



# King County House Sales Analysis

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# Overview

For this project, we used the King County House Sales data set calculations to advise future homeowners on what affects the price of a home

We will be looking at three analysis

- Construction grade as a primary value driver
- Renovation potential in mid-tier homes
- Living space expansion creates measurable value

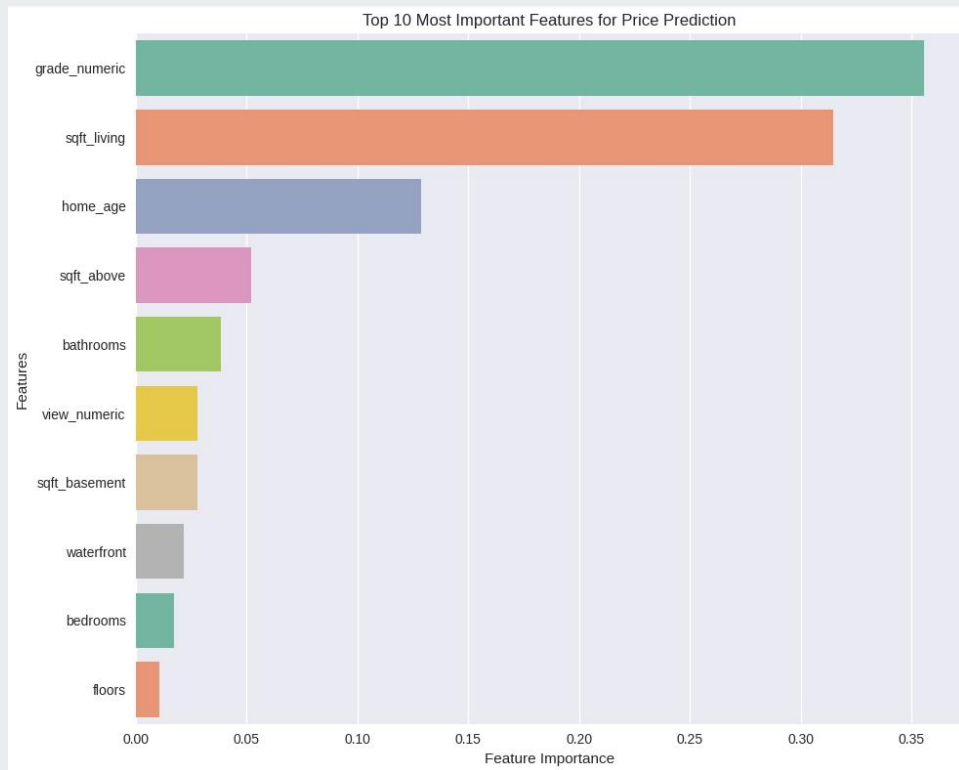


# Data & Methods

- Importing the 'kc\_house\_data.csv' for our analysis needs
- Cleaning and preprocessing data prior to analysis

