

Capstone Project

**Problem Description / Data**

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*July 02, 2020*

## Problem Description

Early Learners Inc is a major player providing product and service support to students in primary and high schools in Canada, **especially the non-private schools**. The company is interested in exploring the location and distribution of non-private schools in Toronto, as part of an ongoing product development effort.

Therefore, this study will explore the distribution of non-private schools across Toronto region.

It analyses each neighborhood and identifies the leading location in terms of count and how these helps to group the schools for the purpose of further research works.

## Data

**School Data:** For the purpose of this project, I sourced the school data from Toronto open data web page. It is a geographical file covering the City of Toronto that contains all the point location of schools, including private schools. The data was last refreshed on Feb 4, 2019.

These are the column descriptions

Column
_id
OBJECTID
GEO_ID
NAME
SCHOOL_LEVEL
SCHOOL_TYPE
BOARD_NAME
SOURCE_ADDRESS
SCHOOL_TYPE_DESC
ADDRESS_POINT_ID
ADDRESS_NUMBER
LINEAR_NAME_FULL
ADDRESS_FULL
POSTAL_CODE
MUNICIPALITY
CITY
PLACE_NAME
GENERAL_USE_CODE
CENTRELINE_ID
LO_NUM
LO_NUM_SUF
HI_NUM
HI_NUM_SUF
LINEAR_NAME_ID
X
Y
LATITUDE
LONGITUDE
geometry

**Postal Code:** I got the Toronto Postal Codes from [Wikipedia](#).

Column
PostalCode
Borough
Neighborhood

**Venue Data:** I used the Foursquare location data to execute my idea. Using the Foursquare API, I got the common venues based on the borough and neighborhood.

This usually returns a json object. I will transform and extract the needed columns from the source data.

Column
name
categories
lat
lng
srclatitude
srclongitude
srcpostalcode
srcBorough
srcNeighborhood