

Coursera Capstone Project

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1 Introduction

Restaurants and Cafes are a great place to relax, eat and socialise with friends and family. The restaurant industry in the UK is worth in excess of £38 billion and more than 86,000 restaurants participate in the sector with most Brits spending a weekly average of around £18 on eating out. They not only become a place for meetup but if successful they become a tourist attraction befitting the local neighbourhood. Restaurants are capable to accelerate tourism growth in the local area and provide an enhanced value-added experience for visitors and local people alike.

A venue such as this generates great income for property developers. My client wishes to enter this booming sector in his local borough Harrow invest into a venue.

Harrow is a well ethnically diverse part of London and there is already a tense competition in all types of cuisine. It has a great population of 250,000 with a great infrastructure and multiple successful shopping outlets so there is always a high demand for good quality restaurants.

1.1 Business Problem

My client wishes to invest into a restaurant sector which is proven to be successful, hence risk averse and open where there is less competition from other vendors nearby in the local borough.

My objectives are as follows:

- Identify the best locations in Harrow to establish a new venue.
- Identify which type of cuisine is most popular among locals.

To do this I shall employ use of Visualisation and Exploratory Data Analysis and machine learning techniques such as clustering to identify this and meet my clients objectives.

1.2 Target Audience

This Project is of particular use for property developers, Investors and restaurant owner hopefuls to analyse successful restaurants and identify the locations where investment and projects should be made. This data and report will only be relevant to the borough of Harrow as each Borough have different demographics and hence different preferences for venues.

2 Data

The following page: https://en.wikipedia.org/wiki/List_of_areas_of_London contains detail of every borough and its neighbourhoods in London. To extract this data I shall use the BeautifulSoup4 and request packages to employ web-scraping techniques to achieve this.

We can then get the latitude and longitude coordinates for each of these neighbourhoods by using the geocoder package in python. This is to help plot the data in a map.

For the venue details I will be using the Foursquare API to gather this data. This will provide me with venues in Harrow and their categories such as location and the type of cuisines which I will then be using for my selection.