**A Caribbean Restaurant in Montreal**

1. **INTRODUCTION**
   1. **Business Problem**

Montreal is one of the major cities in Canada and Quebec in particular. Its population is the second largest French-speaking population in the world after France, composed largely of immigrants. One of the most immigrant-friendly cities in North America with more than half of the entire Haitian Canadian population residing in Montreal it is one of the best places to start a Caribbean restaurant.

In this project we will go through step by step process to make a decision whether it is a good idea to open a Caribbean restaurant. We analyze the neighborhoods in Montreal to identify the most profitable area since the success of the restaurant depends on the people, environment, ambience and other. Since we already know that Montreal shelter a greater number of Haitian than any other city in Canada, it is a good idea to start the restaurant here, but we just need to make sure whether it is a profitable idea or not. If so, where we can place it, so it yields more profit to the owner.

* 1. **Interest or Target audience**

Who will be more interested in this project? What type of clients or a group of people would be benefitted?

1. Business personnel who wants to invest or open a Caribbean restaurant in Montreal. This analysis will be a comprehensive guide to start or expand restaurants targeting the Caribbean crowd.

2. Freelancer who loves to have their own restaurant as a side business. This analysis will give an idea, how beneficial it is to open a restaurant and what are the pros and cons of this business.

3. Haitian or Caribbean crowd who wants to find neighborhoods with lots of option for Caribbean restaurants.

4. Business Analyst or Data Scientists, who wish to analyze the neighborhoods of Montreal using Exploratory Data Analysis and other statistical & machine learning techniques to obtain all the necessary data, perform some operations on it and, finally be able to tell a story out of it.

1. **DATA ACQUISITION AND CLEANING**
   1. **Data acquisition**

A. We use the "Open Data" on *http://donnees.ville.montreal.qc.ca/dataset/quartiers* for data on the reference boroughs, neighbourhoods and cities of Montreal. For the geospatial coordinates of the neighbourhoods, we use the geolocator(geocoder). This data includes geospatial information (latitude and longitude). Neighbourhoods are reference neighbourhoods in housing.

B. The data on Montreal's immigrant population comes from the 2016 Census through the document entitled in French: "ANNUAIRE STATISTIQUE DE L'AGGLOMERATION DE MONTREAL / MONTREAL AGGLOMERATION STATISTICAL YEARBOOK". The document is available here: *http://ville.montreal.qc.ca/portal/page?\_pageid=6897,68087755&\_dad=portal&\_schema=PORTAL*

C. To get location and other information about various venues in Montreal I’m using Foursquare’s explore API. Using the Foursquare’s explore API (which gives venues recommendations), I’m fetching details about the venues up present in Montreal and collected their names, categories and locations (latitude and longitude).

From Foursquare API (*https://developer.foursquare.com/docs*), I retrieved the following for each venue:

* Name: The name of the venue.
* Category: The category type as defined by the API.
* Latitude: The latitude value of the venue.
* Longitude: The longitude value of the venue.