

Ames, Iowa Housing Data

What can we learn about future home sale prices?

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Goal of Analysis and Project

This project looks to see how accurately past housing data can predict sale price.

Also looking to see how different building types affect predictions.

Expecting that building type will make a significant impact on predictions.



Data We are Working with: Ames Housing Dataset

- Detailed and robust dataset related to houses
- Data from 1872 - 2010
- Property types: Single Family Detached, Two Family, Duplex, Townhouse

Gross Living Area, Overall Quality, Year Built, and Zoning Classification were used for features in a Linear Regression.



Data Analysis and Scaling

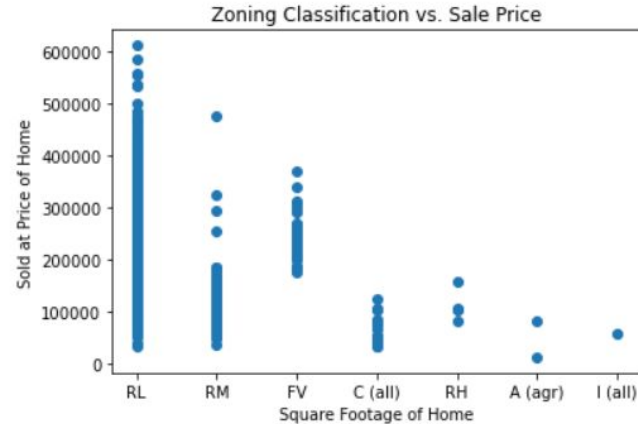
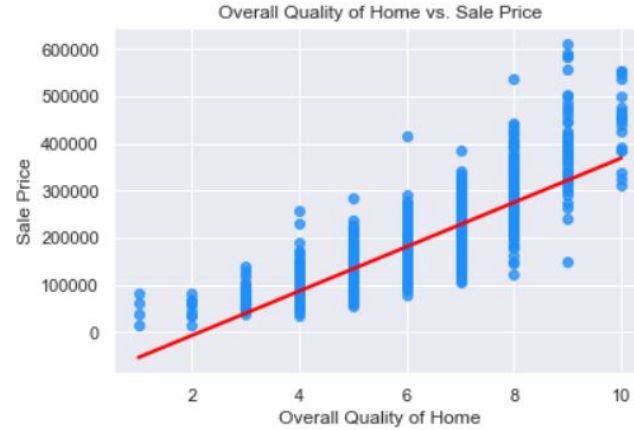
One model for single family detached only

One model for all properties

Data has been scaled for efficiency

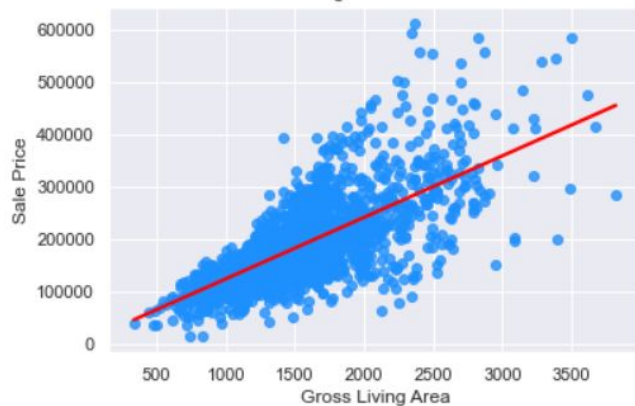


Single Family Only Results

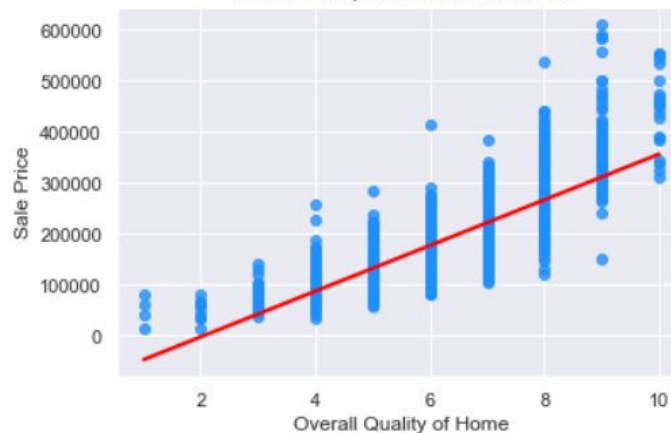


All Property Types

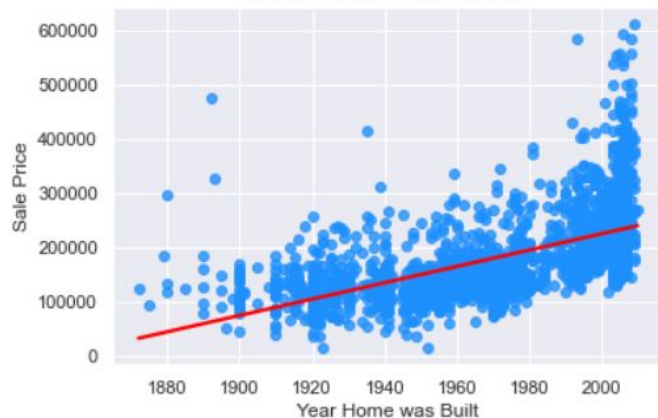
Gross Living Area vs. Sale Price



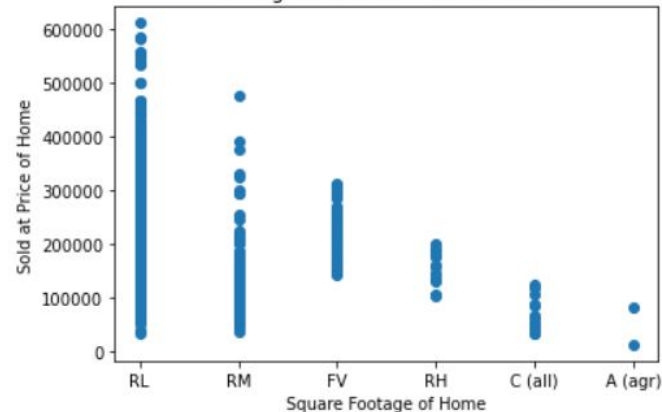
Overall Quality of Home vs. Sale Price



Year Built of Home vs. Sale Price



Zoning Classification vs. Sale Price



Precision / Accuracy of Predictions

Single Family Detached:

- Predictions off by an average of about \$35,500

All Property types:

- Predictions off by an average of about \$37,000



Rethinking Hypothesis



Conclusions and Recommendations

It turns out that building type has less of an impact on sale price prediction than originally thought

Features have similar impact on predictions, regardless of building type

Do we have all data for multi-family homes? Seems low for college town

Newer data could increase precision (dataset used is 1872-2010)



Thank you for listening!

