

IBM Data Science – Capstone Project

Opening a new Vietnamese Restaurant in the UK

Introduction

For my capstone project, I am taking the role of a data scientist that is working for a local entrepreneur that would like to open a restaurant in the UK. I will be most focusing on the Midlands as this is where the entrepreneur is based. The reason for a Vietnamese restaurant is the cuisine is a great mix of flavours, however this is not a common cuisine in the UK and more people should try it!

This project therefore focuses on where the most appropriate place to open a Vietnamese restaurant would be and why. It is likely that there are not many Vietnamese restaurants already so using clusters of similar restaurants should help the entrepreneur make their decision. This location will be key to the success of the entrepreneur's business so this will need to be a robust solution

I will be using the techniques learned in the IBM Data Science course to find the appropriate location to set up the restaurant. This will utilise unsupervised learning and FourSquare API calls

Data

I will be using external data for this course and this is referenced below:

- Download of all UK postcodes from <https://www.doogal.co.uk/PostcodeDistricts.php>. This needs to be cleaned and processed ready for me to use it
- Handily the co-ordinates are given in the above csv file so no need for a geocoder package in Python to find the co-ordinates
- I will require the geocoder package to find the co-ordinates of the midpoints of the maps that I want to create in Folium
- Using the FourSquare API to find venue data local to the Midland where the entrepreneur lives