# The Battle of Neighborhood — Arabic Coffee Shop in London

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**Introduction/Business Problem**

As one of the largest English cities, London has one of the most ethnically diverse population in the world. It is considered to the world’s cultural capital with a diverse range of cultures and people. Even though English is the official Language in London, there are over 300 languages spoken in the city. According to the 2011 census, over 36.7% of the London residents or 2,998,254 people are foreign-born, which is the second largest population of immigrants in the world right behind New York. Some of the largest ethnic groups in the city include Arabs, Chinese, Bangladeshis, Pakistanis, Indians, and Africans.

My friend asked me to help him exploring London city and choose the best location for his business as he is going to open an Arabic Coffee shop in London. He wants to provide authentic Arabic coffee to Arab and non-Arab people, so that the community knows the ancient original Arab culture, and he believes that there is no much competition in this field.

Arabic coffee is a version of the brewed coffee of Coffea arabica beans. Most Arab countries throughout the Middle East have developed distinct methods forbrewing and preparing coffee. Cardamom is an often-added spice, but it can alternatively be served plain.

It was agreed that the location of the business should be close to the main most popular venues and neighborhoods in London, also the presence of Arab and Turkish restaurants would be an advantage.

In this project, we will Scrap London Boroughs, Neighborhoods and Postcode data from Wikipedia, then using geopy library to convert postcodes addresses into their equivalent latitude and longitude values.

After that, we will get the top 10 venues for each Neighborhood using Foursquare API, and using clustering K-Means algorithm to group the neighborhoods into clusters. We will also visualize the neighborhoods in London City and their emerging clusters using Folium library.

Finally, we will choose the best location for the business based on the criteria mentioned above.

# Data

This project will rely on public data from Wikipedia and Foursquare.