

Battle of Neighborhoods – Capstone Project

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1. Introduction

1.1 Background

Buying a home is a big investment. This capstone project targets prospective retirees, who are looking for cities in US, that has excellent weather year round, low crime rate and a great neighborhood. San Diego, California tops the list. This Project will help ease the home search process in San Diego County.

1.2 Problem

There isn't a single repository to obtain the crime rate by zip code, for the San Diego county.

1.3 Interest

Though this project is for retirees to find a good neighborhood, anyone looking to buy a home in the San Diego county will find the analysis useful.

2. Data sources and Description

There can be several criteria when it comes to buying a home. This project is focused on finding neighborhoods in San Diego with relatively low crime rate.

2.1 Data sources

The first and foremost criteria for a prospective home buyer is to make sure the neighborhood has a low crime rate. First dataset is from San Diego Association of Governments (SandAG), to help identify the crimes reported in the San Diego county.

- Crime Data set for San Diego Neighborhood

http://www.sandag.org/programs/public_safety/arjis/CrimeData/crimedata.zip

Knowing the number of crimes in the area will not depict true picture, unless it is related to the number of people who live there. Getting the population of San Diego by zip code will help us achieve that. Number of crimes reported divided by the population times 100,000 will tell how many crimes occur per 100,000 people.

- Population of San Diego by zip code

<https://www.zip-codes.com/city/ca-san-diego.asp>

To validate the correctness of the Crime data set pertaining to San Diego, a listing of all zip codes that fall under San Diego county is needed.

- Zip codes of cities in San Diego county can be obtained from San Diego court portal http://www.sdcourt.ca.gov/portal/page?_pageid=55,1524259&_dad=portal&_schema=PORTAL

For any Home buyer, setting a budget for their home purchase is vital. Knowing the Home sale prices from Zillow, a popular web site for home sales statistics from all cities and joining that with the zip codes in San Diego county will give the home prices specific to San Diego county .

- Home sales from Zillow
https://s3-us-west2.amazonaws.com/econresearch/Reports/Core/RDC_InventoryCoreMetrics_Zip_sfh.csv
- Four square venues API will help in retrieving venues around the neighborhood of San Diego, <https://developer.foursquare.com/docs/api/venues/details>