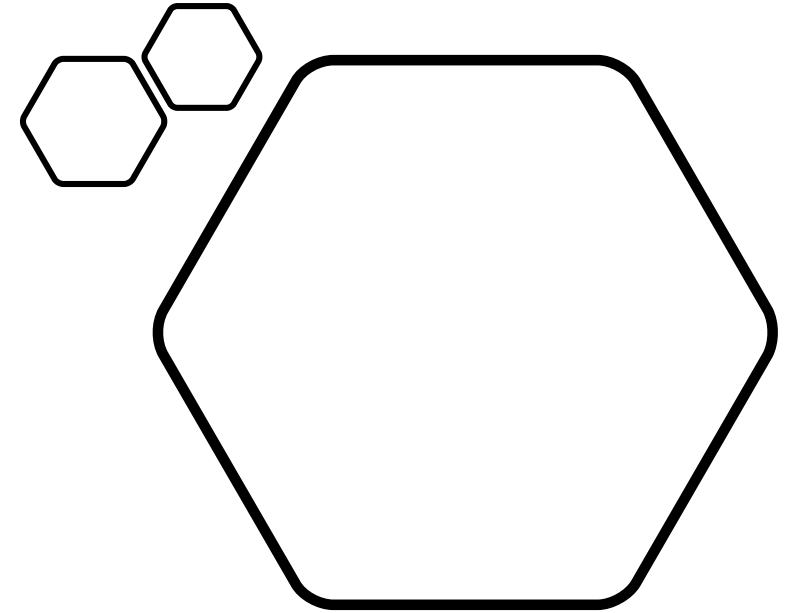


CAPSTONE PROJECT – The Battle of Neighborhoods: Cluster Analysis of London Real Estate Market

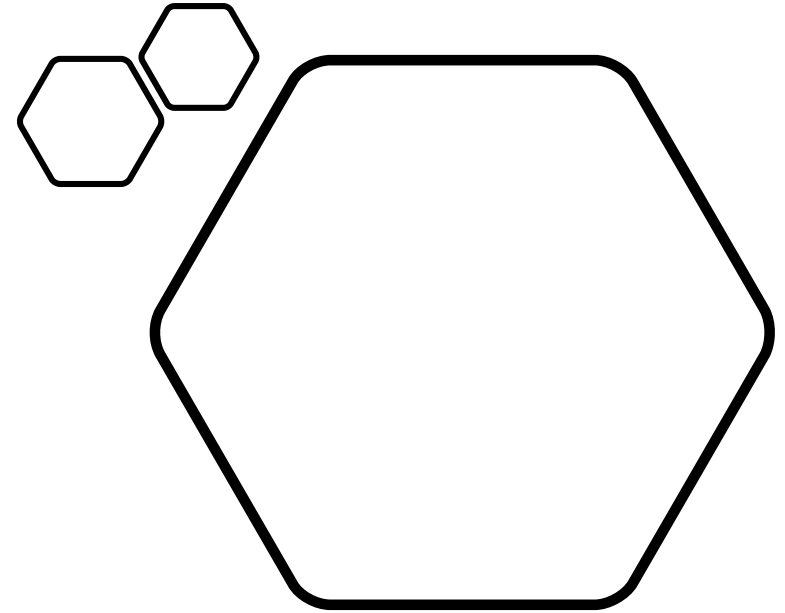
Business Problem section

- 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.



