

# 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

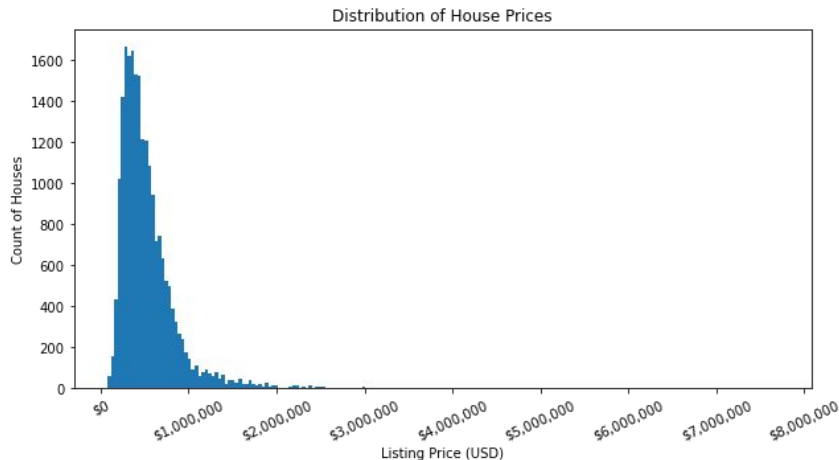


Figure 1:  
Distribution of House Prices

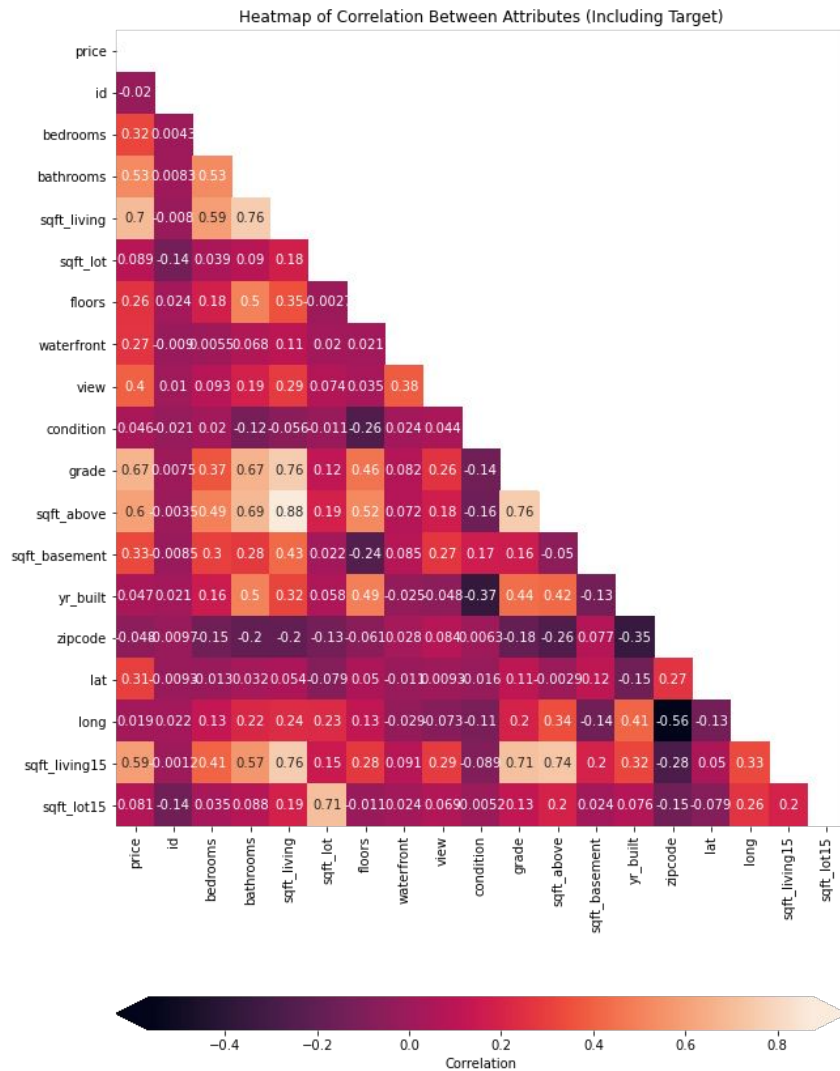
# Data Correlation

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

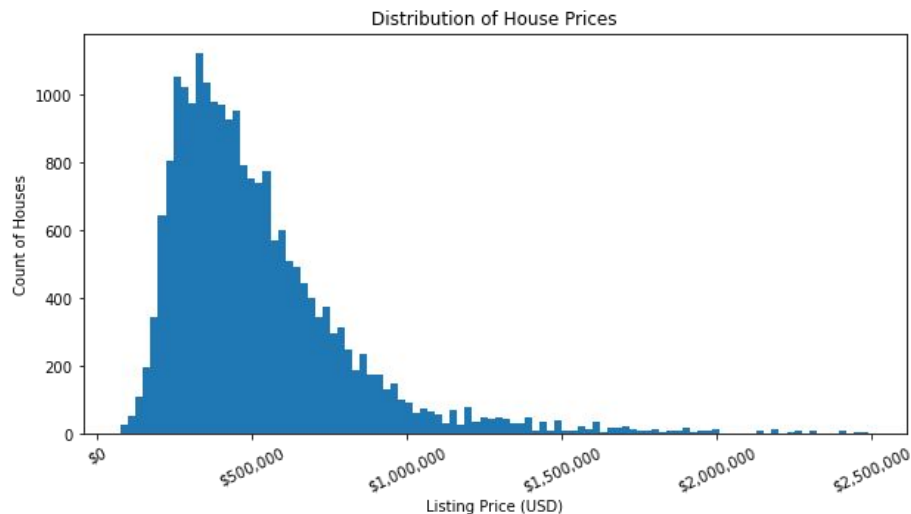
## R Squared Values for Each Model:

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

