

Toronto House Hunting

Introduction

A house, or simply a home is a place everyone longs for at the end of hectic working day. Today with the ravages of the COVID-19 still fresh in our minds, the home has been turned into the new office of the twenty first century. Today we work and stay at home. It therefore becomes very important to carefully choose the best place that might work as both as a home and a work place, and for those working outside of their homes, it's also paramount to choose a safe neighborhood with good commuting distance.

Toronto like many developed cities in the world , house hunting is a full time job. Even with agents, at least you will have to go in for viewing. Also many listing websites do not provide enough details for one to make an informed decision. For example which neighborhood is safe. Though provide a map view of the properties, these lack comparisons amongst neighborhoods. As a new young professional

As a young professional with a limited budget, it becomes hard to find a good house that make a good home in a convenient neighborhood without having to arrange hundreds of viewings. This assignment, I will cluster house/apartment give a commute distance, crime rate of the neighborhoods, and the amenities around neighborhoods to filter house and reduce of the number of viewing.

Dataset

The first step will be to write a scraper to collect some basic information:

1. Property address
2. Property price
3. Number of rooms
4. Number of bathrooms
5. Property type

To obtain this data, I will scrap [LINK](#) that list hundreds pf properties across Canada.

Enhancing the Data

1. Use geopy library, I will retrieve the latitude and longitude coordinates using the property address.
2. Using the foursquare API, I will retrieve the amenities around each property
3. I will also use the crimes data to see which neighborhood has the highest crime rates.