

Coursera, Peer Graded Assignment

Capstone Project – Presentation

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INTRODUCTION

- Bangalore, officially Bengaluru, is the capital of the Indian state of Karnataka. It has a population of over ten million, making it a megacity and the third-most populous city and fifth-most populous urban agglomeration in India.
- Forbes considers Bangalore as one of “The Next Decade’s Fastest-Growing Cities”, which means the faster it grows the faster small businesses will grow.
- Bangalore is also known as the Silicon Valley of India because of the large number of information technology companies here and of course we cannot forget the fact that Bangalore is the third largest hub for high-net-worth individuals and is also home to more than 10,000-dollar millionaires and about 60,000 super-rich people!

BUSINESS PROBLEM

- Bangalore's hyperactive economic scenario makes it one of the major economic centers in India, and at the same time it's a heaven for those who want to start their own business. With extensive business opportunities and economic stability, anyone with a valuable business idea can setup a highly profitable business here.
- With huge development in the city, the population is expected to increase in the coming years. Bangalore's 2020 population is now estimated at 12,326,532. The aim of this project is to find suitable places in the city with best dining experiences.

TARGET AUDIENCE

- The target audience of this report is for anyone who wants to open up a new restaurant in Bangalore.

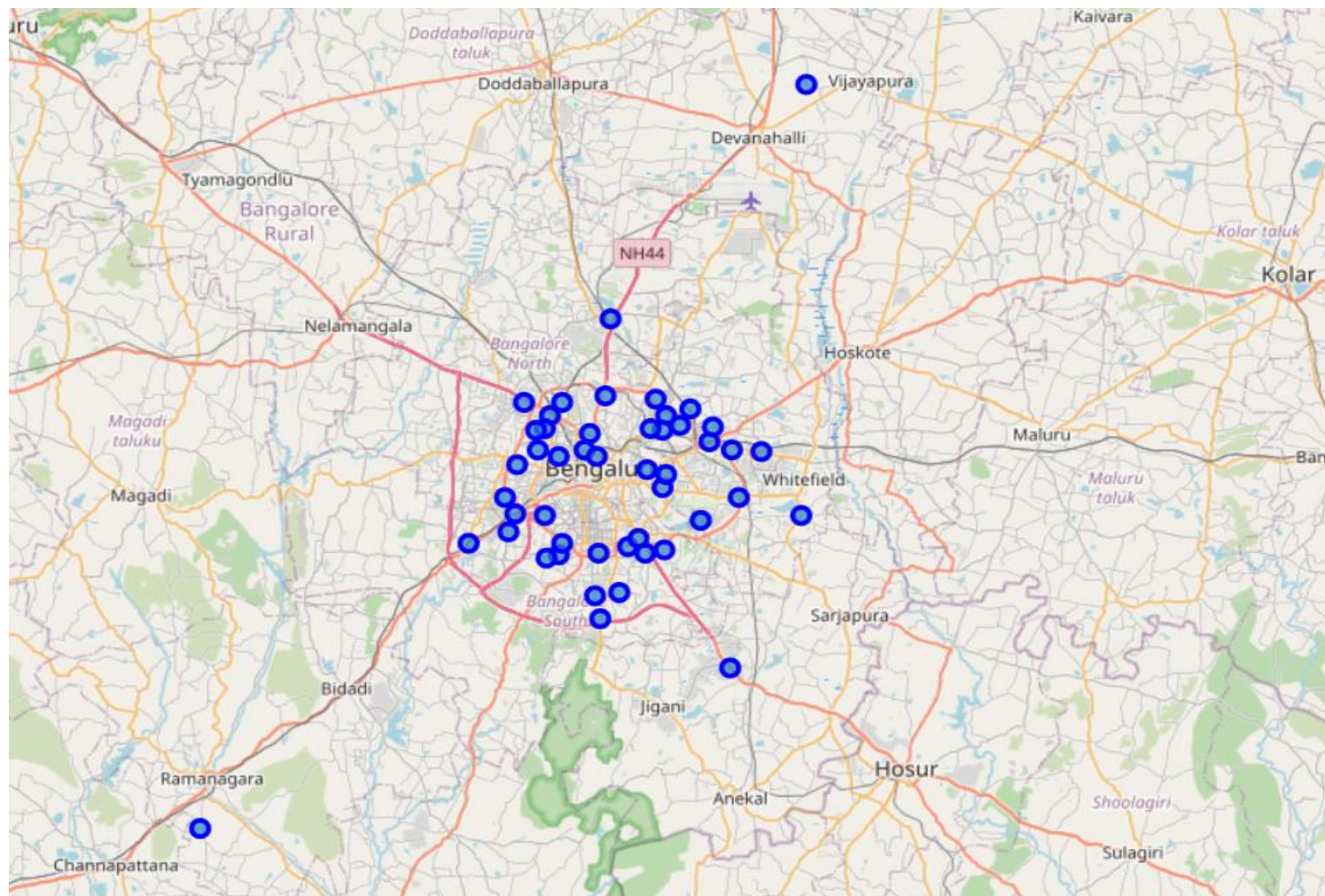
DATA

- The data for this project has been taken from the Wikipedia webpage. Where the list of all neighborhoods in every regions has been listed.
- A link to the webpage is provided here:
"https://en.wikipedia.org/wiki/List_of_neighbourhoods_in_Bangalore".
- Foursquare City Guide, commonly known as Foursquare, is a local search-and-discovery mobile app developed by Foursquare Labs Inc. The app provides personalized recommendations of places to go near a user's current location based on users' previous browsing history and check-in history.

