Capstone Project – Coursera
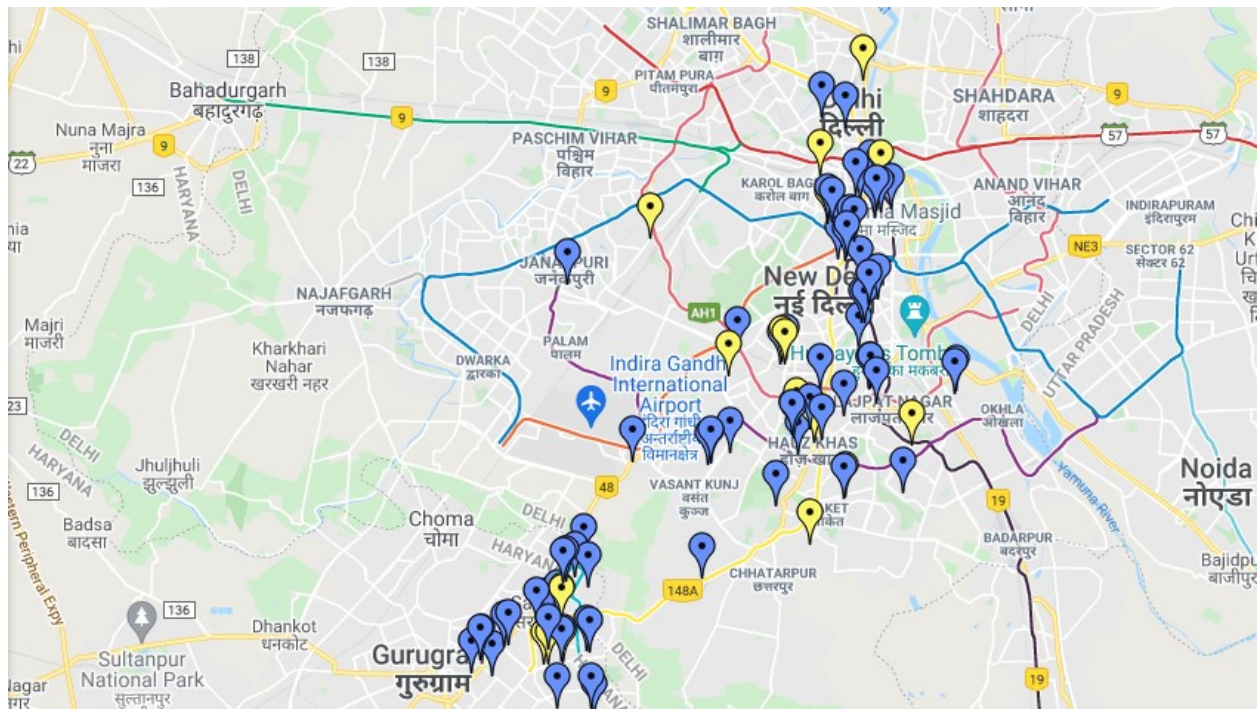
To find out best Italian and other restaurants in New Delhi along with location and locality to stay for Italian food

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Introduction

New Delhi is the capital city of India. It is a part of the city of Delhi's 11 districts. The city itself has a population of 11 million. However, the much larger metro area has a population that exceeds 30 million.

New Delhi are used interchangeably to refer to the National Capital Territory of Delhi (NCT), these are two distinct entities, with New Delhi forming a small part of Delhi. The National Capital Region is a much larger entity comprising the entire NCT along with adjoining districts in neighboring states.

The official language of New Delhi and the one that is most widely spoken is Hindi. However, English is also spoken as a formal language within businesses and government agencies. Over last decades it is continuously grow because of the city's important role in government and commercial business.

Background Discussion

It is one of the major hubs of the world and is extremely diverse with people from various ethnicities residing here. The multi-cultural nature of the city of Delhi has brought along with it numerous cuisines from all over the world. The people of India generally love food and I personally love to try different cuisines and experience different flavors, especially I love Italian food.

With it's diverse culture, comes diverse food items. There are many restaurants in New Delhi City, each belonging to different categories like Chinese , Italian , French etc.

So as part of this project, we will list and visualize all major parts of New Delhi City .

This project can be useful for the people who love different cuisines and who are looking to try in a different restaurant in New Delhi. The main objective of this project is to carefully analyze appropriate data and find recommendations for the stakeholders.

Business Problem

This is actually not a business problem but kind of a data analysis to help people who are looking and trying to taste different foods in New Delhi. New Delhi is famous for its street food and special kind of local food. It also has many famous and multi-cuisines restaurants.

