
POTENTIAL STUDENT ACCOMMODATION LOCATIONS IN LONDON

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Business application

Many factors affect the viability of opening new student accommodation businesses in London, including:

- property prices
- university density in a given area
- student density
- existing accommodation businesses

Using publicly available data, I will aim to predict with confidence the best areas within London that a prospective accommodation company should consider.

Data

Wikipedia.com

- This website offers a premade table of universities within London. I also used this website to retrieve the student enrolment numbers for all the universities within the UK. (2016/17)

Data.London.gov.uk

- This was the other significant source of data for this project, giving me median property prices for each London borough (2017)

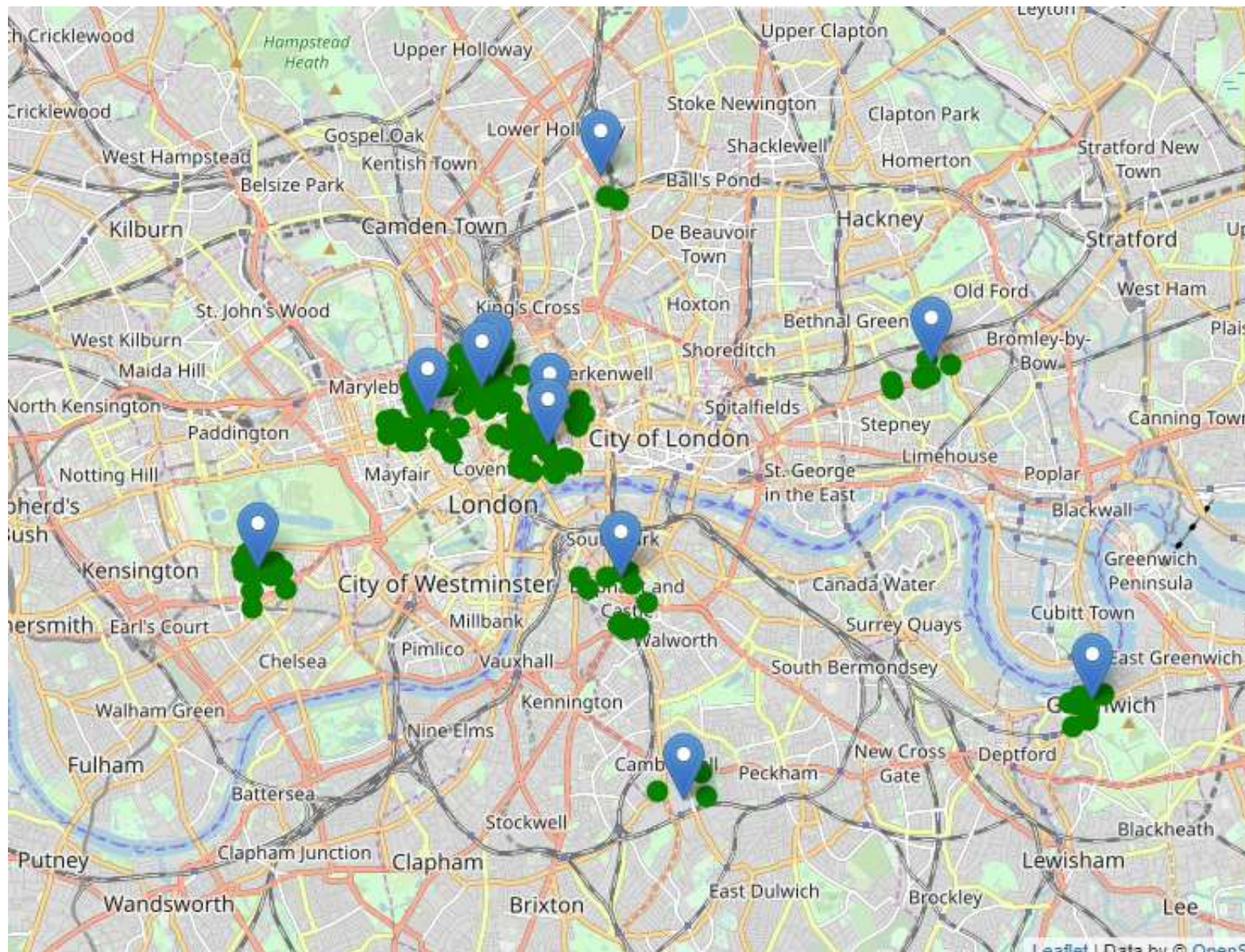
APIs

- I accessed API data within python to retrieve location data. Such APIs were: Geopy, Foursquare, Postcodes.io

