Predicting House Prices in Ames, IA

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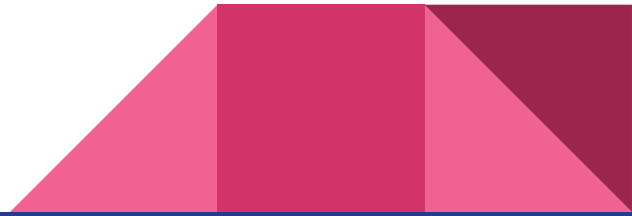
General Assembly

Objective

-Analyze data from the sale of individual residential properties sold in Ames Iowa between 2006 -2010.

-Build a linear regression model that uses the data to predict future home sales in the area.



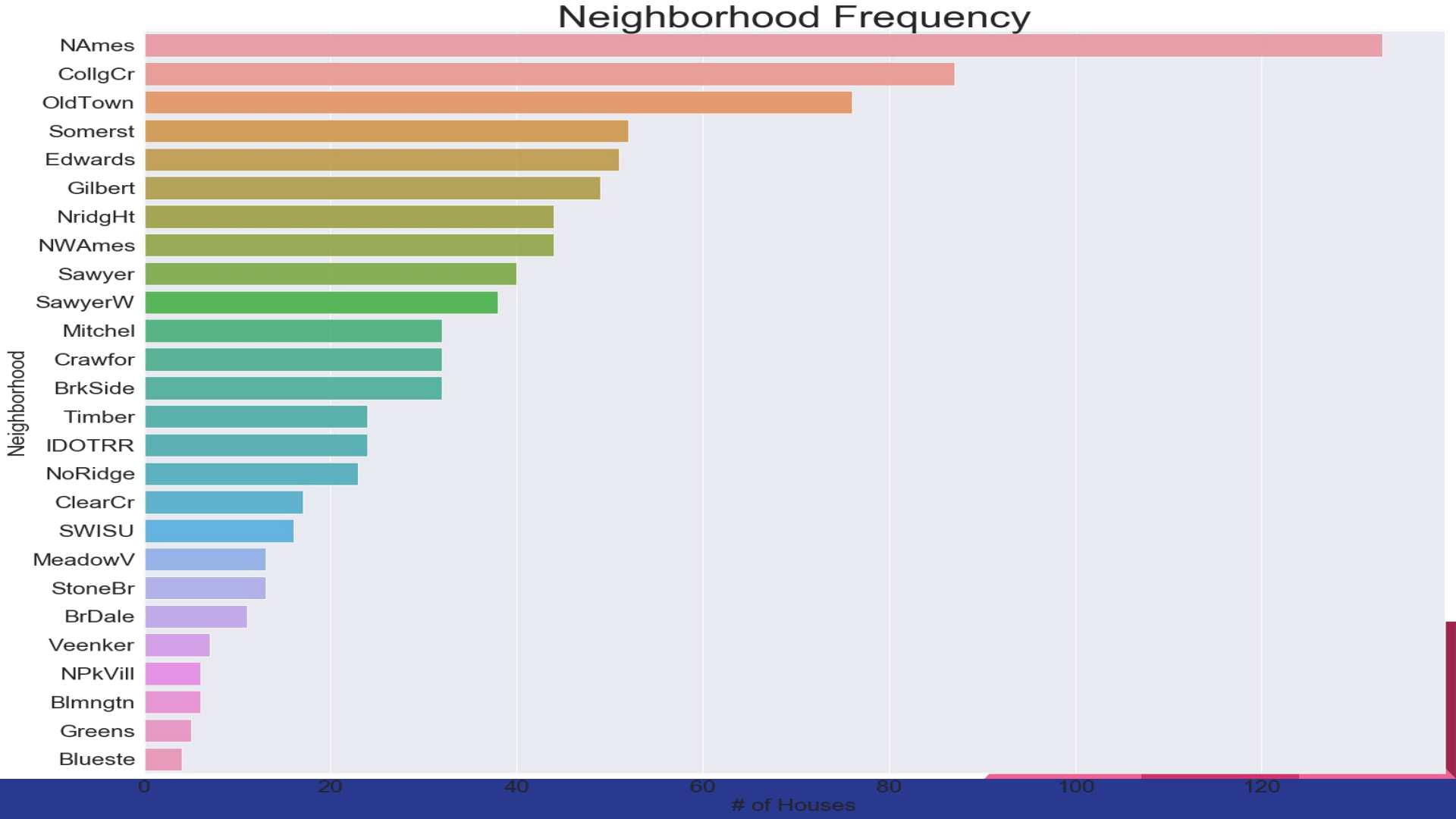
Size and type of Data

2050 Rows of Data, Each Representing a Sale

