

Coursera Capstone

IBM Applied Data Science Capstone

Finding Best Neighbourhoods for a New Home in Toronto, Canada



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Introduction

Problem Statement

In a diverse and huge city like Toronto, it might be intimidating to figure out which neighbourhoods are best in one's quest to buy a new home, considering the exorbitant prices of homes in certain neighbourhoods. Not only that, one needs to look into different factors like population density, low crime rates, access to parks and playgrounds, and restaurants and cafes while looking at the budget in mind. Here the neighbourhood of Forest Hill South is taken as a reference by the customer due to its high scores in various factors like low crime rate, access to restaurants etc. The only downside is that the homes in Forest Hill South are well above the customer's budget which is CAD 800,000. The average price of homes in Forest Hill South in 2017 was CAD 1.329 million (as shown in www.moneysense.ca).

There are well over 120 neighbourhoods in Toronto. So in order to find the neighbourhoods which are similar to Forest Hill South, one needs to segment the neighbourhoods based on their low crime rates, the density of population, close proximity to restaurants, cafes, parks etc. The segmentation will be done using clustering technique. After determining which neighbourhoods are similar to Forest Hill South in terms of the features mentioned above, I will be able to find neighbourhoods according to the customers budget and liking.

Target Audience

When a customer visits a real estate agent or a website dealing with real estate, it would be great to have a good idea about the areas to limit the search to. Otherwise, it will be overwhelming and quite intimidating for the customer to choose from over 120 neighbourhoods. Also, the customer will be interested in neighbourhoods similar to the one they like. The customer would also consider moving to neighbourhoods with low crime rates, population etc even though there are fewer venues like restaurants etc.