Cleaning

- Over 13,000 rows and 18 features were in the raw datasets combined, reduced to 15 rows and 7 features after cleaning

	University	Latitude	Longitude	Distance	Students	Borough	Value
0	Brunel University London	51.532553	-0.473994	24.831126	13130	Hillingdon	415000
1	University of West London	51.489519	-0.313640	13.766399	10390	Hounslow	395000
2	University of East London	51.507273	0.064405	12.673621	13215	Newham	390500
3	Kingston University	51.437255	-0.251575	12.299441	19470	Wandsworth	654000
4	Middlesex University	51.590297	-0.229632	11.829639	19505	Barnet	533500
5	University of Greenwich	51.482542	-0.006653	8.314634	19915	Greenwich	420000
6	King's College London	51.469844	-0.089279	4.881667	30565	Southwark	530000
7	London Metropolitan University	51.548156	-0.106189	4.339511	12145	Islington	615000
8	Imperial College London	51.498871	-0.175608	4.176682	17690	Westminster	1025000
9	University of Westminster	51.518252	-0.141074	1.848184	19650	Westminster	1025000
10	London South Bank University	51.497788	-0.101859	1.753800	17985	Southwark	530000
11	University College London	51.523161	-0.128204	1.637336	37905	Camden	760000
12	City, University of London	51.521767	-0.130191	1.568050	19405	Camden	760000
13	University of the Arts London	51.517642	-0.116389	0.873328	18290	Camden	760000
14	London School of Economics	51.514429	-0.116588	0.518405	11210	Westminster	1025000



Plotting universities
and existing
accommodation
within 1km

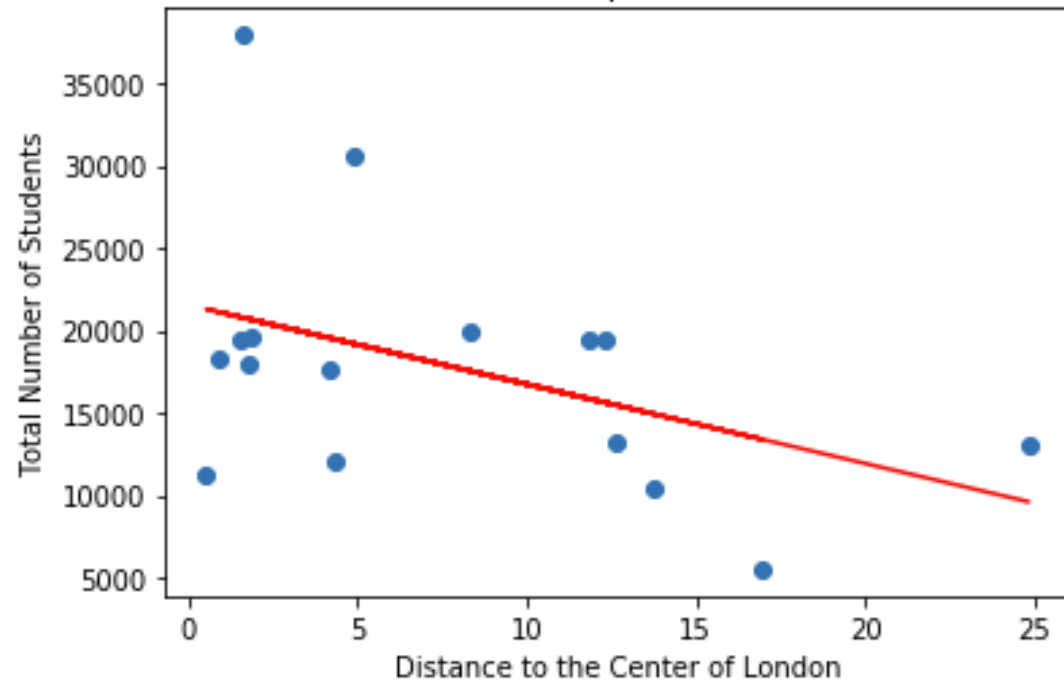
High density in the
center, dropping of to
very low density
around the outskirts.