81 Categories (Numeric and Descriptive)

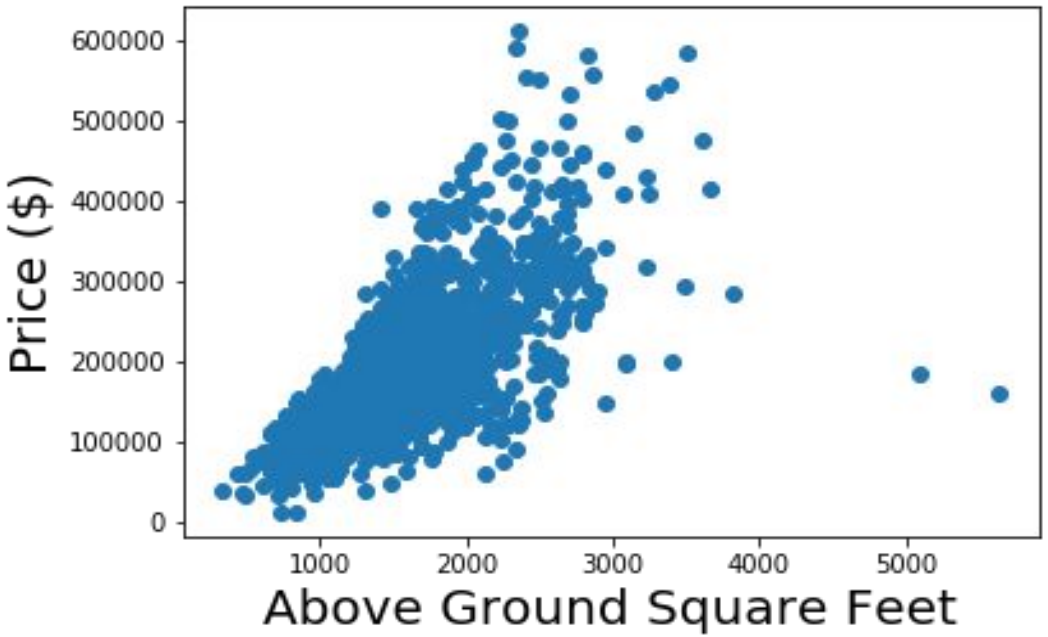
Single and Multi-family Houses

28 neighborhoods


Neighborhood Frequency
NAmes
CollgCr
OldTown
Somerst
Edwards
Gilbert
NridgHt
NWAmes
Sawyer
SawyerW
Mitchel
Crawfor
BrkSide
Timber
IDOTRR
NoRidge
ClearCr
SWISU
MeadowV
StoneBr
BrDale
Veenker
NPkVill
Blmngtn
Greens
Blueste
Neighborhood
0
20
40
60
80
100
120
# of Houses

Correlations

Sale Price Factors
(Starting Point ~$32,000)

