

Blackrock Real Estate Investment

Cassidy Exum, Data Science Flex

King County

- How can Blackrock make educated purchasing decisions?
- How can Blackrock increase the value of the houses they purchase?
- Find two important variables in house price and make determinations about how we can increase the price of a house

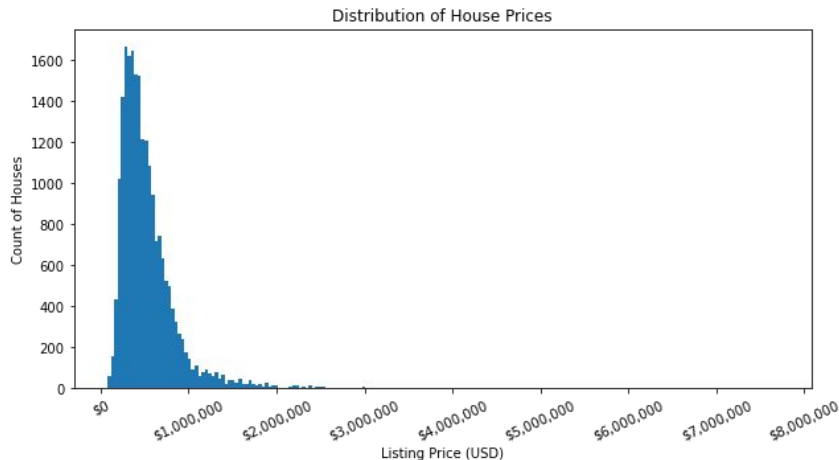


Figure 1:
Distribution of House Prices

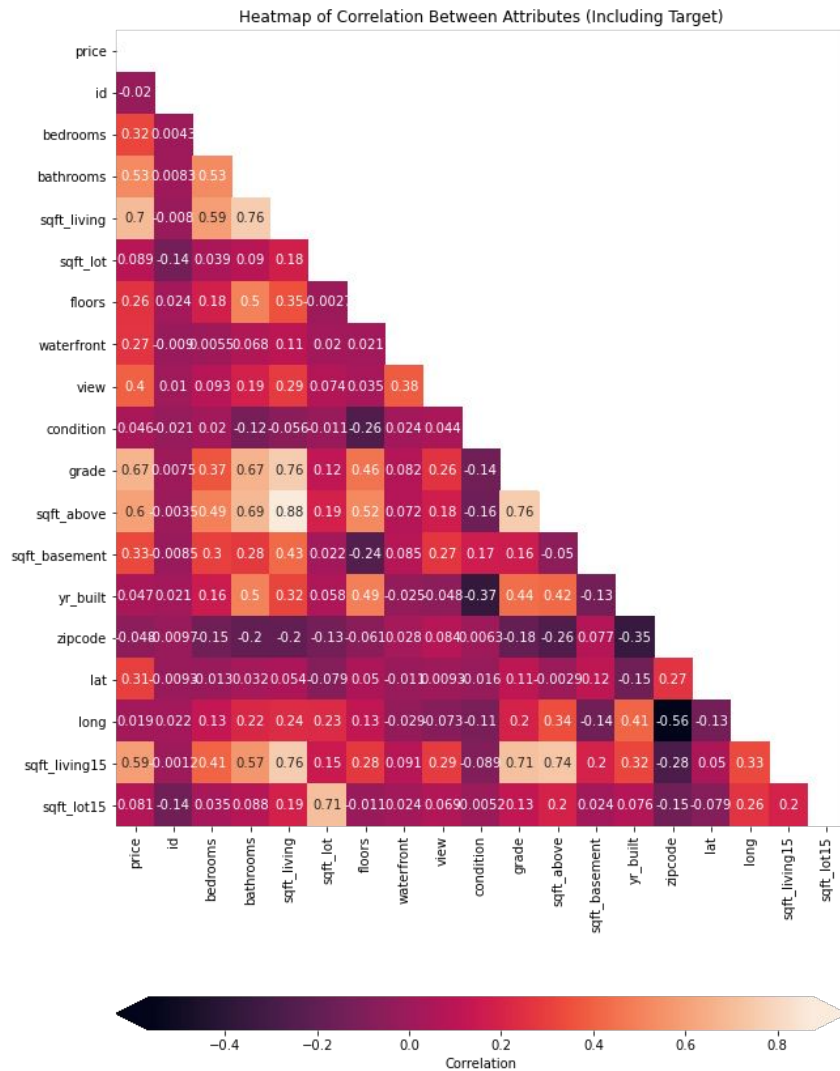
Data Correlation

The first thing we looked at was a correlation heat map to help determine what features to use

Figure 2: Correlation heatmap.
Darker squares are more negative,
brighter squares are more positive