Target Audience for this project

Many people from different cities and countries are coming to Delhi for business and for tour. This data will help them to find best restaurants of their choice and locality to stay nearby of favorite food restaurants.

Data Acquisition

- New Delhi Restaurants data that contains list Locality, Restaurant name, Rating along with their latitude and longitude.
- Data source : Zomato kaggel dataset
- Description: This data set contains the required information. And we will use this data set to explore various locality of new delhi city.
- Nearby places in each locality of new delhi city.
- Geographical Coordinates : Fousquare API
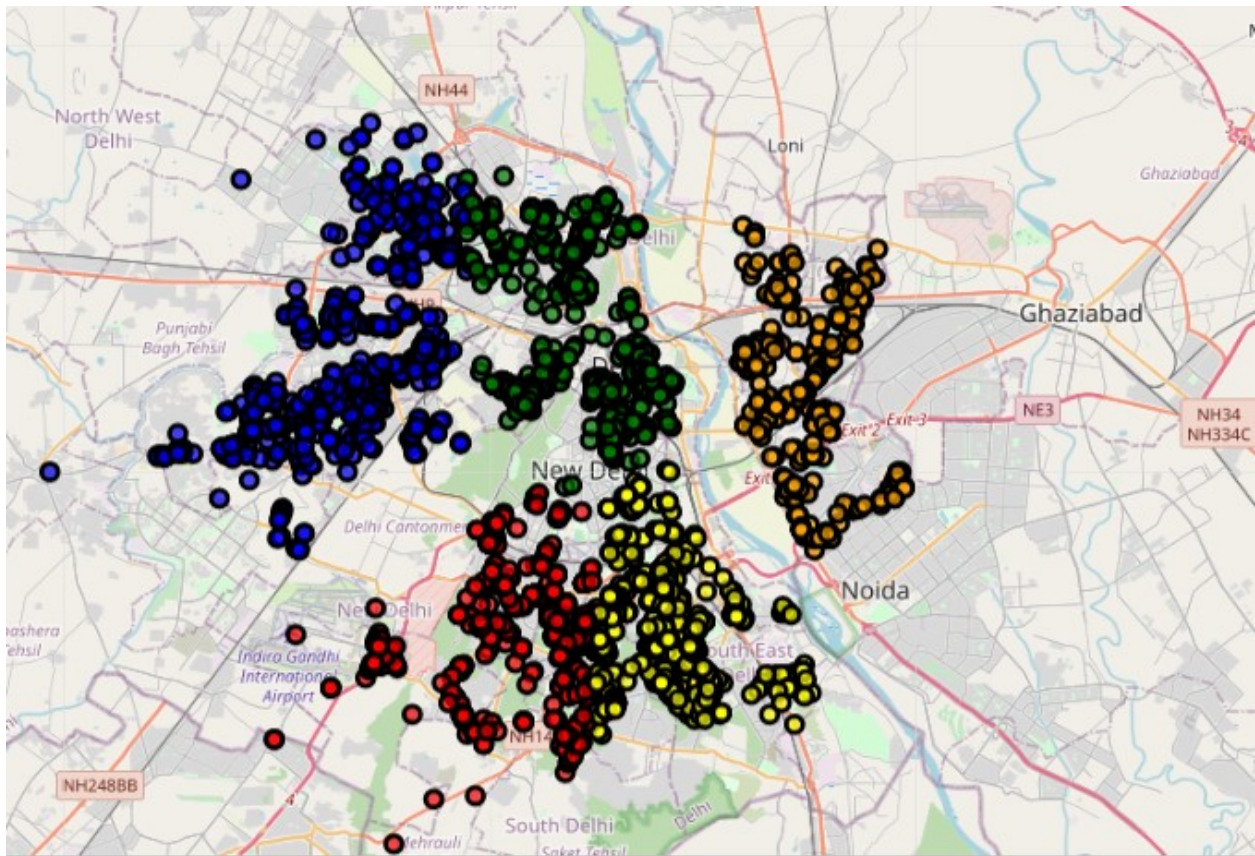- Description : By using this API we will get all the venues in each neighborhood*

