Analyzing the King County Housing Data Set

FlatIron School Project 1
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Introduction

The data set that we are working with includes information about homes that were sold between May 2014 and May 2015 with several factors that influence home price.

Our goal today is to create a model that will predict housing prices based on the factors included in this data set.

Discussion of Data

Several categories with no data:

Waterfront status - dropped the variable due to small percentage of homes

Year Renovated - filled with the median value of renovation years

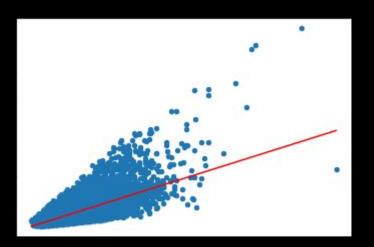
View Rating - filled with the median value of 0

Later found the basement square footage category had some rows with no data

Filled with the median value

What is the effect of square footage on price?

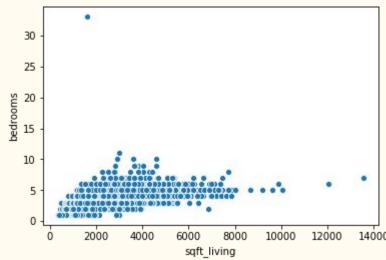
There is a correlation, however, our prediction line could only explain 49% of the data, therefore it is not an accurate predictor of home price.



Is there a relationship between square footage and bedrooms?

We can say with a 95% certainty that there is a relationship between square footage and bedrooms, however, square footage is not necessarily a good predictor of the number of bedrooms a house will have.

There is no linear relationship.



Are bedrooms and bathrooms correlated?

There is no linear relationship between bedrooms and bathrooms- they don't predict each other.

However, they do have a weak correlation. The more bedrooms, the more bathrooms a house had.

Results and Recommendations

Our model accounts for 68% of the change in price of a house.

Using this model, I make the following recommendations:

The features of a house that will increase the sale price the most are the quality of view, grade of the house, and condition of the house.

The highest selling houses will be in good condition and grade, and have a good view.

Conclusion

Though some of the data had to be removed, it was still viable for a working model that can predict home prices.

Data analysis revealed a relationship between bedrooms and bathrooms, square footage and price, and square footage and bedrooms, though none were predictors of the other.

The biggest influences of sale price are view, condition and grade of a house.