Problem Discussion & Background

With the advances in globalization and remote work, it is increasingly frequent that employees, entrepreneurs and self-employed professionals have opportunities to relocate to different cities across the world to work.

However, one does not always have the ability to visit and experience the cities they will live in before they actually move. This can be stressful for families as they move into different cities they do not know and may have a hard time to get adapted to.

This project aims to provide insights on how similar certain cities across the world are, from the point of view of availability of commercial and services venues, according to the local population. This way, **the user will be able to make an informed decision** about the country he or she plans to move to.

For example, a Latin American professional who wants to move to the U.S. can choose to get insights about how similar American cities are to their home city. If, for example, Latino restaurants, parks and shopping malls are very prevalent in their home city, this tool will inform them of cities in America with the most similar profiles.

Target Audience

The target audience for this project is the current and future expat community, composed by professionals who have relocated or want to relocate to different countries. For such professionals, it is always important to learn more about their prospects of personal life in the place they are about to move to.

Obtaining information on the commonly offered commercial, service and leisure options will allow the audience to build an initial perception of the top cities in the country they intend to live in, imagine how their personal life could be compared to their home city, and effectively prioritize their job search.

Data Description

The external data sources used for this project are:

- Foursquare venue review data using Foursquare API (https://developer.foursquare.com)
- Simple Maps World Cities open database database of the world's cities and towns (https://simplemaps.com/data/world-cities)

Below are some examples of features we can extract from each dataset:

Foursquare – Extract venue information for a selected venue; view user scores and reviews; view user comments; get nearest places to a given location

Simple Maps – City or town name, country, isocode, population, capital city status, and geo localization

Methodology

The methodology approach to solve the presented problem is the following:

- 1. Capture user input as to the current city they live in;
- 2. Capture user input as to the current country they want to move to;
- 3. Use Simple Maps database to get coordinates for venue review search;
- 4. Use Foursquare data to obtain the current city profile and for the top 20 cities in the destination country;
- 5. Use an Euclidian distance function to calculate distance between cities;
- 6. Rank the top 5 cities most similar to the input city, and present results to user.