

Project intro & data

Introduction:

This project aims to provide a guide for new-to-London college students, especially international students, to explore better facilities around their campus. This guide could help them make smart and efficient decisions on deciding neighborhood out of all the districts in London, UK. The first part of the guide is specifically for UCL students as the campus is located in central London. By utilizing this guide, students could find best area to try exotic cuisine, find home food or seek that niche bookshop area full of cute cafes.

Problem which tried to solve:

1. List and visualize Central London district with specific facilities
2. Which is the best neighborhood for you to find your home food when you get homesick?
3. Where would you go for a cultural experience of theatre-going and book-shopping?

Data used in this guide:

Foursquare API is used as the primary data source for this project. As a database of millions of places around the world, this project utilized Foursquare places API to provides location search, sharing and details.

List of London District Name and Post code is scrapped from Wikipedia. Latitude and the longitude coordinates of each district come from Geocoder package in Python.

After data cleaning and wrangling, I performed K-means clustering algorithm to segment neighborhoods for better understanding and solving our business problem.