

Problem

Since London UK is one of the most expensive places to live in, the project is established in order to help the property seekers in order to get the proper recommendation based on their budget, using existing open source data officially provided by the UK government, data science can be used in order to provide the recommendations together with the most popular venues related to this recommendation.

The project is generic and can be used for any place with available data for properties purchase transactions.



Data Sources

Data provided by UK government in the form of CSV file with all the transactions for property purchasing with London and Wales, can be used in order to filter the proper districts for each property seekers budget and accordingly they can get all related facilities and point of interest using foursquare API.

Data Set Source: http://landregistry.data.gov.uk/







Project Steps

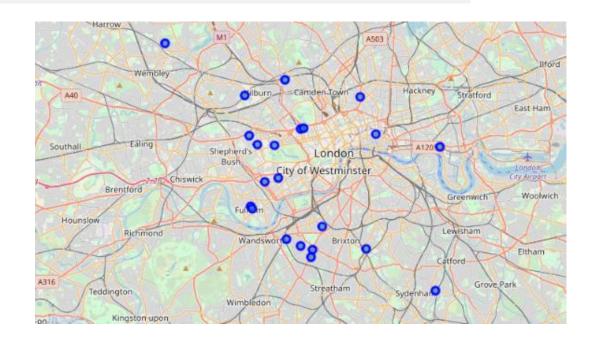
- Locating of data source & analysis of the data structure and missing required data.
- Looping on google API in order to get the missing coordinates of the street names.
- Limiting the results based on the required budget.
- Map representation of the concluded results.
- Calling foursquare API to get related venues and famous locations.
- Listing the outcome.



Results Samples

Based on the pre-assigned budget range of **2.1 GBP to 2.4 GBP** we have the following list of streets where it can be affordable for a person searching for a property within this range Also, a map representation was conducted in order to give a better view of the outcome results

	Street	Avg_Price	latitude	longitude
71	ALMEIDA STREET	2.302000e+06	51.539575	-0.103625
151	BALHAM HIGH ROAD	2.183333e+06	51.447621	-0.148760
152	BALHAM HILL	2.375000e+06	51.452020	-0.147747
156	BALLINGDON ROAD	2.365000e+06	51.454189	-0.158856
265	BICKENHALL STREET	2.300000e+06	51.521197	-0.158934
342	BRAMPTON GROVE	2.400000e+06	51.570365	-0.283394
393	BRONDESBURY PARK	2.400000e+06	51.540439	-0.210419
620	CHILTERN STREET	2.225000e+06	51.521626	-0.156205
631	CHIVALRY ROAD	2.100000e+06	51.458021	-0.171349
	151 152 156 265 342 393 620	71 ALMEIDA STREET 151 BALHAM HIGH ROAD 152 BALHAM HILL 156 BALLINGDON ROAD 265 BICKENHALL STREET 342 BRAMPTON GROVE 393 BRONDESBURY PARK 620 CHILTERN STREET	71 ALMEIDA STREET 2.302000e+06 151 BALHAM HIGH ROAD 2.183333e+06 152 BALHAM HILL 2.375000e+06 156 BALLINGDON ROAD 2.365000e+06 265 BICKENHALL STREET 2.300000e+06 342 BRAMPTON GROVE 2.400000e+06 393 BRONDESBURY PARK 2.400000e+06 620 CHILTERN STREET 2.225000e+06	71 ALMEIDA STREET 2.302000e+06 51.539575 151 BALHAM HIGH ROAD 2.183333e+06 51.447621 152 BALHAM HILL 2.375000e+06 51.452020 156 BALLINGDON ROAD 2.365000e+06 51.454189 265 BICKENHALL STREET 2.300000e+06 51.521197 342 BRAMPTON GROVE 2.400000e+06 51.570365 393 BRONDESBURY PARK 2.400000e+06 51.540439 620 CHILTERN STREET 2.225000e+06 51.521626



Conclusion

As a conclusion the project can be used as a generic model for any other City, where the inputs are the data sets for transactions of properties purchasing in addition to the budget assigned for the new purchase, outcome will be set of affordable areas together with the set of venues available within these areas.

