

# The Battle of Neighborhoods

Project Capstone (IBM)

Analysis of London Real Estate Market

#### BUSINESS PROBLEM



In this scenario, we adopt machine learning tools in order to assist homebuyers clientele in London to make wise and effective decisions. As a result, the business problem we are currently posing is: how could we provide support to homebuyers clientele in to purchase a suitable real estate in London in this uncertain economic and financial scenario?

# BUSINESS PROBLEM SECTION



- Brexit
- Hidden price falls
- Record-low sales
- Homebuilder exodus
- Tax hikes addressing overseas buyers of homes in England and Wales.

# STAKEHOLDER QUESTION



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

# THE 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



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



The Methodology section will describe the main components of our analysis and predication system. The Methodology section comprises four stages:

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

#### OUTCOME



- 1. Examination of real estates according to neighborhoods London areas West London (Noting Hill, Kensington, Chelsea, Marylebone) and North-West London (Hampstead) might be considered highly profitable venues to purchase a real estate; South-west London (Wandsworth, Balham) and North-West London (Adlington) are arising as next future elite venues with a wide range of amenities and facilities.
- 2. Examination of real estates by clusters 0, 2 and 4 may target home buyers prone to live in 'green' areas with parks, waterfronts; Clusters 1 and 3 may target individuals who love pubs, theatres and soccer.