BATTLE OF NEIGHBORHOODS

COURSERA CAPSTONE PROJECT

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1. Background

'Battle of Neighborhoods', this project is aimed at solving a problem involving Foursquare location

data and demonstrating Data Science skills.

I choose to explore the country I am born and brought up, ' India' located in southern Asia, is second most populated country in the World. It has mixed cultures from over all Religions. Well known for engineering and manufacturing, education institutions, health care facilities and services, textile businesses as well as an exciting tourism hub, India has over 29 Urban States (excluding the sub-urban neighborhoods)

Idea behind this project is to cluster the Restaurants for each city which could help small business start-ups in terms of assessing local Restaurants and existing Food venues. I explored neighborhoods using

Foursquare API Interface.

2. Business Problem

My Initial exploration of Indian cities using Foursquare's explore endpoint revealed that 177

venues from 51 neighborhoods out of 64 total neighborhoods in the city, while search end point

resulted in 7472 venues covering all 64 neighborhoods.

Note that there are 13 neighborhoods itself did not appear in recommendations and 376 venues

appeared as uncategorized. Second tier cities like Coimbatore may lack availability of data

(categories, user reviews, etc...) for recommendations to new/prospective users (especially

tourists/travellers and Foursquare's own customers).

Out of all attributes of a venue, category is plays crucial role in fetching results. In rest of project

would attempt find a solution to assign categories to uncategorized venues.

Importance of improving missing data of neighborhoods/venues

This could affect variety of people and their needs,

•As stranger/traveller one could be presented with no recommendations near him or show

something far, while some venue is really close by which is unreviewed but of same

category. As Foursquare's customer /business planer, venue details with missing categories, reviews,

recommendation ratings would make it difficult to analyse and make decisions related to

choose of neighborhoods/venues

•Stakeholders/Audience who would benefit from the solution to this problem

• Foursquare / Similar location data providers. Enrich their databases for better competitive advantage and improved customer experience. App developers/owners, who offer services based on location-data (example Food Delivery Cab Services etc...)When an un-reviewed venue is found closer than a recommended venue, enable

3. Data and Approach

- ➢ Data Requirements and Data Sources
- ➢ A list of neighborhood names (Neighbourhoods of Indian cities, n.d.) and Neighborhood
- ➢ location as latitude and longitude (GeoPy, n.d.)
- ➢ Regional Neighborhood Latitude Longitude
- ➢ List of venues from neighborhoods and their categories (Foursquare Endpoints, n.d.)
- ➢ List of all possible categories (Foursuare Categories, n.d.)

References

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