



IBM Capstone Project for Applied Data Science

Guidance for renting an apartment in Boston



Data source

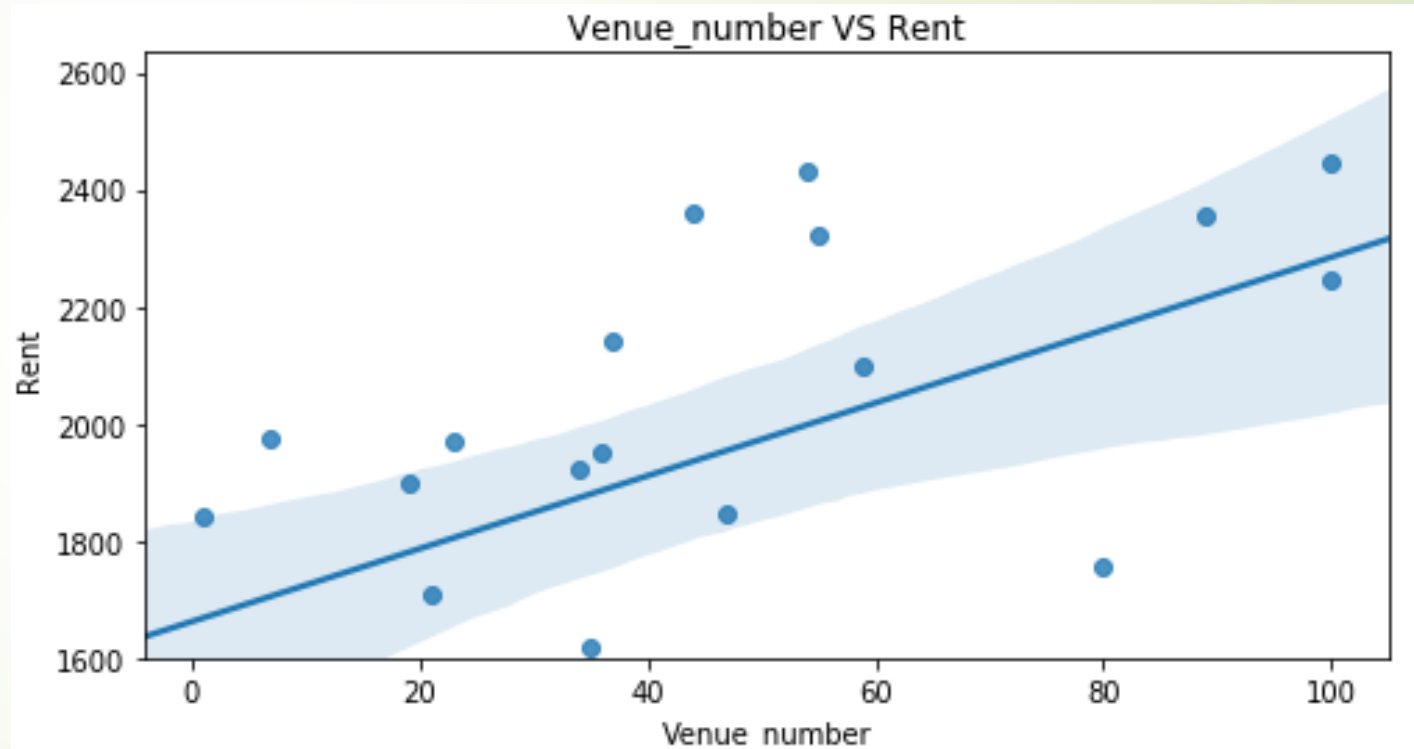
- List of Neighborhood from <https://data.boston.gov/dataset/boston-neighborhoods/resource/c46fae56-956b-44c1-9454-c16cc2ddf270>
- Average rent price from <https://bostonpads.com/average-rent-prices-boston-by-town/>
- Geo-data from Python Geocoder Package
- Venue data from Foursquare API

The data
frame used for
Linear
Regression
Model.

	Neighborhood	Rent	latitude	longitude	Venue_number
0	Allston	1756	42.355434	-71.132127	80
1	Back Bay	2444	42.350707	-71.079730	100
2	Beacon Hill	2433	42.358708	-71.067829	54
3	Brighton	1847	42.350097	-71.156442	47
4	Brookline	2100	42.331764	-71.121163	59
5	Cambridge	2143	42.375100	-71.105616	37
6	Charlestown	1921	42.377875	-71.061996	34
7	Dorchester	1356	42.297320	-71.074495	12
8	East Boston	1618	42.375097	-71.039217	35
9	Fenway	2324	42.345365	-71.104282	55
10	Jamaica Plain	1708	42.309820	-71.120330	21
11	Malden	1543	42.425096	-71.066163	43
12	Medford	1546	42.418430	-71.106164	34
13	Mission Hill	1899	42.332560	-71.103608	19
14	Newton	1840	42.337041	-71.209221	1
15	North End	2247	42.365097	-71.054495	100
16	Quincy	1299	42.252877	-71.002270	45
17	Roxbury	1975	42.324843	-71.095016	7
18	Somerville	1972	42.387597	-71.099497	23
19	South Boston	1952	42.333431	-71.049495	36
20	South End	2362	42.341310	-71.077230	44
21	Symphony	2356	42.342690	-71.084861	89

The relationship between the number of venues and rent was explored by linear regression model.

1. The average price of rent does show somewhat linear relationship with the number of venues
2. The relation is weak (R square score is 0.26)



Neighborhood clustering based on most common venues

Most venues are in the cluster 2.



Indicating a high chance to find a similar neighborhood for those who want to change their current neighborhood but without sacrifice of the convenience of living.

