

Ideal Chicago Neighborhood Brewery Locations

Data Requirements

To find a solution to the given problem, a detailed data analysis will be required. One that will need all available data in the following areas:

- Location of all Chicago neighborhoods
- Population of neighborhoods
- Average income levels of neighborhoods
- Tourist levels of neighborhoods(represented by hotel venue locations)
- Existing brewery locations by neighborhood

This data will be used to determine clusters of neighborhoods that meet the requirements of the stakeholders. After scraping website to obtain the data, an analysis using k-means clustering will be performed on the data.

Data Collection

1) Geographical coordinates of Chicago neighborhoods from
cityofchicago.org

Example:

Location	PERIMETER	AREA	COMAREA_	COMAREA_ID	AREA_NUMBE	COMMUNITY	AREA_NUM_1	SHAPE_AREA	SHAPE_LEN
- 87.609140876 17894, 41.844692502 65398	0	0	0	0	35	DOUGLAS	35	46,004,621.16	31,027.05

Data Collection (continued)

2) Population of Chicago neighborhoods from chicago.gov

Example:

Num	Community Area	Population 2010	Population 2000	Difference	Percentage
1	Rogers Park	54,991	63,484	-8,493	-13.4%

Data Collection (continued)

3) Income by neighborhood

from <http://www.chicagocomputerclasses.com/average-city-chicago-income/>

Example:

COMMUNITY AREA NAME	AVERAGE
Near North Side	\$88,669.00

Data Collection (continued)

4) Foursquare API

- Brewery venue location data
- Hotel/Tourist venue location data