Methodology

Data Cleaning

After understood a business problem and collected the data required to start the analysis process using panda's data frames cleaning plays a crucial role, the data being acquired from kaggle dataset it is cleaned.
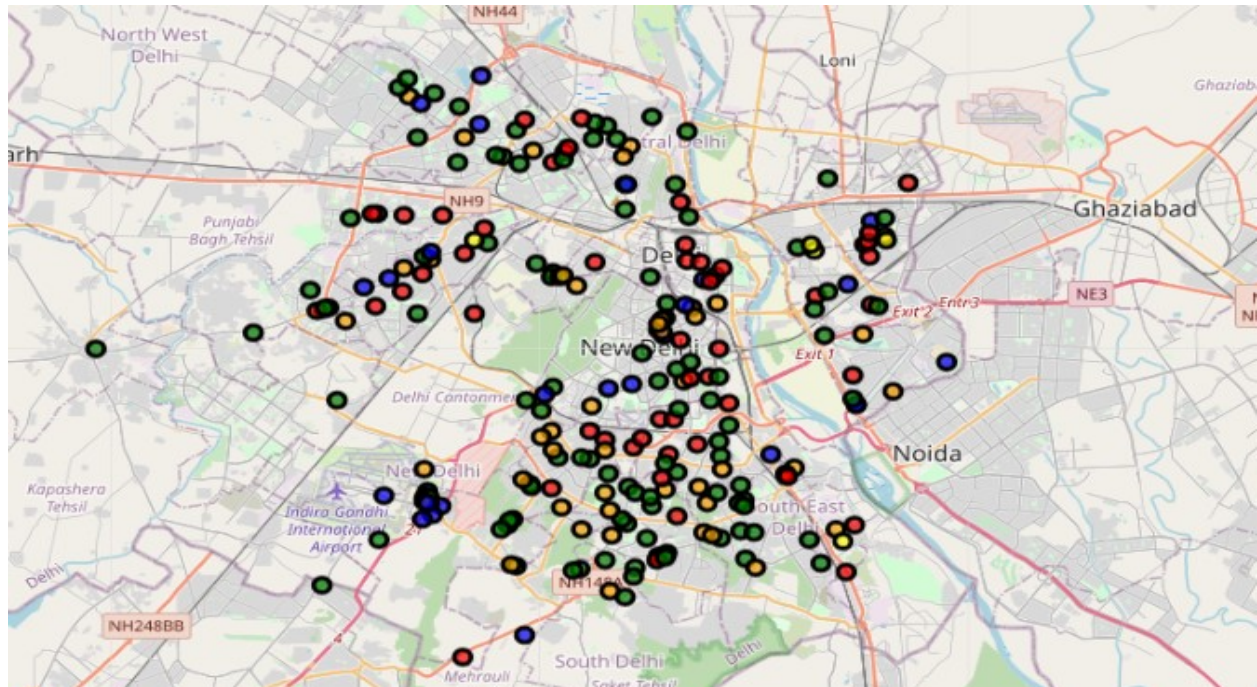
Exploratory Data Analysis:

Using the data we gathered then created a map using Folium and displaying all the restaurants located in different areas of New Delhi.

Next, we used the Foursquare API to get a list of all the locations of restaurants in New Delhi which include cafe shops, Pizza cafes and all other types of Restaurants.

Getting this data was crucial to analysing the number of Italian Restaurants all over the New Delhi.

Then we created a map using the Folium package in Python and all restaurants were colored based on the cluster label.

Discussion and Result

Based on the cluster result below we can see that which cluster is recommended Indian restaurants, night clubs, Hotels, cafe, pizza, and fast food. As per the requirement of different people they can choose to live in the best suitable cluster.

As Delhi is one of the business hub in India, people are coming from different region of India as well as different countries. They can utilize the findings from this excercise and choose the best cluster to live in. This data contains most of the restaurants in Delhi with cuisines, ratings and location this will help all kind of food lovers.

Cluster 1: It is most recommended for Indian Restaurants.

Cluster 2: It is most recommended for Hotels and nightclub.

Cluster 3 and Cluster 5: It is most recommended for Fast food.

Cluster 4: It is most recommended for the cafe and pizza.

Conclusion

In conclusion, to end off this project, we had an opportunity on a business problem, and it was tackled in a way that it was similar to how a genuine data scientist would do. We utilized numerous Python libraries to fetch the information, control the content and break down and visualize those datasets. We have utilized Foursquare API to investigate the settings in locations of restaurants in New Delhi, get a great measure of data from Kaggle. We visualized utilizing different plots present in Matplotlib libraries. Similarly, we utilized Folium to picture it on a map.

- Khan Market and Defense Colony are some of the best neighborhoods for Italian cuisine.
- DLF Place Mall, Saket and Kailash Colony** places have the best Italian restaurants
- Greater kailash, Feroze shah road, Saket have best restaurants in New Delhi.