

Final Project-The Battle of Neighborhoods - Look for a nice resident in Downtown Toronto

1. Introduction:

As we know a lot of people have been migrating to Canada for better study and career opportunities but since they are not local residents of Canada they are unaware of various locations, places in Canada. Specifically when it comes to looking for a nice and better place to live.

This project is aimed at solving this by providing a better way to explore and find various neighborhoods based on various factors like access to nearby supermarket, grocery stores, malls, average housing price, school ratings. It will provide all results and information via an interactive map and bar charts making it easier for end user.

2. Data Section:

Source Data:

For this project we will be focusing only on Downtown Toronto area which is a popular destination for new immigrants moving to Canada. To fetch data we have referred to following source

https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M

This data contains Postal codes, Borough and Neighborhood

Postalcode	Borough	Neighborhood
M1B	Scarborough	Malvern, Rouge
M1C	Scarborough	Rouge Hill, Port Union, Highland Creek
M1E	Scarborough	Guildwood, Morningside, West Hill
M1G	Scarborough	Woburn
M1H	Scarborough	Cedarbrae

Libraries Used:

- Pandas: Standard library for all required dataframe operations.
- Scikit Learn: to import K-Means clustering.
- Matplotlib: to plot bar charts.
- Folium: To visualize cluster distribution of neighborhoods using interactive leaflet map.
- Beautiful Soup: To fetch and handle http requests operations.
- JSON: For JSON files operations.
- XML: To fetch data from XML and store it in dataframe.
- Geocoder: To fetch location coordinates.