K-means clustering
with a k value of 10

Five universities
within the center of
the city share the
majority of
accommodation
buildings.

Distance of Universities to London Compared to Their Total Number of Students

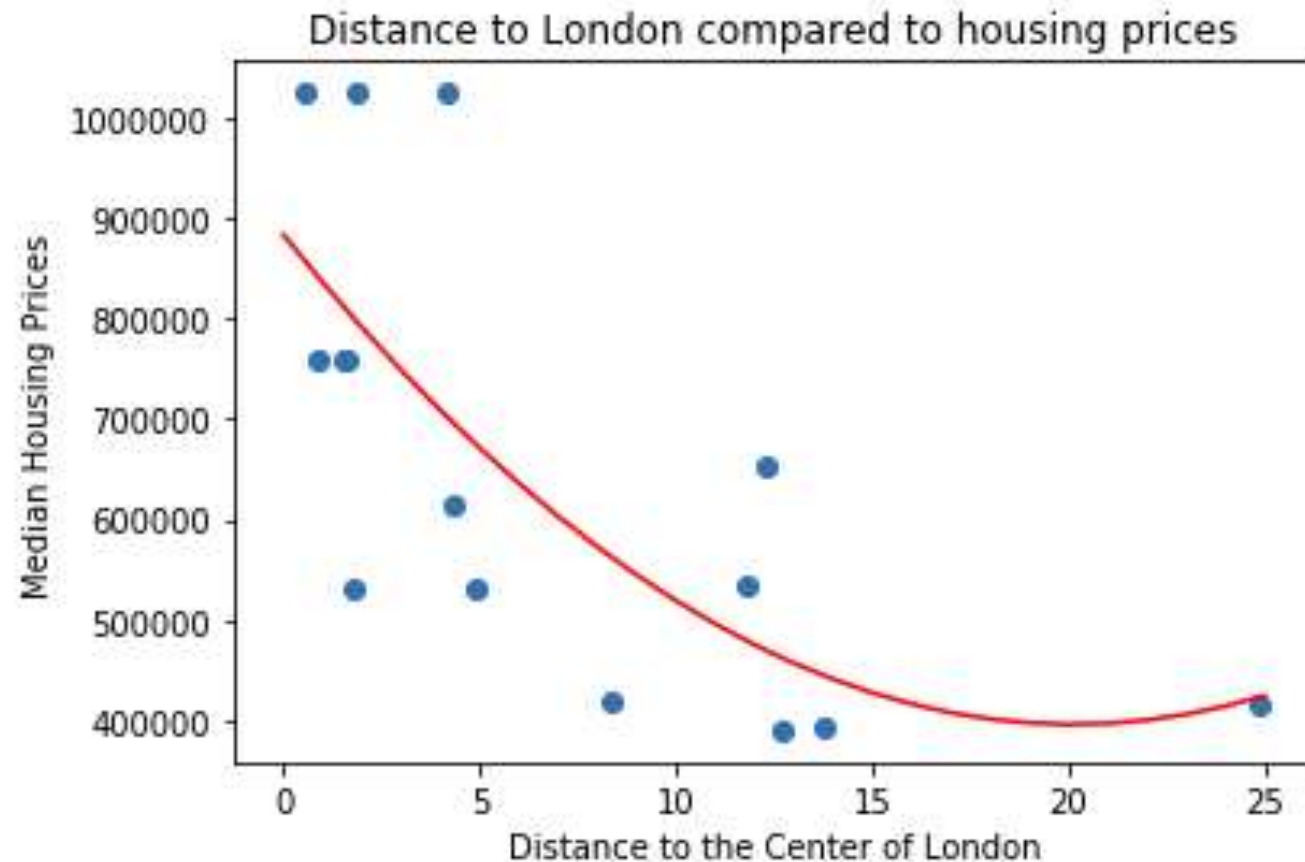


Correlation Strength:

```
[[ 1.         -0.4376484]
 [-0.4376484  1.         ]]
```

Plotting distance and student enrolment

There is a weak negative correlation seen here.



Plotting distance and median property prices

As seen, there is a clear quadratic negative trend between distance and prices.

Conclusion

- It is clear from the data that there are more business prospects for setting up student accommodation in the centre of the city.
- I would recommend more research into the characteristics and placement of universities and existing accommodation in the very centre of the city, where the student density is highest.
- For example, plot the median weekly accommodation prices against proximity to universities.