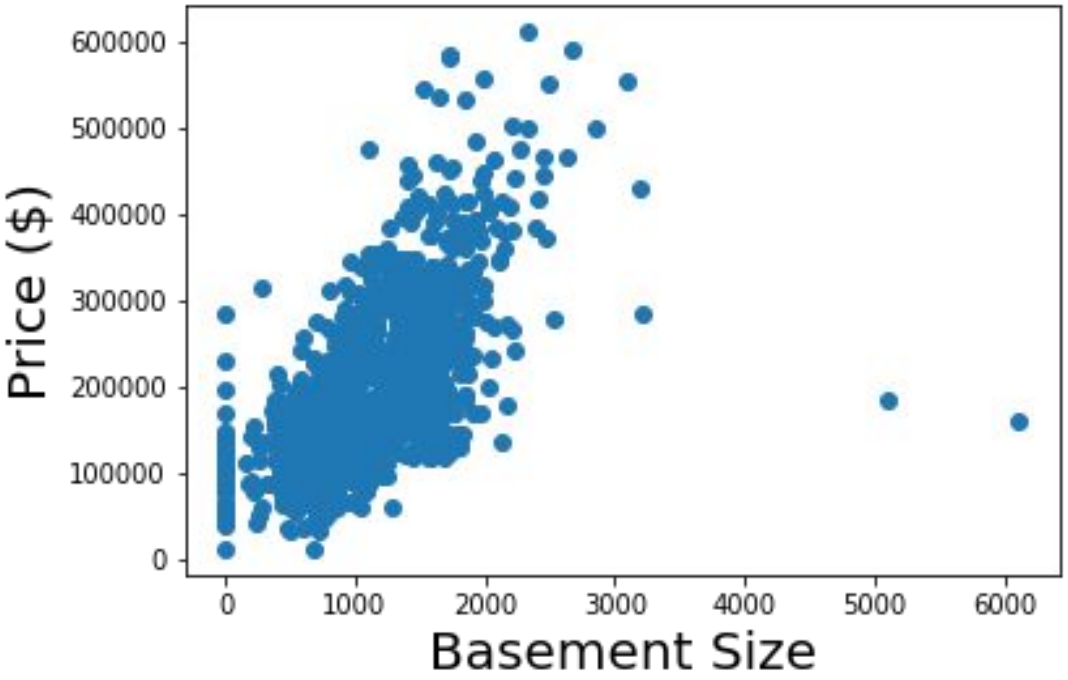


For every 200 square feet, the price will increase on average $4,650.

Confidence Interval

($2400 - $6500)

Sale Price Factors
(Starting Point ~$32,000)

