

AMES HOUSING DATA PREDICTION

By Tenzin Wangdu

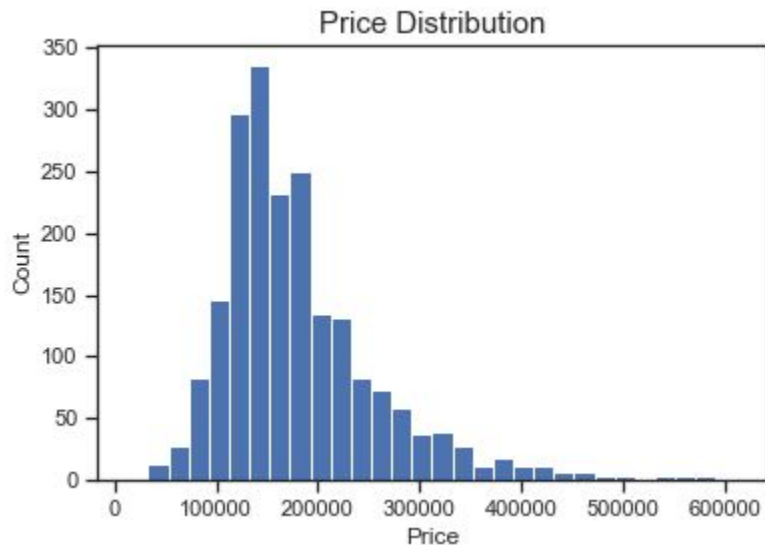
PROBLEM STATEMENT

1. A Realtor is looking to renovate and build houses in Ames, Iowa.
2. He wants me to look the data to see what to invest in to get best R.O.I.
3. Which features will raise the price of the house value.

BACKGROUND

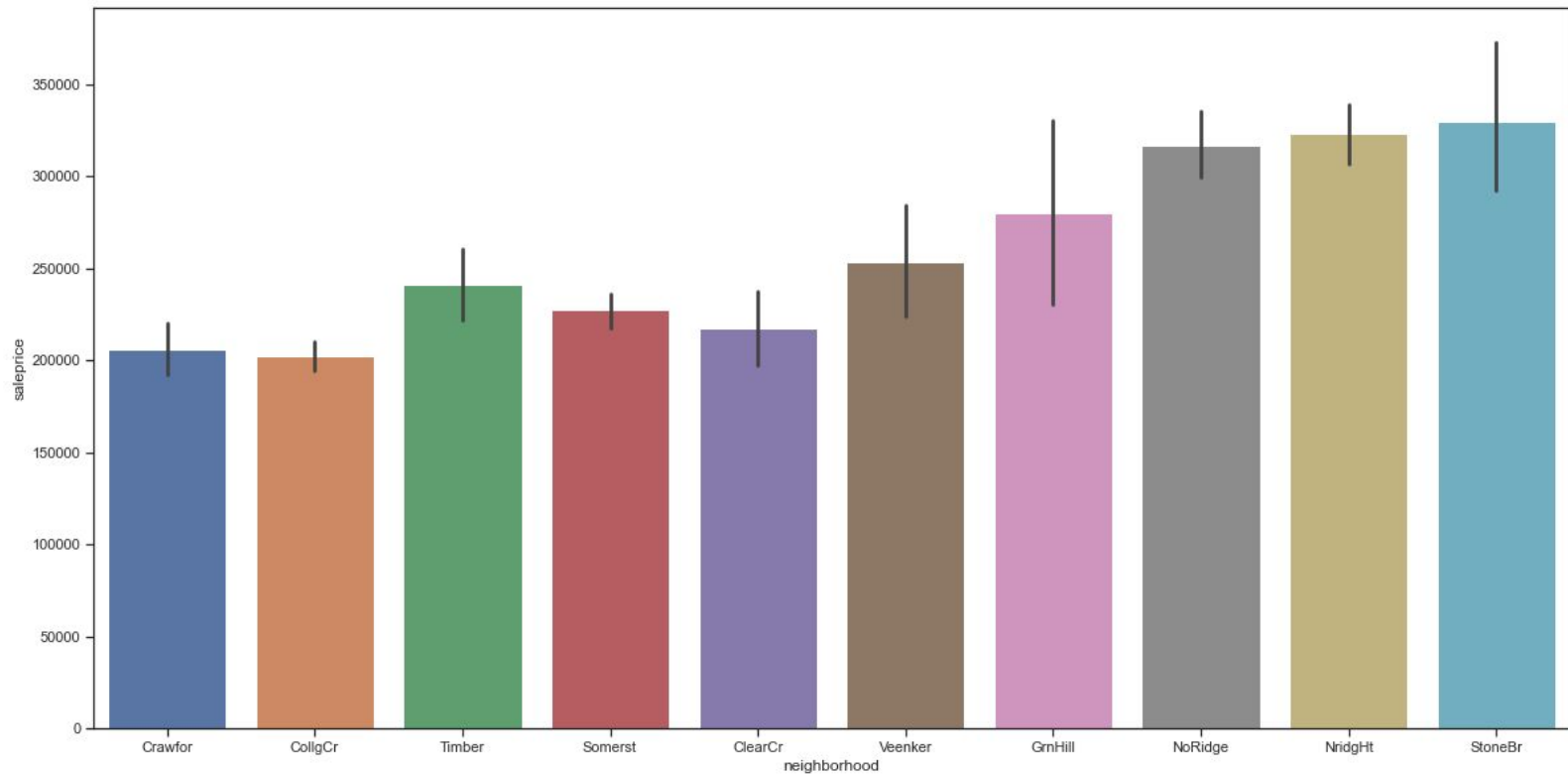
- Data set from Ames, Iowa (Ames Assessor' Office)
- 80 Features to Predict
- Data on 2051 homes sold
- Using Regression Model to Predict the Sale Price(House)
- The model score was 93%
- The house prices were predicted within 21,000

