

Identifying the best area to open a Coffee Shop near Deshapriya Park, Kolkata

Introduction

The city of Kolkata is famous for its teas as it's in the same state which has the city of Darjeeling which is usually considered as Champagne for teas. However, the city has always loved its cafes and have always been a growing market for coffee and tea alike. This analysis will help potential business investors to aid their decision of where to open a new café business near Deshapriya Park, Kolkata.

Data Collection

We will factor in the following criterions to evaluate the various neighborhoods and determine the optimal one to open the coffee shop

- Total number of existing cafes in the neighborhood (the lesser the better)
- Distance of neighborhood from Deshapriya Park (the closer the better)
- Distance to existing cafes from the target center

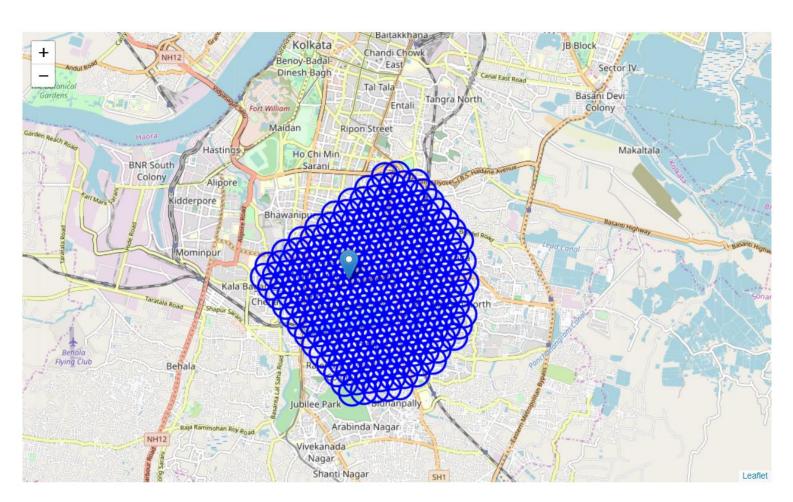
We will use regularly spaced circular grids of locations, centered around Deshapriya Park center, to define our neighborhoods.

The following data sources will be used to generate the required information:

- Google Maps API: To reverse geo code the centers of candidate areas around the target. We will get the centers of the areas via google maps api and will take this data to define circular areas with a radius of 300 meters from the target location. The google maps api will be used to get the latitude and longitudes of the address (i.e. Deshapriya Park, Kolkata) and that dataset will be the central point for the rest of the data analysis.
- Foursquare API: To determine the number of cafes and their location in every neighborhood circling the target area. Once we get the geo location data from the google maps API we can use Foursquare to get detailed locational info about the various existing coffee shops in and around the target area.

We will analyze the above data to zone in on the best spot in and around Deshapriya Park which will have either zero or very few existing cafes and ideally be not too far from our target area, Deshapriya Park.

Map of the selected areas near target



Total number of Cafe spots: 34

Average number of Cafe spots in neighborhood: 0.577

Total number of Cafeteria venues: 1

Average number of Cafeteria venues in neighborhood: 0.012

Total number of Coffee Shop spots: 147

Average number of Coffee Shop spots in neighborhood: 1.692

Average distance to closest Coffee shop spot from each area center: 601.404

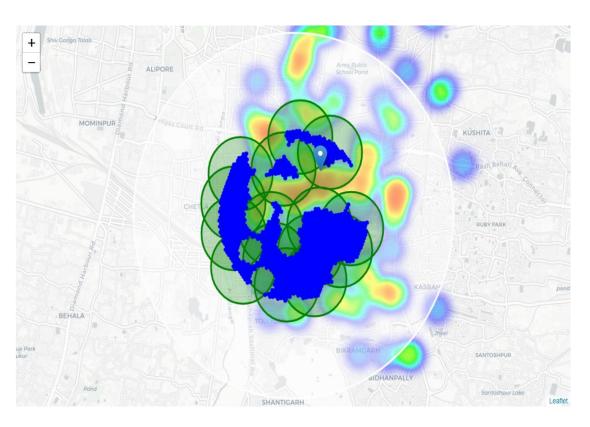
Heat Map showing density of Coffee Shops

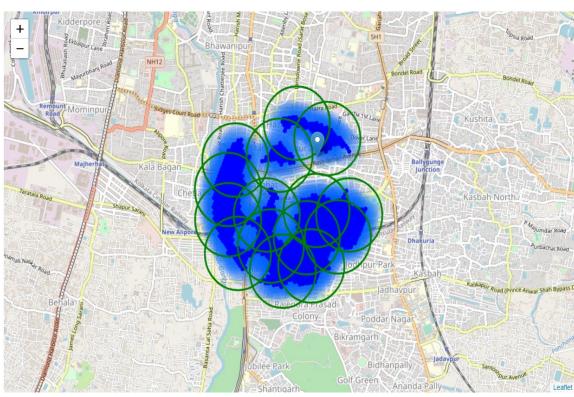


Locations with no more than 2 coffee shops in radius of 250 meters and no coffee shops in radius of 400 meters



Clustering of those locations





Final list of addresses and map locations



Thank you.