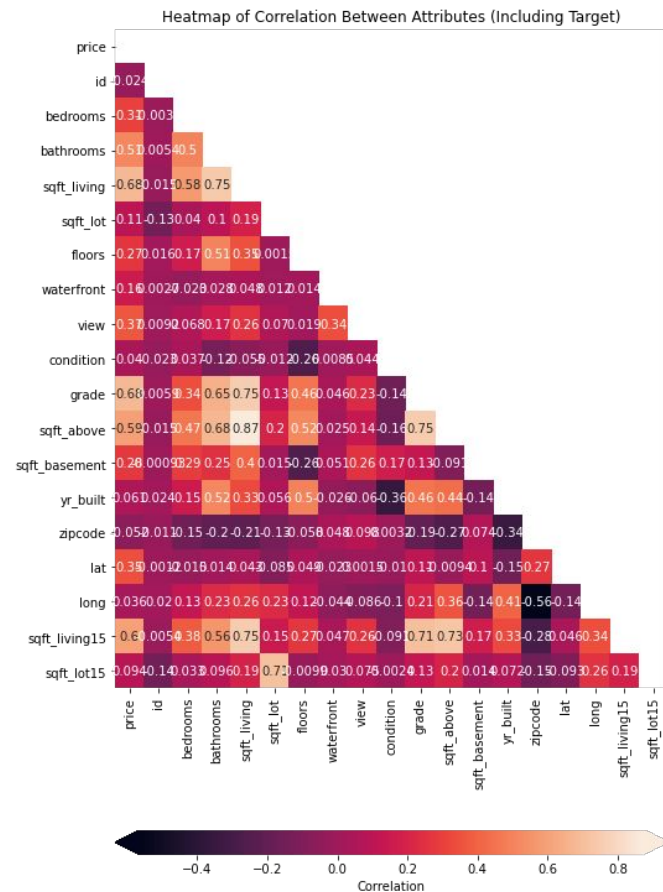
Validation Score is the predictive ability of the model

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.

Recommendation 2: Improve the grade of the house.

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?**



# Contact Info:

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