

IBM CAPSTONE PROJECT – The Battle of Neighborhoods:

Cluster Analysis of London Real Estate Market

Business Problem

- London Housing Market is in a rut:
 1. Brexit
 2. Hidden price falls
 3. Record-low sales
 4. Homebuilder exodus
 5. Tax hikes addressing overseas buyers of homes in England and Wales.

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 and Methodology

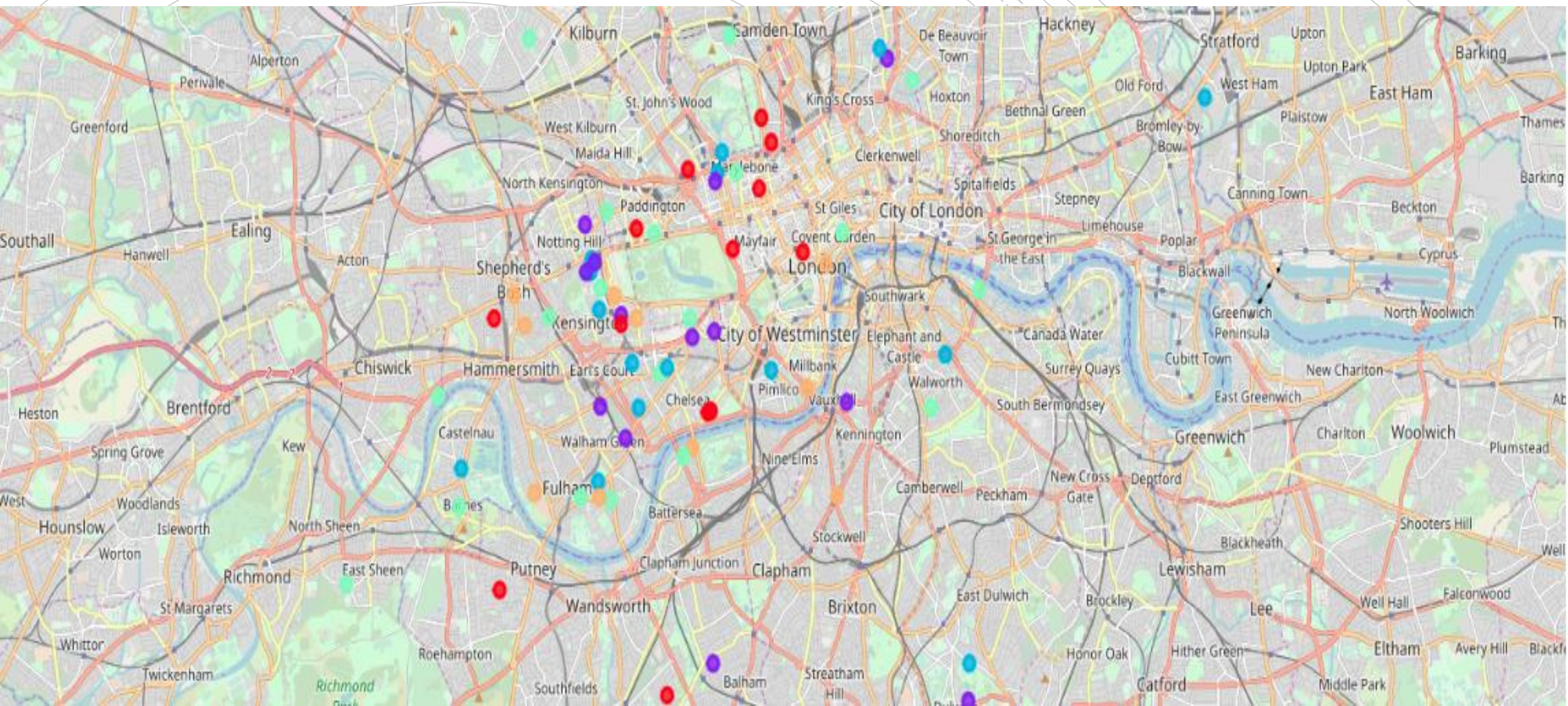
- Data:

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.

- Methodology:

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

K-Means Clustering



Outcome

Examination of real estates according to neighborhoods/London areas

1. West London (Notting Hill, Kensington, Chelsea, Marylebone) and North-West London (Hampsted) might be considered highly profitable venues to purchase a real estate;
2. South-West London (Wandsworth, Balham) and North-West London (Islington) are arising as next future elite venues with a wide range of amenities and facilities.

Examination of real estates by clusters

1. Clusters 0, 2 and 4 may target home buyers prone to live in 'green' areas with parks, waterfronts;
2. Clusters 1 and 3 may target individuals who love pubs, theatres and soccer.