Property Price Analysis/Visualization of London

Business Problem

When someone looks to move from one neighborhood to another in a major city, it can be assumed that they will usually look for neighborhoods similar/dissimilar to the one they have stayed in earlier. This can be a factor when deciding which neighborhood to move to. So, after retrieving property prices and relevant neighborhood data, a system can be designed to cluster/classify neighborhoods and help the stakeholders decide on the best fit according to their preferences.

London being the largest/most populated city in the UK, this can be a very valid use case for people looking to move in London, from any other city or London itself.

Data

To build this service, we make use of property prices data from propertydata.co.uk and Foursquare API for the other venue/amenity details. Combining both, we can make a dataset to compare the amenities/prices of individual neighborhoods and then cluster them based on similarity. The neighborhood/area codes are retrieved from Wikipedia.

1. Neighborhood codes/Area Data: https://en.wikipedia.org/wiki/List_of_areas_of_London
    a. Sample:

	Location	London borough	Post town	Postcode district	Dial code	OS grid ref
0	Abbey Wood	Bexley, Greenwich [7]	LONDON	SE2	020	TQ465785
1	Acton	Ealing, Hammersmith and Fulham[8]	LONDON	W3, W4	020	TQ205805
2	Addington	Croydon[8]	CROYDON	CR0	020	TQ375645
3	Addiscombe	Croydon[8]	CROYDON	CR0	020	TQ345665
4	Albany Park	Bexley	BEXLEY, SIDCUP	DA5, DA14	020	TQ478728

2. Property Data for London: https://propertydata.co.uk/cities/london
    a. Sample:

	Area	Avg yield	Avg price	£/sqft	5yr +/-	Explore data
0	BR1	3.7%	£434,470	£461	+24%	Explore data
1	BR2	3.4%	£480,252	£468	+25%	Explore data
2	BR3	3.6%	£442,642	£493	+25%	Explore data
3	BR5	3.2%	£462,260	£427	+24%	Explore data
4	BR6	2.9%	£570,996	£465	+25%	Explore data

3. Neighborhood Information/Venues/Amenities: https://api.foursquare.com