Highly Correlated Features Include:

Square footage of the living space and Grade



Iterations

Validation Scores for Each Model:

- First Model: 0.49
- Second Model: 0.61
- Third Model: 0.61
- Fourth Model: 0.61

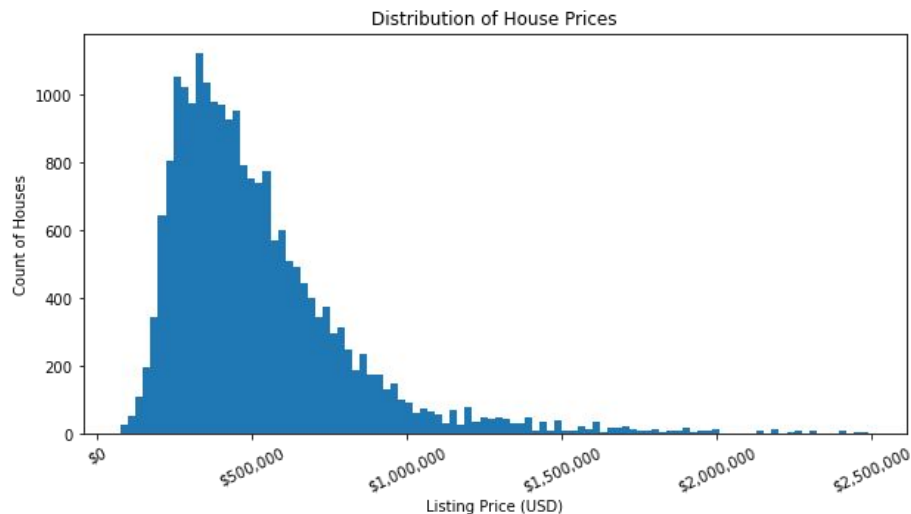
R Squared Values for Each Model:

- First Model: 0.49
- Second Model: 0.61
- Third Model: 0.61
- Fourth Model: 0.59

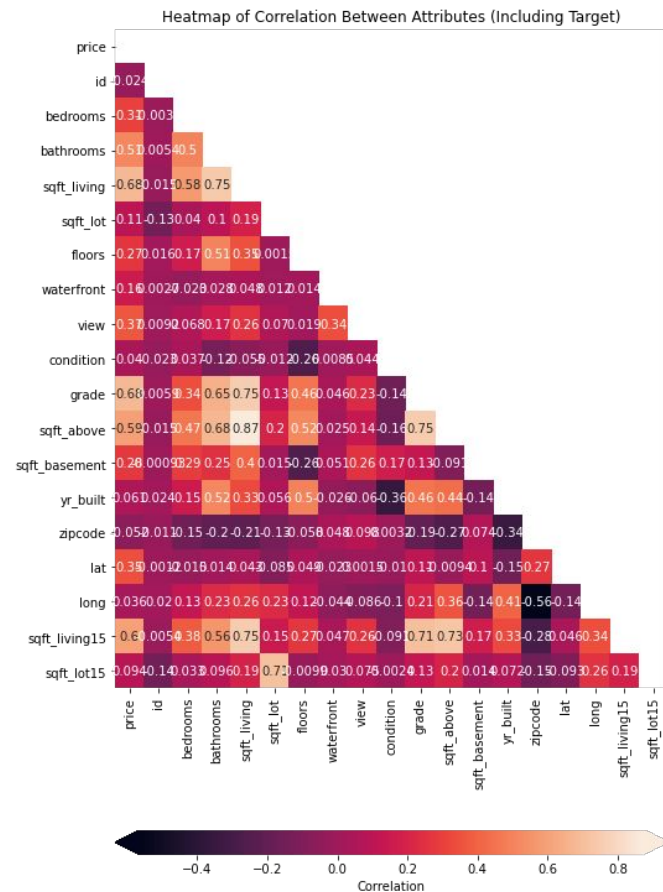
Validation Score is the predictive ability of the model

R Squared value represents how well the data fits the model

Data After Adjustment



After adjustment, the data has fewer outliers and should produce better results



Final Model Features and Validation Score

Final Model Validation Score:	0.71	Validation Score is the predictive ability of the model
Final Model R Squared Value:	0.72	R Squared value represents how well the data fits the model

Two Most Correlated Features: Square Footage of the Living Space and Grade of the House

Recommendations

Recommendation 1: Increase of the size of the living space. Every 1 square foot you increase the living space, the price will increase by \$123.

Recommendation 2: Improve the grade of the house. Every increase in grade will increase the price of the house by \$96,752

The best way to accomplish both would be to renovate a section of the house, thus improving the grade and increasing the living space.

Any Questions?

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