## CAPSTONE FINAL PROJECT

## IBM DATA SCIENCE

ON

## COURSERA

# USING LOCATION DATA TO EXPLORE ENTREPRENEURIAL OPPORTUNITIES IN TORONTO

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#### **INTRODUCTION:**

This project is aimed at someone who wants to open a new business in Toronto and wants ideas regarding the same. In this project I have used location data of Toronto and Foursquare API to generate venues in the city. Further, I have used data analysis to figure out which are the most common venues in the city. The data reveals that cafés and coffee shops are quite popular and spread all over Toronto. This suggests high demand for beverages in Toronto. Consequently, I have considered a hypothetical case if someone wants to open a Tea Shop, how he can use the data related to coffee shops to figure out the best location for him to open the tea shop.

#### **BUSINESS PROBLEM:**

The aim of the project is to suggest ideas to an Entrepreneur who may be interested in exploring new ventures in Toronto. Alternatively, the aim of the project is to leverage location data to figure out trends in Toronto, which can help an Entrepreneur identify some business opportunities.

#### **TARGET AUDIENCE:**

Any Entrepreneur who is seeking some new business ventures in Toronto

#### **DATA:**

The data used in the project includes:

- 1) List of neighborhoods in Toronto (Wikipedia)
- 2) Latitudes and Longitudes corresponding to the neighborhoods
- 3) Venues related to the neighborhoods

### **DATA EXTRACTION:**

- 1) Web scrapping for extracting data from Wikipedia
- 2) Use of Geocoder package to extract the latitudinal and longitudinal data
- 3) Use of Foursquare API to get venues related to the neighborhoods