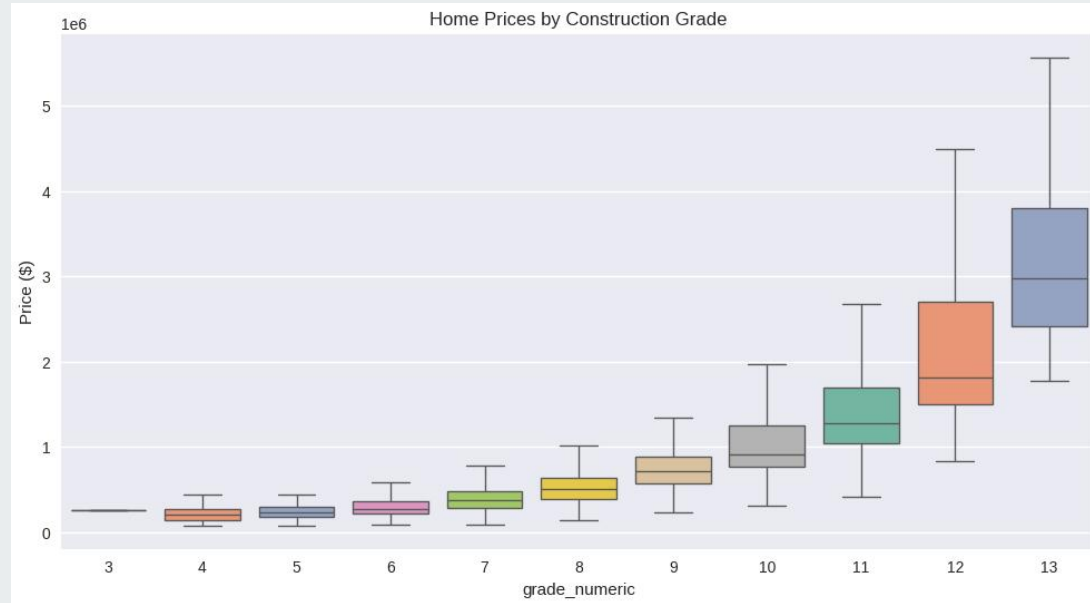
# Data Analysis

- Top 10 Most Important Features For Price Prediction



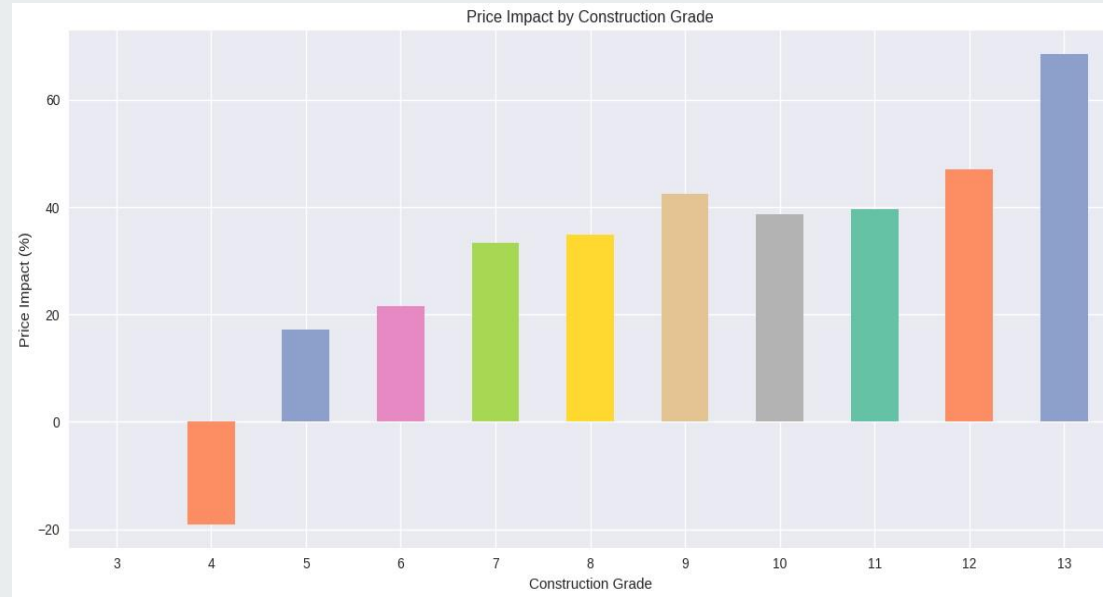
# Data Analysis

- Home Prices By Construction Grade



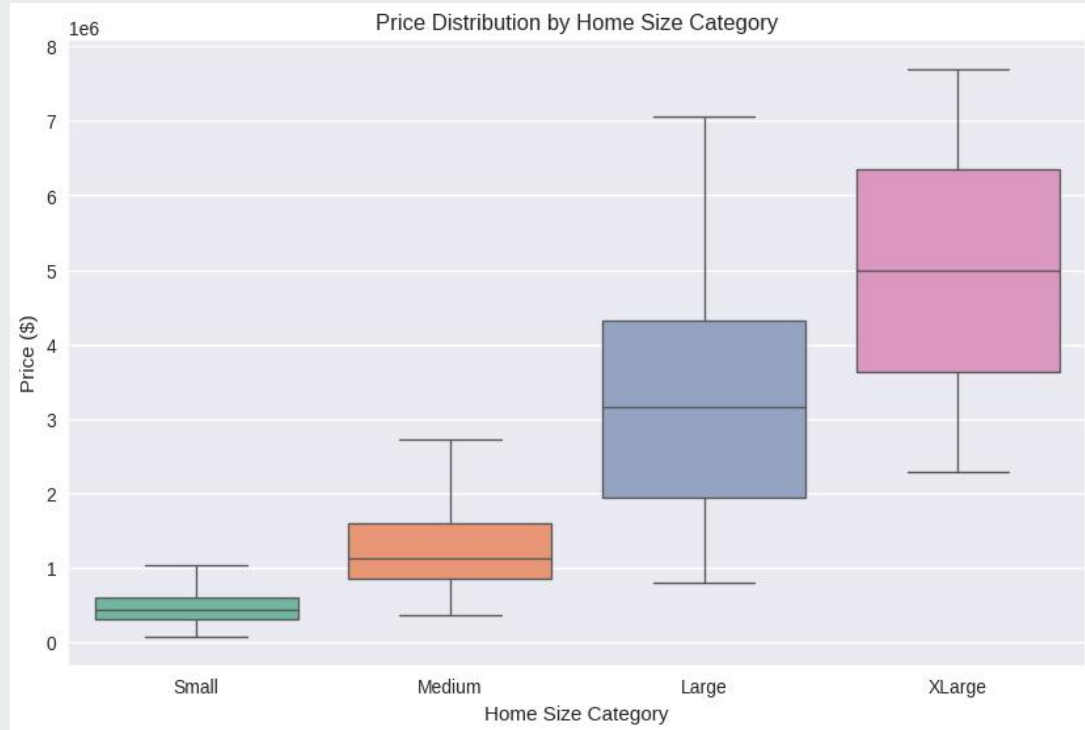
# Data Analysis

- Price Impact by Construction Grade



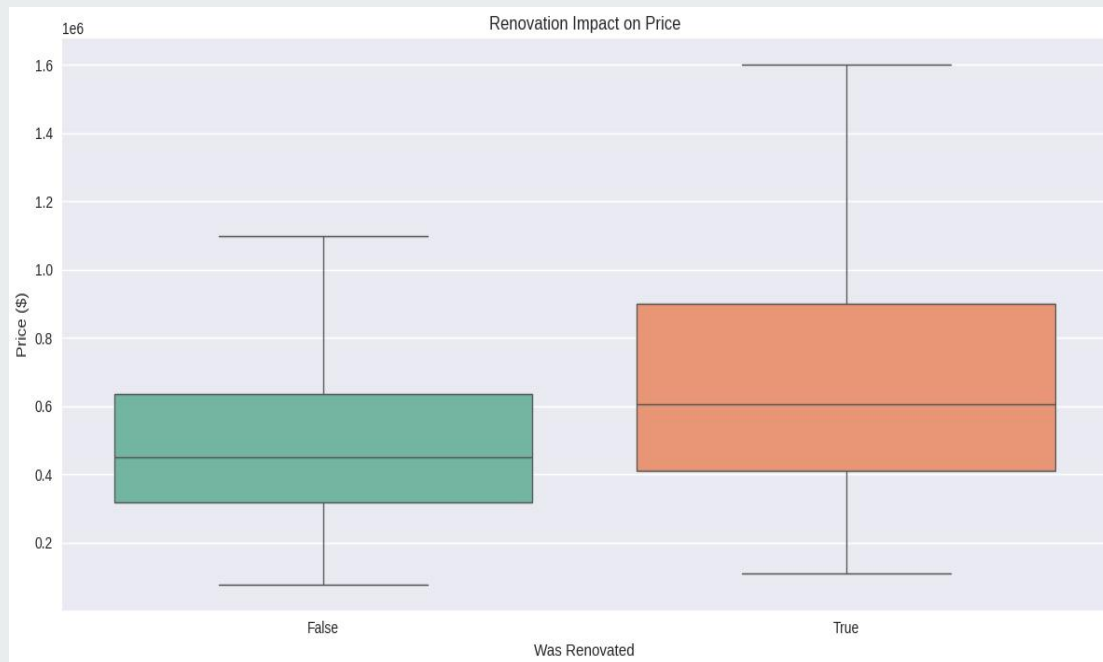
# Data Analysis

- Price Distribution by House Size Category



# Data Analysis

- Renovation Impact on Price







# Conclusions

- **Construction grade is the primary factor affecting home value**

Moving from Grade 7 to Grade 8 typically adds \$140,392 in home value (34.9% increase)

Grade 8 homes seem to have the best value retention

- **Renovated homes sell for \$236,762 higher on average**

You could possibly consider a renovation potential on Grade 6-7 homes

- **Strong correlation between living space and price.**

Median price per sqft is \$245, so possibly adding an additional 500 sqft to a home could increase the value by roughly \$122,322



# Limitaions

- To increase the accuracy of the predictions some more parameters are needed
- The data set is not current



# Recommendations

- Focusing on construction quality seems to have the highest impact on value
- Consideration for a renovation potential on homes between Grades 6-7
- Increasing the size of living space could increase the value of a home  
since it directly correlates with price



# Next Steps

- Next steps would be to upgrade the overall analysis so it's current since the data set is from 2014 to 2015
- Also maybe incorporating school rating and crime status to the data set to give a better overall picture of the focus area
- Partnering with contractors and lenders could be a good step in getting more insight for a potential home buyer



# Thanks!

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