



IBM CAPSTONE PROJECT – The Battle of Neighborhoods: London Real Estate Market

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Business Problem

- ▶ Adopt machine learning tools to assist homebuyers to make wise and effective decisions
- ▶ support to homebuyers clientele to purchase a suitable real estate in London
- ▶ Buying house in this fabulous city needs to be analyzed carefully
- ▶ Guide in reduction of risk and the return on investment to be reasonable.

Business Problem

- ▶ How could we provide support to homebuyers clientele in to purchase a suitable real estate in London in this uncertain economic and financial scenario?

Solution

- ▶ Clustering London neighborhoods in order to recommend venues and the current average price of real estate where homebuyers can make a real estate investment.

Data sources

- ▶ Merging data on London properties and the relative price paid data from the HM Land Registry and data on amenities and essential facilities surrounding such properties from FourSquare API interface.

Mehodology

1. Collect Inspection Data;
2. Explore and Understand Data;
3. Data preparation and preprocessing;
4. Modeling

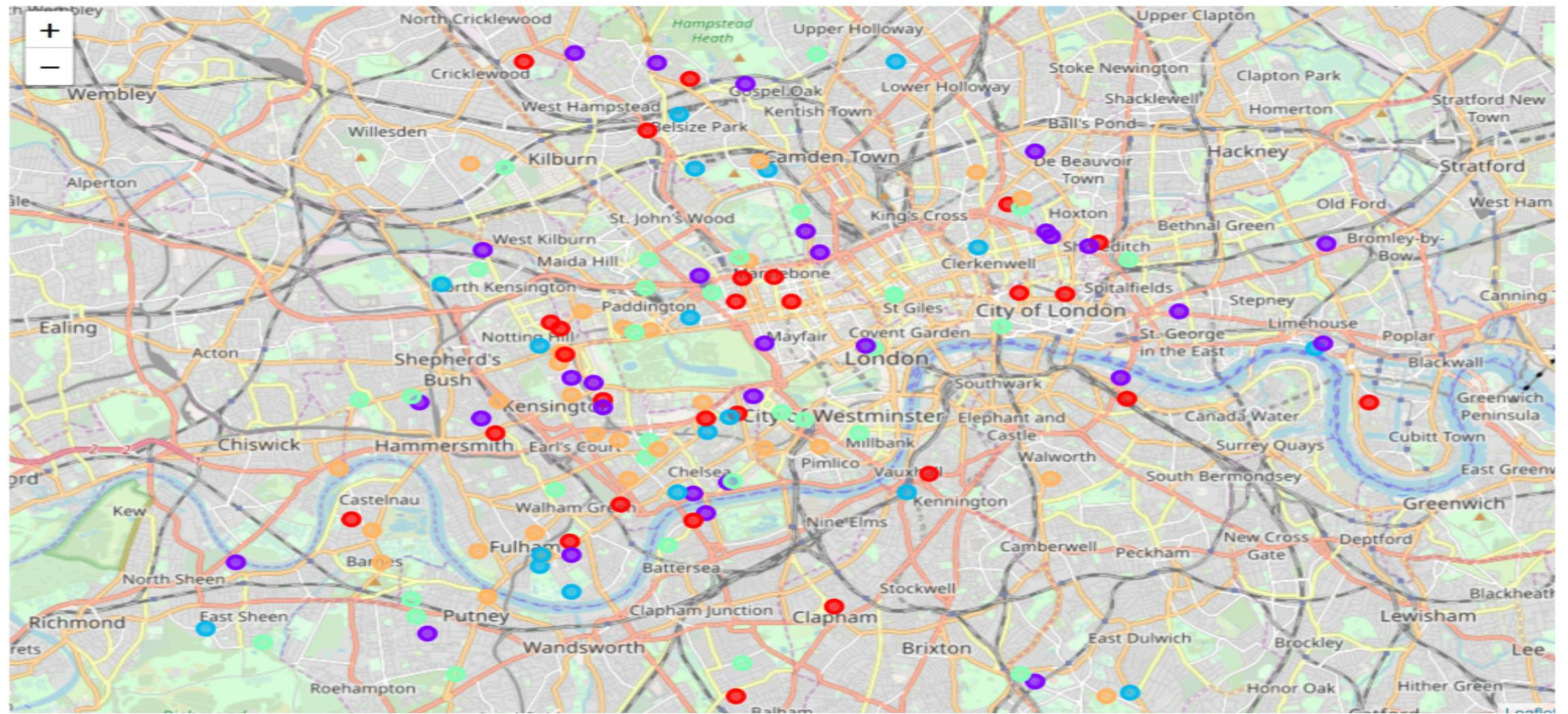
	Street Latitude	Street Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
Street						
AIREDALE AVENUE	3	3	3	3	3	3
ALBION SQUARE	27	27	27	27	27	27
ALBION STREET	11	11	11	11	11	11
ANHALT ROAD	14	14	14	14	14	14
ANSDELL TERRACE	58	58	58	58	58	58
APPLEGARTH ROAD	4	4	4	4	4	4
ASHCHURCH PARK VILLAS	27	27	27	27	27	27
AVENUE ROAD	4	4	4	4	4	4
AYLESTONE AVENUE	4	4	4	4	4	4
BALLINGDON ROAD	14	14	14	14	14	14
BARONSMEAD ROAD	11	11	11	11	11	11
BEAUCLERC ROAD	29	29	29	29	29	29
BELSIZE CRESCENT	12	12	12	12	12	12
BELVEDERE DRIVE	38	38	38	38	38	38
BERESFORD TERRACE	26	26	26	26	26	26
BETTRIDGE ROAD	40	40	40	40	40	40
BICKENHALL STREET	100	100	100	100	100	100
BIRCHLANDS AVENUE	11	11	11	11	11	11
BLYTHS WHARF	16	16	16	16	16	16
BOSTON PLACE	18	18	18	18	18	18
BRACKENBURY GARDENS	16	16	16	16	16	16
BRAMPTON GROVE	4	4	4	4	4	4
BRAMSHOT AVENUE	7	7	7	7	7	7
BRIARDALE GARDENS	7	7	7	7	7	7
BROADLANDS ROAD	2	2	2	2	2	2

Venues Counts per Street

	Street	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue
0	AIREDALE AVENUE	Bakery	Harbor / Marina	Business Service	Zoo Exhibit	Food & Drink Shop	Fast Food Restaurant	Filipino Restaurant	Fish & Chips Shop	Fish Market
1	ALBION SQUARE	Café	Restaurant	Bar	Indian Restaurant	Coffee Shop	Pub	French Restaurant	Department Store	Supermarket
2	ALBION STREET	BBQ Joint	Pizza Place	Coffee Shop	Auto Workshop	Athletics & Sports	Lounge	Smoothie Shop	Amphitheater	American Restaurant
3	ANHALT ROAD	Pub	Grocery Store	Japanese Restaurant	Garden	Gym / Fitness Center	English Restaurant	Diner	Pizza Place	Cocktail Bar
4	ANSDELL TERRACE	Clothing Store	Italian Restaurant	Restaurant	Hotel	Juice Bar	Pub	Chinese Restaurant	English Restaurant	Indian Restaurant

Top Venues

K-Mean Cluster



Outcome:

