Week 4 | Part 2 |: Applied Data Science Capstone

Hyderabad City Locality Recommendation System

IBM DATA SCIENCE – ARJUN GIDWANI

DATA:

Data Required:

1. A list of the Zones, Circles and Wards which come under the Greater Hyderabad Municipal Corporation.
 2. The Coordinates (The Latitudes and Longitudes) of each ward (equivalent of a neighbourhood). This is required particularly to plot the map and to get the venue data using the Foursquare API.
 3. Venue Data
 4. Ward-wise average rent data for 2BHK
 5. Population Data for each Ward
- These are important for clustering and setting the parameters of the recommender model.

Sources of Data:

The GHMC Zones, Circles and Wards List:

https://www.ghmc.gov.in/Documents/GHMC_Circles.pdf

<https://www.ghmc.gov.in/Documents/Wards.pdf>

The lists from the GHMC website have been manually combined due to the lack of reliable open source list.

The Coordinates of each ward:

Due to the unavailability of open source data on geographical coordinates on Wikipedia or government websites, this data was manually collected for each using google maps to produce the dataframe for the same.

	Zone	Ward	Latitude	Longitude
0	LB Nagar (East Zone)	Kapra	17.488731	78.568384
1	LB Nagar (East Zone)	Dr. AS Rao Nagar	17.479077	78.550862
2	LB Nagar (East Zone)	Cherlapally	17.464962	78.593184
3	LB Nagar (East Zone)	Meerpet HB Colony	17.452821	78.564846
4	LB Nagar (East Zone)	Mallapur	17.446885	78.574279

Venue Data:

Foursquare API to get the Venue Data:

	Ward	Zone	Ward Latitude	Ward Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
0	Kapra	LB Nagar (East Zone)	17.488731	78.568384	MedPlus	17.488267	78.569265	Pharmacy
1	Dr. AS Rao Nagar	LB Nagar (East Zone)	17.479077	78.550862	The Coffee Cup	17.483180	78.552104	Café
2	Dr. AS Rao Nagar	LB Nagar (East Zone)	17.479077	78.550862	Swagath Grand	17.482022	78.553261	Indian Restaurant
3	Dr. AS Rao Nagar	LB Nagar (East Zone)	17.479077	78.550862	Ushodaya Supermarket	17.482001	78.553056	Department Store
4	Dr. AS Rao Nagar	LB Nagar (East Zone)	17.479077	78.550862	Vodafone Store	17.482264	78.552923	Electronics Store

Main Data: <https://www.makaan.com/price-trends/property-rates-for-rent-in-hyderabad>

- housing.com
- magicbricks.com

<https://indikosh.com/city/708723/greater-hyderabad>