

The background features abstract, overlapping green geometric shapes, primarily triangles and polygons, in various shades of green, creating a modern and dynamic visual effect.

Capstone Project

Food Business in Chittagong

By Mohtasim Fuad

Introduction:

Chittagong ,known as “Chattrogram” is a major coastal city and financial centre in southeastern Bangladesh. The city has a population of more than 2.5 million ,while the metropolitan area had a population of 4,009,423 in 2011. making it the second largest in the country.

It is the capital of an eponymous district and division. The city is located on the banks of the Karnaphuli river between the Chittagong hill tracts and the Bay of Bengal. Modern Chittagong is Bangladesh's second most significant urban center after Dhaka.

Food business is one of the most popular businesses in this city. Lots of restaurants and food corners are available here. With a population over 4 million and large number of restaurants makes it crucial to make choices where and which type of restaurant should be a successful business.



Problem:

To find the answers of the following questions

- 1.What type of restaurant is most popular in the city among the students?**
- 2.What kind of restaurant can be a potential for business ?**
- 3.Which area has the highest density of educational institutions ?**
- 4.Which is the best place to start a food business**

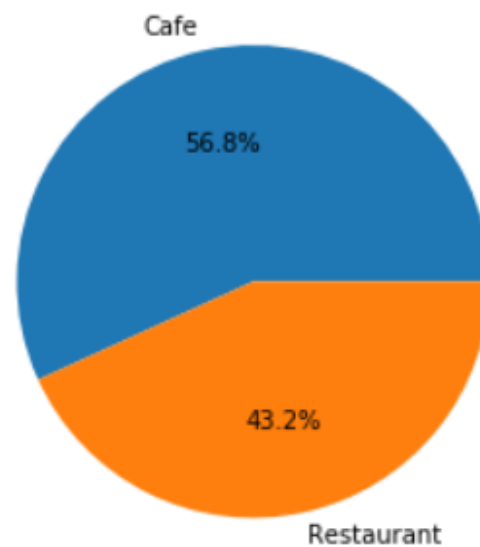
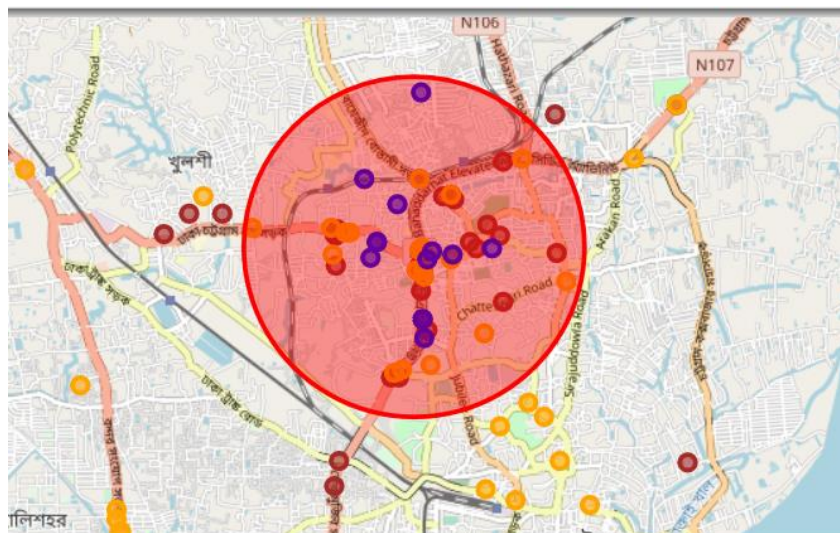
Data Section:

- Places in the city having restaurants with their latitude and longitude
 - Data source: Foursquare API
 - Description : Using this data we will find the places that has restaurants and the density of the restaurants with types, example: cafe, biriyani , chinese etc.
- Places in the city having educational institutions
 - Data source: Foursquare API
 - Description : Using this data we will find the places that have educational institutions which will help to visualize the density of the student population .
Example: schools, colleges and universities and their locations

Methodology:

1. We will get all the locations of educational institution in the city by using foursquare API
2. We will use foursquare API to find the venues of all the restaurants and cafes within Chittagong City
3. We will fix unwanted values from the data and filter it to make it usable and visualize the data
4. Using K means clustering we will find the cluster where the educational institution is mostly dense
5. From the clusters we will locate all the food businesses and their type in the area
6. Finally based on the type of popular food business in our chosen cluster we will answer the questions

Result:



Out[297]:

	Type	Count
0	Cafe	25
1	Restaurant	19

Conclusion

From our analysis the answer of your questions are the following:

- 1.Cafe is most popular among the students in the city
- 2.Because of the lack of good restaurants , different types of restaurant like Chinese , Italian, Indian can be a potential in the city
- 3.Dampara , Zakir Hossain Rd has the most dense area with educational institutions
- 4.O.R Nizam road is the best place to open a food business

Thank You