# Home Renovation Analysis

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#### Overview

An analysis of King County House Sales dataset determining how different home improvements affects profitability when selling a home.

### Outline

• Business Problem

• Data and Process Steps

• Results

Conclusions

#### **Business Problem**

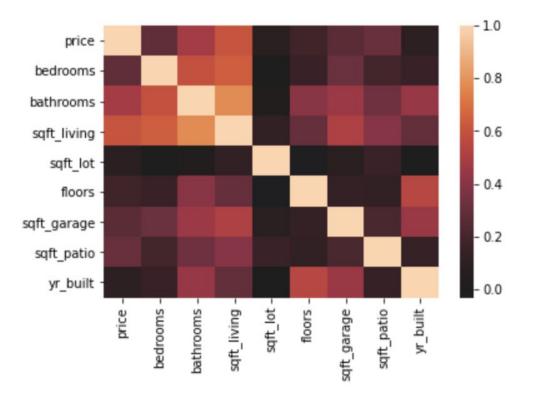
• Homeowners and real estate agents are looking for ways in how different renovations affect their home's price and by how much

• Find the renovations that result in the greatest increase on home's price

## Data and Process Steps

 Utilizing multiple linear regressions to determine best renovations for homes

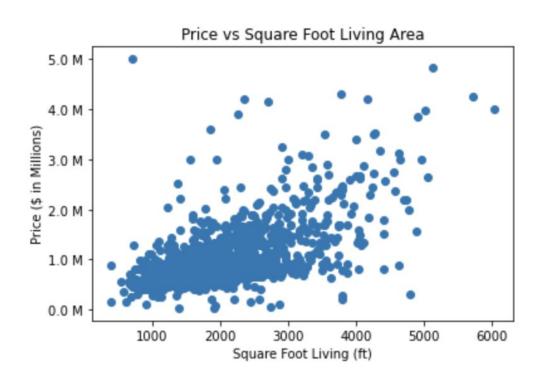
## Data and Process Steps



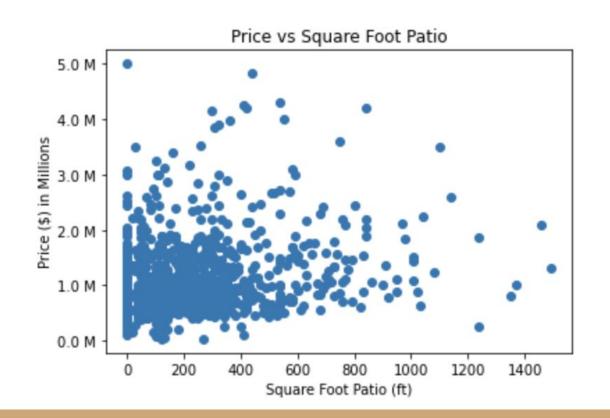
• Find highest correlation with Price

• 42% variance in price

• Results statistically significant

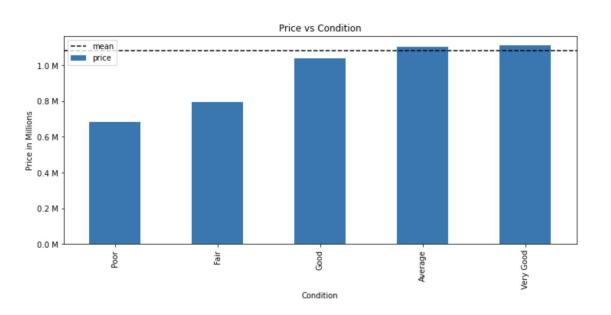


• For every increase in 1 square footage of the living area, expect an associated increase of \$478 in price



• For every increase in 1 square footage of the patio, expect an associated increase of \$199 in price

- Mean Absolute Error of 365,179 USD
  - o On average, model has error of 365179 USD when predicting price of house



• The Very Good condition will result in the largest increase in price by 32%

#### Conclusion

• Improve the overall condition of the house to add the most value when selling a home

 Add square footage to the patio and living area to also help increase the value of the home

# Thank you!

Questions?

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