KING COUNTY HOUSING SALE PRICE ANALYSIS

AMOS PRIDE

OVERVIEW

Alliance realtors would like to help homeowners do home renovations that will contribute to a higher sale price of the home.

My job: What features should you consider when renovating a home that would ultimately lead to a higher sale price?

The Data

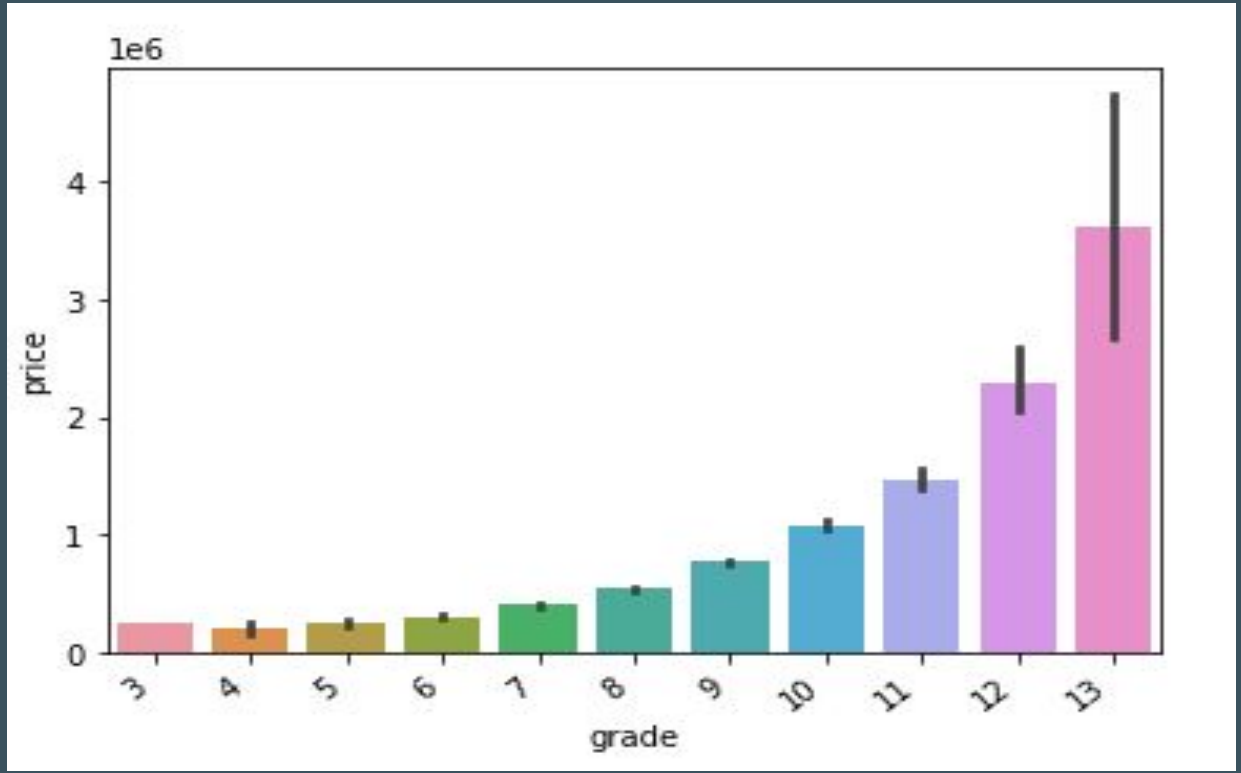
King County Home Sales Dataset

2014 to 2015

21597 homes

20 features

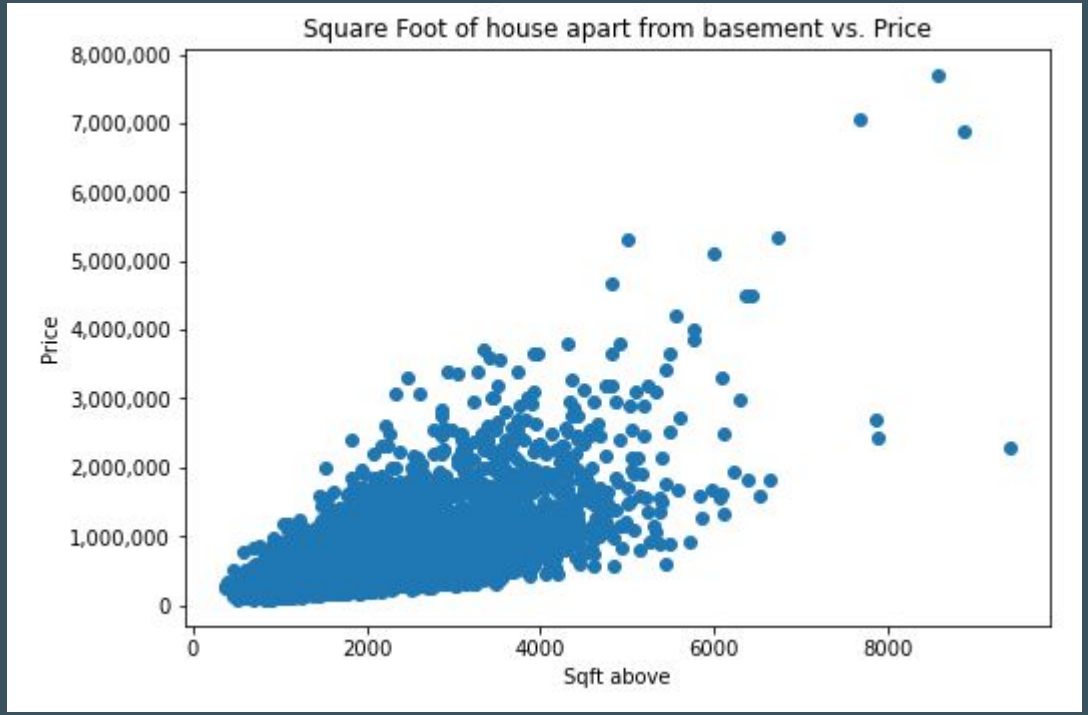
Grade



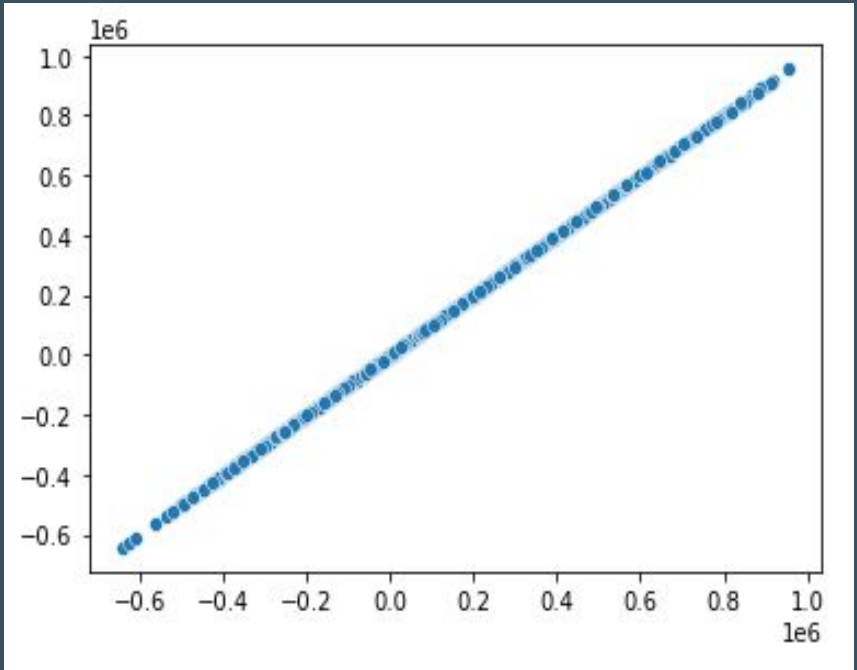
As the grade of a house increases the price of the house increases

Square footage of house apart from basement

House apart from basement increase of 1000 square feet = price increase of 46686 USD.



Regression



- Identifies the features that matter the most and how they influence each other
- Measures impact of features on house price

Results

All selected features are statistically significant.

In our final regression model using all of our selected features, we saw an increase in model performance based on our R-squared value from 31 percent (baseline) to 57.5 percent (final).

Some Observations:

- With each additional floor added you can increase the home sale price by 24,290 dollars.
- Homes on a waterfront see an increase in property value of 13,260 dollars.
- Homes that are considered to have an 'excellent' view sell for 84,420 dollars more than those with no view.

My Recommendations

1. Homes with grade_7(average) see a bigger increase in value than most other features. Renovating a house with grade_7(average) materials and design sees an increase in sale price of around 94,750 dollars.

2.Find a house to renovate that has at least what is considered a 'Good' view. Homes built on these lots will see an increase in sale price of around 32,000 dollars.

3.Also to take into consideration is the condition of the house as houses with a good condition see an increase in sale price of around

52,000 dollars.

Limitations and Future Analysis

Conclusions should be approached with a lot of caution:

1. Our model accurately fits only 57.5 percent of the data.
2. Homoscedasticity assumption failed in our final model

Future Analysis

1. Find data before 2014 and 2015
2. Include additional features in future models.

Thank You

Questions?

You can reach me at:
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For a more detailed analysis and the methods behind this presentation,please visit:

https://github.com/amoskiito/dsc-phase-2-project-v2-3