

Analysis of Chicago crime data to suggest better housing areas to general population

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Project Introduction/Business Problem:

The main purpose of this project is to analyze Chicago crime data and suggest people better locality and area to look out for housing. Analysis performed includes getting the geocodes of the addresses already present in the dataset using foursquare API. Results from this project helps general population to find better housing area with higher safety and affordable within their requirements.

Data:

Dataset with the name Chicago Crime has got columns like type of crime, description, location description, street address, city, state, year of crime, community area name, police district and many other details. I will be not using all the columns for analysis however, only the required columns are retained and unwanted columns will be dropped. During the analysis, address columns are used to generate geocodes using foursquare API and other columns like type of crime, location will be primely considered to suggest the locality to the residents. This dataset is available online. For convenience, I downloaded the dataset and below is the dataset I imported.

Methodology:

Initially, dataset collected from a website i.e Chicago crime data is analyzed and unnecessary columns are removed. By considering the 'beat' column which represents the amount of crime rate in a given area, latitude and longitudes of areas having lowest BEAT values are considered and further the area is explored by using foursquare API.

Results:

By exploring the coordinates of the areas having least crime rate, requires locations like restaurants were explored and below are the restaurants found.

```
0 Mariscos El Kora Restaurant
1 El Charro Restaurant
2 Carnitas Don Rafa
3 Wing Wah
4 Mariscos La Bahia
5 La Quebrada
6 Las Brisas Del Mar
7 Golden Heart
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Discussion:

Just like the exploration carried out to find restaurants near a better locality area, other locations like cafes, super markets, fast food centers, banks etc could be further explored by using foursquare API.

Conclusion:

Hence, by just having the geo coordinates of the locations needed to explore, we could find many other locations near by a given distance. The excellent feature of selecting the distance range is provided by foursquare API. Using this app, we could find any location of which we need information about. With the help of these analysis and results, we could now suggest a better residential area to the people looking for housing in a locality with least crime rate.