

# **Increasing the revenues of restaurants by analysing the population in a specific region and their food habits.**

## **Introduction**

To increase the revenues of restaurants by analysing the food habits of the customer with their orders in restaurant and by identifying huge populations new food combinations will be introduced and attract more customers in a specific region.

## **Methodology**

- There are total of 422 restaurants in Croydon, London out of which 52 are Indian cuisines.
- The revenues of these 52 Indian restaurants has to be increased.
- The population of Croydon is 372752 and I will find the average customers visiting this Indian restaurants and I will find out their orders by their visits.
- A new food item with the same taste will be introduced for the customer in the next visit.

## **Data**

I will be using Foursquare to utilise location data and explore London to identify the London boroughs that requires to identify the restaurants in a specific region.

More no of sales increases the revenue of the restaurant.

In order to increase the revenue, food habits of a particular region is analysed and new food items will be introduced in the menu

Customer order details will be taken in the restaurant respectively.

### ***Areas will be identified that:***

- Have large Populations
- Have more restaurants
- Have more children.
- Have more number of Indian population.

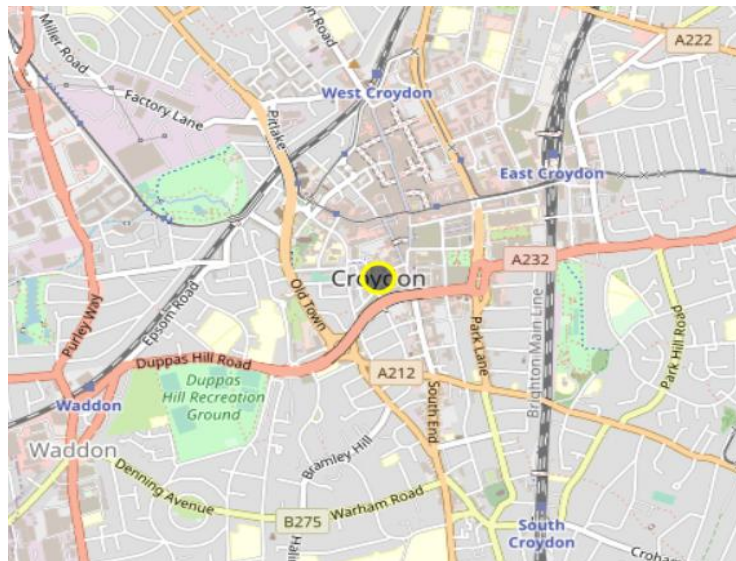
### Areas having more population

	Borough	Area	Population	Latitude	Longitude
0	Barking and Dagenham	13.93	194352	51.554117	0.150504
1	Barnet	33.49	369088	51.653090	-0.200226
2	Bexley	23.38	236687	39.969238	-82.936864
3	Brent	16.70	317264	32.937346	-87.164718
4	Bromley	57.97	317899	51.402805	0.014814
5	Camden	8.40	229719	39.944840	-75.119891
6	Croydon	33.41	372752	51.371305	-0.101957
7	Ealing	21.44	342494	51.512655	-0.305195
8	Enfield	31.74	320524	51.652085	-0.081018
9	Greenwich	18.28	264008	51.482084	-0.004542



Croydon Area	No. of Restaurants	Indian Restaurants
	422	52

Croydon is near Wimbledon and Croydon area there are Indian cuisines and their sales need to be improved so the restaurants sales and orders are analyzed for increase in the sales.





By using K-means clustering the restaurants of the Croydon area will be clustered and segmented and analysed based on the ratings which customer has given to each restaurant.

## Results

The restaurant spots are identified in the folium map by the areas where the population is in huge numbers and thereby revenues can be increased with setup of new restaurants and if there are restaurants already present in that area, new food items are introduced in the menu.

## Conclusions

More Indian recipes will be introduced in the Indian restaurants thereby increasing the sales of restaurants in all the boroughs of London.