IBM Applied Data Science Capstone Project

Opening Indian Restaurant in Pheonix Arizona

Introduction

Pheonix city, Arizona's demographics show that it is a large and ethnically diverse city. It is fast growing and developing city. Eventhough, Indian food is one of the popular food in phoenix area, there are less number of Indian Restaurants in Pheonix. Therefore, starting an Indian Restaurant in a perfect location in Pheonix will be a profitable business for people looking for an business opportunity. As increase in number of Indians in the city and the neighbouring cities also accounts for the profitability of the Business.

This Final project explores the best location in the Pheonix area to start a Indian Restaurant which can lead to success in the business. As location places an important role in the success or failure of the business, My project will try to find the best location where a person can open an Indian restaurant to obtain profits.

Business Problem

The objective of this project is to analyze the data and find the best location to open an Indian Restaurant in Pheonix using Data Science methodology and instruments such as Data Analysis and Visualization along with machine learning algorithms, this project aims to find answer to the question "Which location in Pheonix will be efficient to start a profitable Indian Restaurant?"

Target Audience

This project is useful for the people who are looking to start in a specific location(The type of business and location of the business can be changed accordingly).

Data

To solve the problem, we will need the following data:

- Neighbourhood list of Pheonix.
- Latitude and longitude coordinates of those neighborhoods.
- Venue data associated with Indian restaurants in the city. This will help us in further analysis of the neighborhoods.

Data Extraction

Data can be gathered from the following ways:

- Neighbourhood data can be obtained from scraping the Wikipedia.
- Geocoder Package helps to get the latitude and longitude data.
- Venue data can be obtained from FourSquare API.