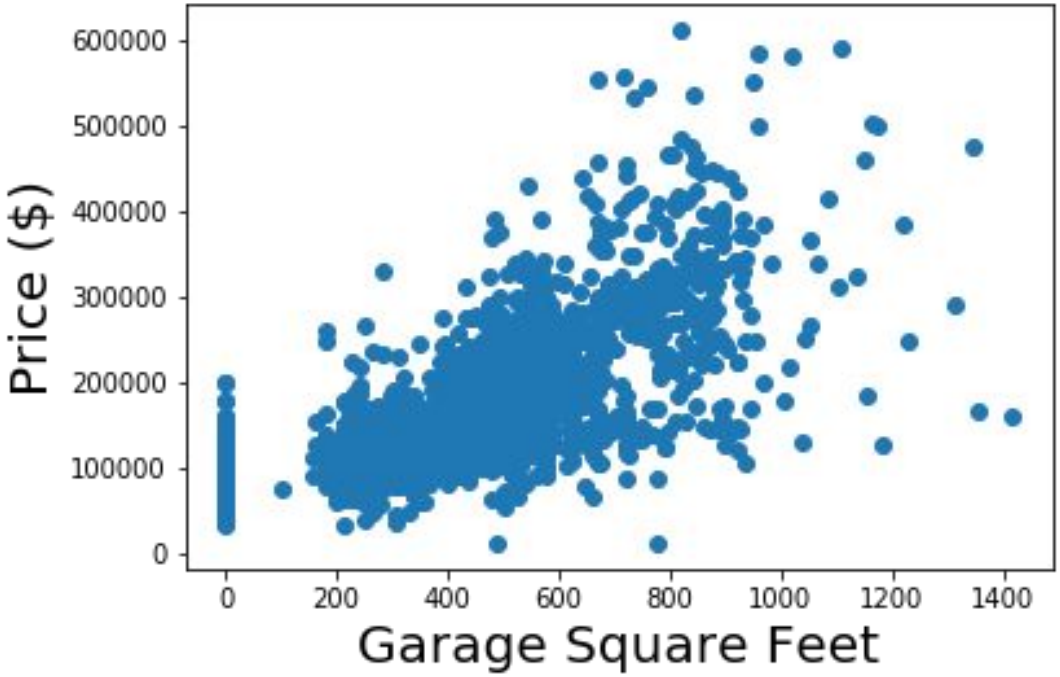


For every 200 feet the price will increase on average $6,800.

Confidence Interval

($5,060 - $8,500)

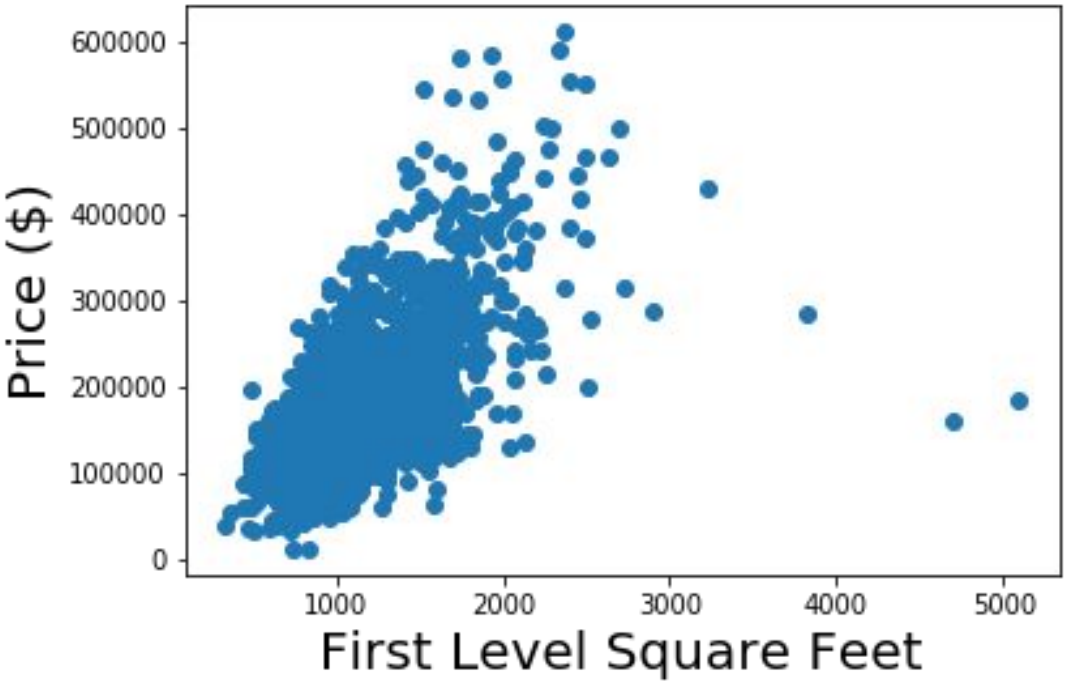
Sale Price Factors
(Starting Point ~$32,000)



For Every 200 Square Feet the Price will increase on average $5,650

Confidence Interval ($4,200 - $7,100)

Sale Price Factors
(Starting Point ~$32,000)



For Every 200 Square Feet the Price Will Increase on Average $7,700.

Confidence Interval

($5,700 - $9,700)

Predictions

- Sale Prices Range from a minimum of $12,800 to $612,000. IQR between $130,000 and $215,000, with a median of $162,500.

- Our model was able to predict on average the sale price on unseen test data with an average Root Mean Squared Error of $24,875.