IBM Data Science Capstone – Coursera

Where to open a new pizza place in Melbourne, Australia?

Introduction

Melbourne is one of the largest cities in Australia. It happens to be a sports and culture capital of the country as well. Melbourne is rated as one of the most livable and student friendly cities in the world. This attracts a lot of foreign investors planning to gain residency in the city by investing a large sum of money in it.

Pizza is a universally loved food item. So if a pizza place is opened and the operation is executed well, it can lead to a great amount of profit create a good return for the investor. So if a foreign investor wants to open a pizza place in Melbourne, in which Suburb should he/she open it? This report will attempt to answer this question by using data science methods.

Business problem

The aim of this project is to analyze and recommend the best suburbs/areas in Melbourne, Australia to open up a pizza place. This will be done utilizing data science methodology and machine learning techniques such as clustering. The question this report attempts to answer is: Where would you recommend a new investor to open a new pizza place in the city of Melbourne?

This project will be useful to… (target audience)

This project is useful for any investors who are willing to open a new pizza place in the city of Melbourne.

Data

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

- List of Melbourne suburbs.
- Lat/Longs of the Melbourne suburbs.
- Venue data. To find the concentration of pizza places in different suburbs.

Sources of data and methods to extract them

The Wikipedia page (https://en.wikipedia.org/wiki/List_of_Melbourne_suburbs) contains a list of 539 inner and outer city suburbs of Melbourne. Web scraping will be used to extract the data from the Wikipedia page. This will be done using the Pandas package. Then we will use Python Geocoder to get geographical coordinates (lat/longs) of each suburb. Then we will use Foursquare API to get the venue data for those suburbs.