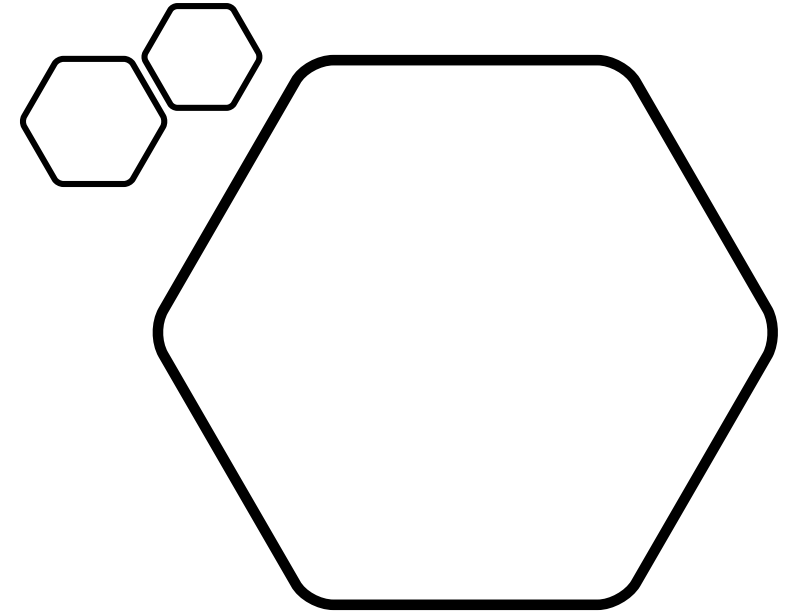
Business Problem

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



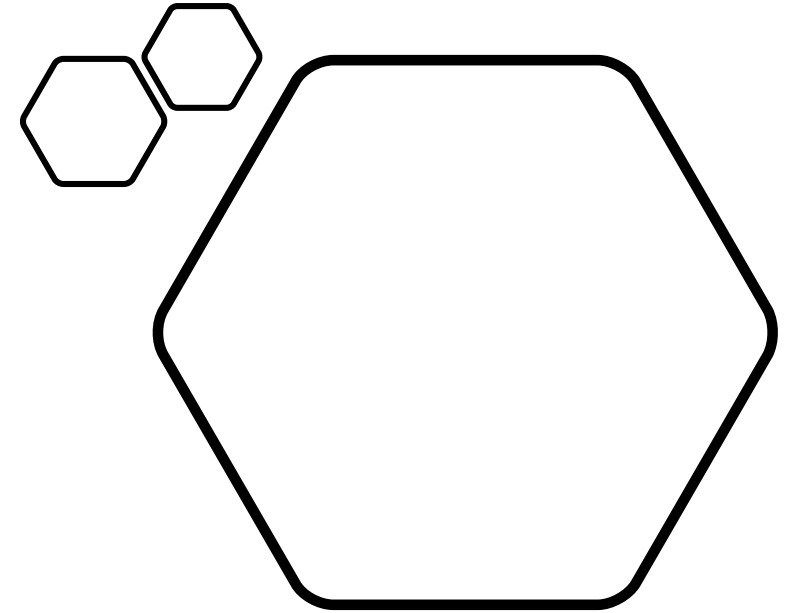
Solution

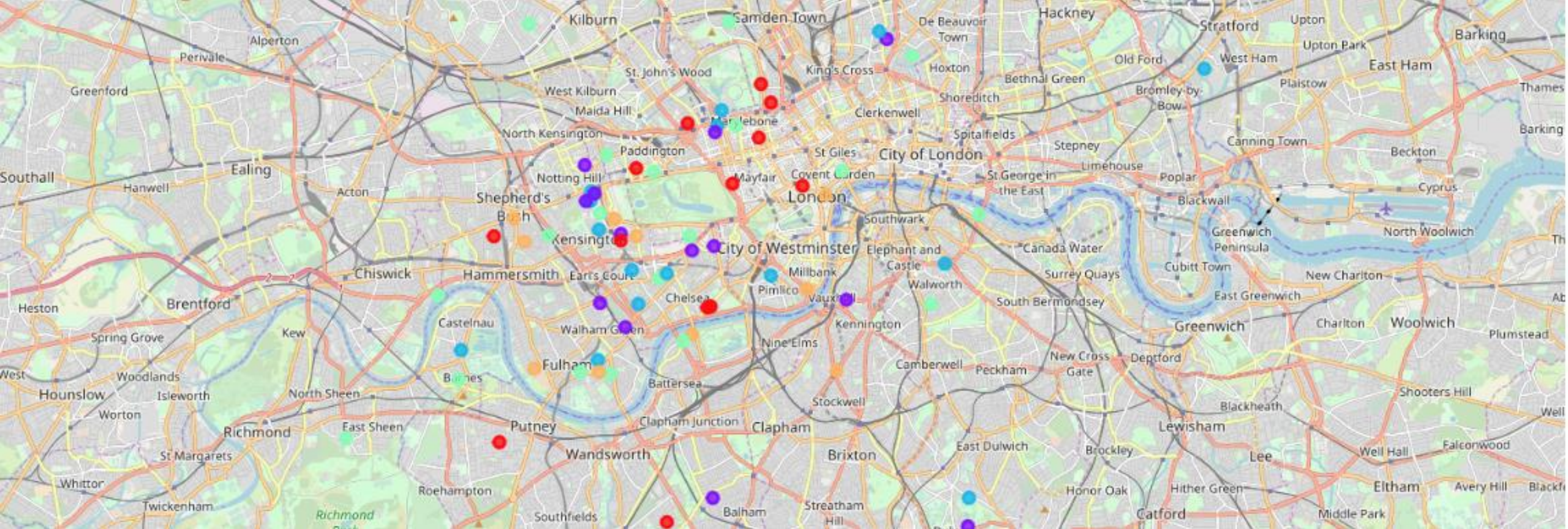
- Clustering London neighborhoods in order to recommend venues and the current average price of real estate where homebuyers can make a real estate investment.



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.

