Coursera Capstone

IBM Applied Data Science Capstone

Opening a Brazilian Restaurant in Rio de Janeiro, Brazil

**Introduction**

As a part of the final IBM Capstone Project, this is my opportunity to work on real life data and understand its properties to make a business decision. The learning outcome for our final project was to define a business problem and to use data science methodologies to understand the data and eventually make a business conclusion.We also had to scrape data from the web and use Foresquare API to extraction location details. In this project, we start with defining a problem, identifying the needed data to answer the problem, analyze data to study its properties and give a conclusion to answer the business question.

**Business Problem**

The objective of this capstone project is to analyse and select the best locations in the city of Rio de Janeiro, Brazil to open a new Brazilian Restaurant. Using data science methodology and machine learning techniques like clustering, this project aims to provide solutions to answer the business question: where would you recommend that they open it?

**Target Audience**

Who will be more interested in this project?

- travellers and residents who want to have an experience to try Brazilian Food.

- Business personnel who are planning to invest in a restaurant

The analysis is going to give a view of demographics before they decide to invest

**Data**

- Name of the 167 Neighboors, from web scrapping

https://pt.wikipedia.org/wiki/Lista_de_bairros_da_cidade_do_Rio_de_Janeiro

- Latitude and longitude coordinates of those neighbourhoods. This is required in order to plot the map and also to get the venue data

- Use Foresquare Data to obtain info about restaurants, We will use this data to perform clustering on the neighbourhoods.