METHODOLOGY

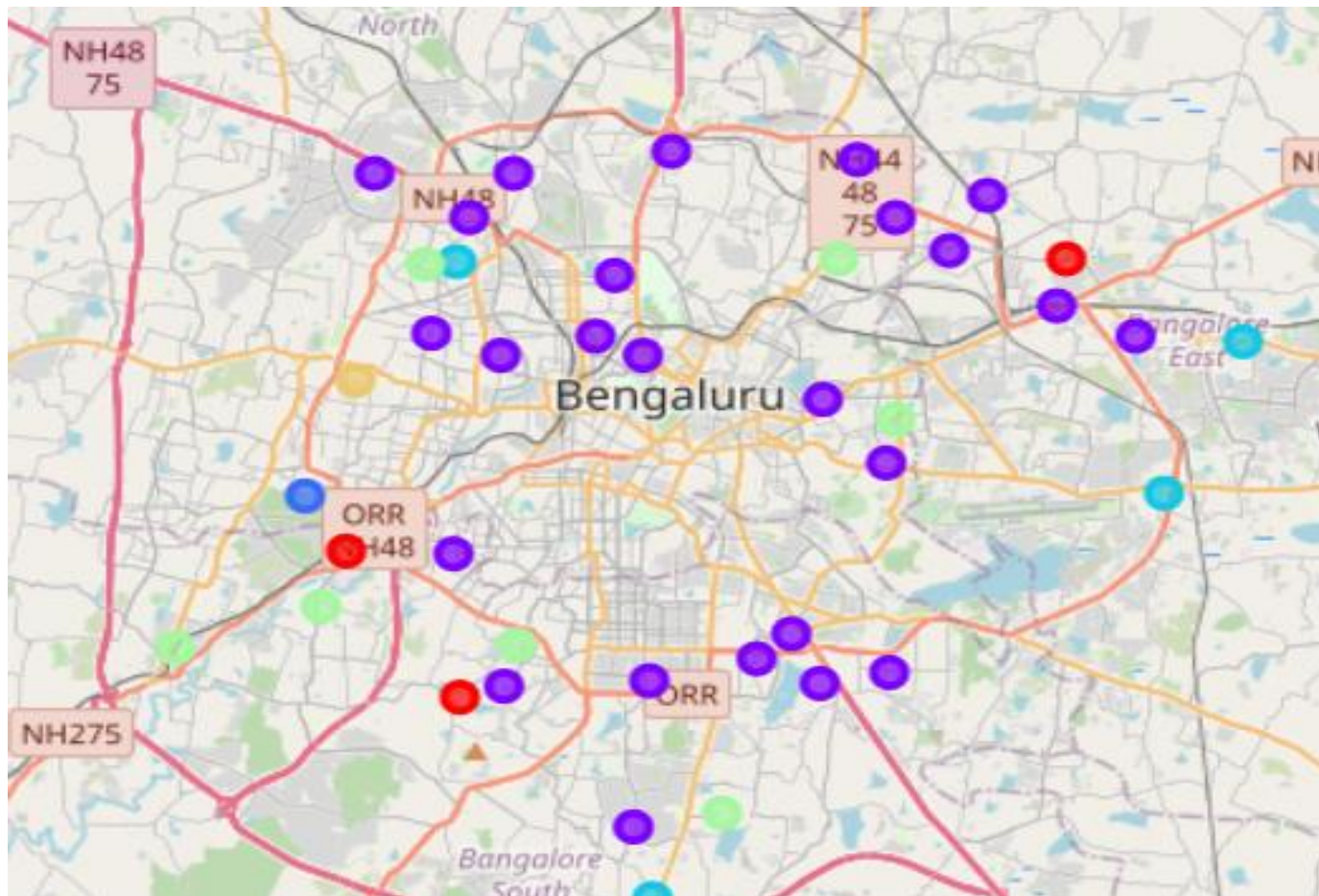
- One hot encoding is a process in which categorical values are converted into a form that can be provided to ML algorithms to do a better job in prediction. For the K-means Cluster Algorithm, all unique items under Venue Category are one-hot encoded.
- Due to high variety in the venues, only the top 10 most common venues are selected and a new data frame is made.
- The Venue data is then trained using K-Means Clustering.

- Folium builds on the data wrangling strengths of Python ecosystem and the mapping strengths of leaflet.js library. All cluster visualisation are done with the help of Folium which in turn generates a Leaflet map made using OpenStreetMap technology.



RESULTS

- The neighborhoods are divided into 8 clusters. The clustered neighborhoods are visualised using different colours so as to make them more distinguishable.



DISCUSSION

- After analysing the above cluster, we find that the fourth cluster fits best to answer our question. The top neighborhood places with Restaurants as the most common venue are Shivaji Nagar, C V Raman Nagar, Hoodi, Marathahalli and R T Nagar.
- These five places have restaurants of different cuisines as their top most common venue. The different cuisines being Indian, Chinese, Vegetarian and Korean. So depending upon the choice of cuisine, the client can easily choose the areas in which he/she would want to open a restaurant.

CONCLUSION

- According to the report "The Rise of Restaurant Industry in India", published by AIMS, (link: "<https://theaims.ac.in/resources/rise-of-the-restaurant-industry-in-india.html>"), the food industry in India is rapidly expanding.
- Greater awareness of global cuisines combined with a larger disposable income is leading many Indian consumers to seek experiential eating or fine dining.

- Fine dining is about elevating the dining experience of consumers through ambience, décor, presentation of the food, quality of service, use of gourmet ingredients, etc. High-end or fine dining is slowly coming of age in India.
- So, the people who are interested in opening a restaurant should not only prioritize the area, but also need to emphasize on the type of cuisine, quality of service, ambience of the restaurant. All these factors builds to providing a great dining experience.