

# Coursera Capstone

IBM Applied Data Science Project

Opening a new Cult Coffee Shop in London, United Kingdom



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## Introduction

Most of the coffee shops that operate in prime locations within London are homogenized Transatlantic chains providing the same coffee taste, service and experience. To provide a new refreshing cult coffee experience which not only includes great coffee, coffee cocktails and all day brunch options but also a cult experience of enjoying the coffee experience, a new coffee chain is looking to identify locations within London Borough where it can attract young generation of office employees, students and other professionals.

Opening a coffee shop may sound like a simple straight forward process however, in order to compete with the established coffee chains and attract young generation of coffee drinkers with the cult coffee experience serious consideration is required towards identifying the right location that has the right amount of footfall and the right mix of crowd which would be attracted towards this concept i.e. location becomes the key for such cult coffee chain startup.

## Business Problem

The objective of this project is to identify locations within London Boroughs where this new cult coffee shop can open its store. Using Python's powerful Data Science tools and Machine Learning techniques like clustering, this project aims to provide solution to the problem of identifying the right location within the Boroughs of London for a new cult coffee chain startup to setup its store. The aim of this project is to provide multiple viable options for the startup chain to setup its store.

## Data

To come up with a list of viable options, following data will be required:

- List of Boroughs within London with Latitudes and Longitudes. This will define the scope of area for this project.
- Data cleansing will be required to restrict the search closer to the central London area.
- Venue data, particularly data related to existing coffee shops, train stations, educational establishments and shopping areas/centres

## Data Source

Data required for this project will be sourced from following location:

- a) Wikipedia page containing list of London Boroughs and its coordinates - [https://en.wikipedia.org/wiki/List\\_of\\_London\\_boroughs](https://en.wikipedia.org/wiki/List_of_London_boroughs)

- b) Use Foursquare API using developer account to get venue data for the London Boroughs to be analysed. The venue data will include information on coffee shops, train stations, educational establishments and shopping centres/areas.