Capstone Project - The Battle of the Neighborhoods (Week 1)

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Introduction: Business Problem

As an immigrant to Canada and I did not visit it before so I have no realistic knowledge about the country that it will be my home country, I want to choose the city that I will live in and the location of my home in that city .

Each of city and location have their considerations.

City must have minimum rate of crime especially hate crime.

Location has to have the necessary venues close to where I live because I am new comer and have no means of transport under my hand around the clock.

Problem :

Finding the best city for newcomer in safety and the number of facilities.

Data and data sources.

1- **Canada main and largest cities** .
We can get it from Wikipedia.
Source :URL:
https://en.wikipedia.org/wiki/List_of_the_100_largest_population_centres_in_Canada'

2- **Crime rate** ,we can get it from Canada government web site under the name of 'Police-reported Crime Severity Index and crime rate, by census metropolitan area, 2019'
Source :URL:' Police-reported Crime Severity Index and crime rate, by census metropolitan area, 2019 (statcan.gc.ca)'

3- **Hate Crime rate** ,we can get it from Canada government web site under the name of 'Police-reported hate crime, number of incidents and rate per 100,000 population, Census Metropolitan Areas'
Source : URL:'https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3510019101'

4- **Canada cities** and their geographical **coordinates**, Population and density we can download the csv file from simplemaps.com website.
Source URL:'https://simplemaps.com/data/canada-cities'

5- Venues in neighbourhood We can use **four square** API.

Methodology to extract and prepare data :

- Pandas with read_html to read and convert included table to dataframe
- Beautiful soup to for web scraping.
- Pandas for cleaning and filling nulls.

Stakeholders: People are willing to come to Canada for immigration.