

# Supermarkets in Baltimore Neighborhoods

## Description:

Supermarkets are a necessity and a basic feature a person considers when buying a house. He/She would want a store nearby. In this project, we will display the available options of supermarkets in the given neighborhood, its ratings, address. This is beneficial for real estate markets, as when advertising a house they can mention that a particular house of interest is in vicinity to a supermarket. Further, we will cluster them based on their ratings. The higher the rating, the more popular the store is.

## Data Set Used:

The dataset used to solve the above problem is Neighborhoods dataset from [https://data.imap.maryland.gov/datasets/fc5d183b20a145009eae8f8b171eeb0d\\_0](https://data.imap.maryland.gov/datasets/fc5d183b20a145009eae8f8b171eeb0d_0). This dataset contains the neighborhoods information for Baltimore city and the size of the neighborhood in acres. The data can be downloaded in the form of a CSV file, a shapefile.

A	B	C	D
OBJECTID	Neighborhood	ACRES	LABEL
1	ABELL	46.7104316	Abell
2	ALLEDALE	260.0238638	Allendale
3	ARCADIA	144.6780746	Arcadia
4	ARLINGTON	115.5846892	Arlington
5	ARMISTEAD GARDENS	302.5856532	Armistead Gardens
6	ASHBURTON	225.5552358	Ashburton
7	BALTIMORE HIGHLANDS	96.96706957	Baltimore Highlands
8	PATTERSON PARK NEIGHBORHOOD	108.1126607	Patterson Park Neighborhood
9	BARCLAY	89.95306758	Barclay
10	BARRE CIRCLE	15.32702623	Barre Circle
11	BEECHFIELD	257.8901207	Beechfield
12	BELAIR-PARKSIDE	20.61651843	Belair-Parkside
13	BELLONA-GITTINGS	104.0378137	Bellona-Gittings
14	BEREA	217.6148991	Berea

The CSV file contains neighborhoods name which will be used to extract latitude and longitude information using Geopy package in Python.

The file has 4 attributes : OBJECTID, Neighborhood, ACRES, LABEL.

OBJECTID : GIS id

Neighborhood : various neighborhoods name in Baltimore City

ACRES : size of the entire neighborhood

LABEL : a general name for the neighborhood

Once the shapefile is ready, a search API will be used for Supermarket as the category on Foursquare.com. This will return all the supermarkets in a given neighborhood in Baltimore city. Further, the result returned for supermarkets will be used to cluster them based on their ratings.