

IBM'S DATA SCIENCE PROFESSIONAL CERTIFICATE

Final Capstone Project

Business Problem

Central London is one of the world's most popular tourist destinations, attracting visitors from all over the world. It is a vibrant city, packed with entertainment centres and great food. Furthermore, it's one of the most influential business centres in the world. This makes it an attractive location for businesses.

The theoretical problem owner for this project is a well-established multiple restaurant chain owner from the suburbs of London who is looking to replicate his success by opening up a restaurant in Central London.

There are many things to consider for the restaurant owner before proceeding with this business venture e.g. costs, availability, supplies, staff etc. Let's assume the restaurant owner is happy with all the other aspects of this venture and is now left with the final problem which is to find the optimal location to open a restaurant in Central London.

Audience

This business problem is targeted at a group consisting of successful business owners (specifically restaurant owners) who wish to open a restaurant in Central London. Although, it can also be targeted at new business owners as long as there is enough capital available to open up in Central London, due to costs being at the premium side of the scale. The beauty of Data Science is that once a methodology is developed it can be applied to different variables of the same scenario quite easily. Therefore, this could be targeted at any business owner looking to open a restaurant almost anywhere in the world.

Data

The following list of data will be used to conduct this analysis:

1. List of Post Districts in Central London
2. Geo-coordinates of the districts in Central London
3. Popular restaurants by categories in these districts

The list of Post Districts will be obtained from the following Wikipedia page:

https://en.wikipedia.org/wiki/EC_postcode_area. Here, the data required is stored in a table called "List of postcode districts".

The Geo-coordinates will be calculated using the geocoder package within Python.

The popular restaurants will be gathered from Foursquare using API.