



Capstone Project

IBM DATA SCIENCE PROFESSIONAL CERTIFICATE

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Coursera - Capstone Project

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Introduction

Background

Canada aims to invite 1 million immigrants over the next three years, the nation would need to welcome approximately 350,000 roughly 1 percent of its current population. Toronto is the provincial capital of Ontario and the most populous city in Canada, with a population of 2,731,571 as of 2016. The city continues to grow and attract immigrants. A study by Ryerson University showed that Toronto was the fastest-growing city in North America.

Business Problem

Immigrating to a new country is a challenging task whether alone or with a family. Hence, choosing where to live is crucial for any immigrant and requires informed decision making. This project will focus to resolve this challenge.

This project aims to aid immigrants to identify the right neighborhood to settle in Toronto, based on their personal preferences. The project will explore different localities of Toronto and identify various venues of interest in each neighborhood.

Data

Following is the data required for this study:

- **Postal codes** in Canada through Wikipedia

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

This is a list of postal codes in Canada where the first letter is M. Postal codes beginning with M are located within the city of Toronto in the province of Ontario. Only the first three characters are listed, corresponding to the Forward Sortation Area.

Postcode ↕	Borough ↕	Neighbourhood ↕
M1A	Not assigned	Not assigned
M2A	Not assigned	Not assigned
M3A	North York	Parkwoods
M4A	North York	Victoria Village
M5A	Downtown Toronto	Harbourfront
M6A	North York	Lawrence Heights
M6A	North York	Lawrence Manor
M7A	Queen's Park	Not assigned
M8A	Not assigned	Not assigned
M9A	Downtown Toronto	Queen's Park
M1B	Scarborough	Rouge

- **Geospatial data** of Toronto Neighborhoods in csv format

Source - http://cocl.us/Geospatial_data

The data incorporates various longitudes and latitudes of Toronto neighborhoods

- **Foursquare** Database for location information such as venues, tips and photos

Source - <http://foursquare.com>