1. Business Problem

Thousands of foreign nationals troop into Canada every year in search of University education. This is due largely to Canada's 'flexible' immigration policy, quality education, comparative lower tuition and consistent high ranking for overall quality of life. Prospective students are presented with a deluge of options from which to make a choice - no mean fit by any standard, as Canada has a plethora of reputable Universities across its provinces and territories. It would certainly be helpful if these young and enthusiastic ones were gifted a tool or platform to help, at least, point them in the right direction in their search.

This project offers a lifeline. Canadian Universities are organized into clusters predicated upon pre-selected attributes (or features). Each cluster comprises Universities having a unique combination of attributes - which we call 'cluster description'. Prospective students can then identify the cluster into which to focus their search based on the accompanying cluster description. Thus, the search experience is refined, effective and less time consuming.

2. Data

The dataset used for this project was assembled from scratch. The sources of the components of the final dataset are given below:

- **Canadian University List**: Sourced from the Wikipedia webpage using the BeautifulSoup library.
- **Canadian University Ranking**: Sourced from the Wikipedia webpage using the BeautifulSoup library.
- **Provincial Rent Rates**: Sourced from rentals.ca (https://rentals.ca/national-rent-report#provincial-rental-rates).
- **Geographical Coordinates of Universities**: The Geopy library was engaged. The University names are passed as arguments and the respective coordinates were returned.
- **Location Data (Recreational Index)**: Data for venues within 500m of the each University is obtained as location data with the Foursquare API. The Recreational Index for each University was then derived from the unique venue categories.