

A Tourist's Guide to Restaurants in Mumbai

PROJECT BY: SAURABH SUMAN

Introduction

- Diverse population in Mumbai, from background to their demography.
- The city is full of aspirant and explorers.
- Food often is a common ground for activities.
- Project Goal - to identify neighbourhoods which offer the greatest number of restaurants, with the most number of cuisine varieties.
- Project Utility - useful for bloggers, tourists, local population, potential entrepreneurs.

Data

- Data for the list of neighbourhoods in Mumbai, Maharashtra - to be retrieved from Wikipedia.
- The coordinates for the city and the neighbourhoods (latitudes and longitudes) - to be extracted with the help of the 'geocode' function in python.
- The data regarding the various 'Restaurants' in the city - **Foursquare** location data will be leveraged to extract this information.

Methodology

- Extraction of neighbourhood data from Wikipedia using inbuilt libraries in Python and BeautifulSoup.
- Identification of coordinates (latitudes and longitudes) for individual neighbourhoods using 'geocoder' package.
- Using 'Foursquare' location data to figure out venue details.
- Filtering and categorizing restaurants.
- Merging and superimposing data sets to create a map representative of neighbourhoods with most number of restaurants which offer different cuisine.

Results

- The clusters can be visualised based on the density of different types of restaurants. The red colour marks clusters with '0' occurrence, purple with '1', blue with '2', green with '3' and orange with '4'.
- The clusters red and purple, which represent an occurrence of 0 and 1 may indicate a lower level of cuisine diversity in the neighbourhood.
- The clusters with the blue, green and orange colors, which indicate the occurrence as 2, 3 and 4 respectively might be representative of a higher cuisine diversity in the neighbourhoods.

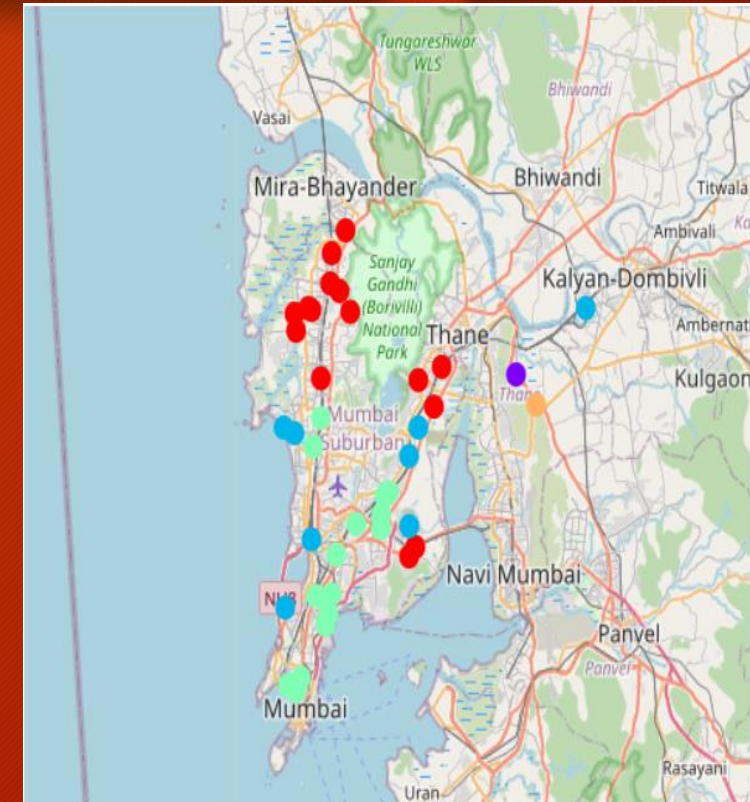


Figure 1: Neighborhood Clusters with Restaurants

Discussion

- Map clearly depicts the neighbourhoods with a higher concentration of restaurants with a wider range of cuisine choices.
- Southern part of Bombay can be seen clearly offering more varieties of food, as compared to the other parts of Mumbai.
- Neighbourhood clusters are also indicative of the high concentration of restaurants in a particular neighbourhood.
- Can help the potential investors identify spots which are not so crowded with restaurants and can help them narrow down an investment area.
- Can help entrepreneurs decide which restaurant and what cuisine would they like to offer in case they want to venture in a neighbourhood with already high number of restaurants.

Conclusion

- The categories which had Restaurant included in them have been included for the assessment.
- The neighbourhoods do indicate the presence of several restaurant categories (in context of cuisine), however, some eateries or cafes, or even restaurants could have remained excluded due to a different description of venue.
- The scope of the study is limited for a project, and has also been subject to factors such as a restricted number of calls due to the personal and free developer profile.
- The project has provided for a great learning exercise, and gives the foundation and basis for bigger project capabilities.

References

- Wikipedia - https://en.wikipedia.org/wiki/Category:Suburbs_of_Mumbai
- Foursquare API

Acknowledgements

- A big thank you to the entire Coursera Team.
- A big thanks to the peer evaluators for investing their time in reviewing the assignments.

Thank you!