HOUSES PRICES IN AMES, IOWA

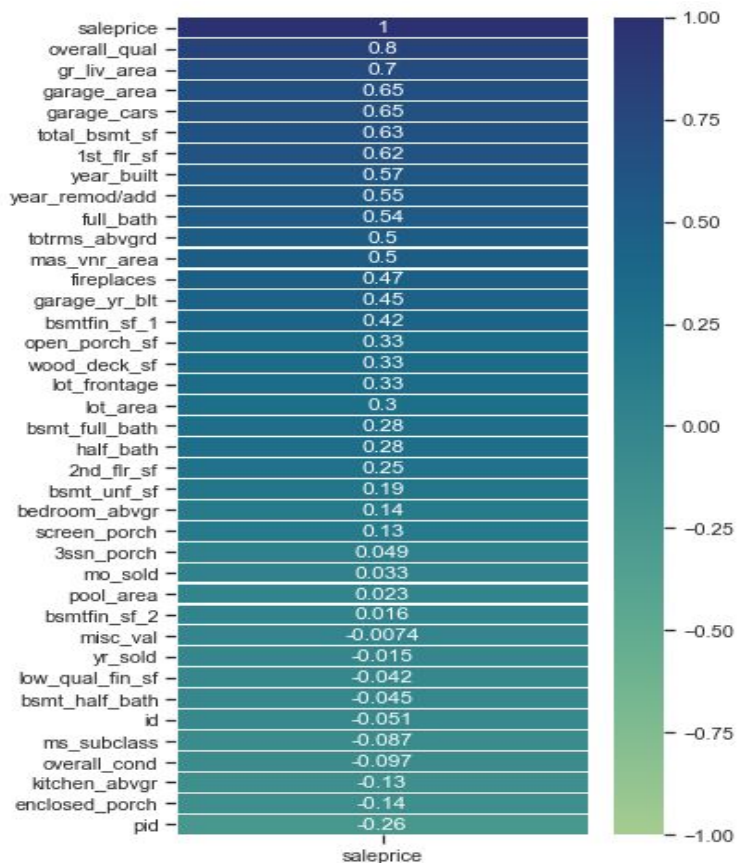


- Mean: \$ 181,469
- Median: \$ 162,500
- Max: \$ 611,657

TOP 10 LOCATION

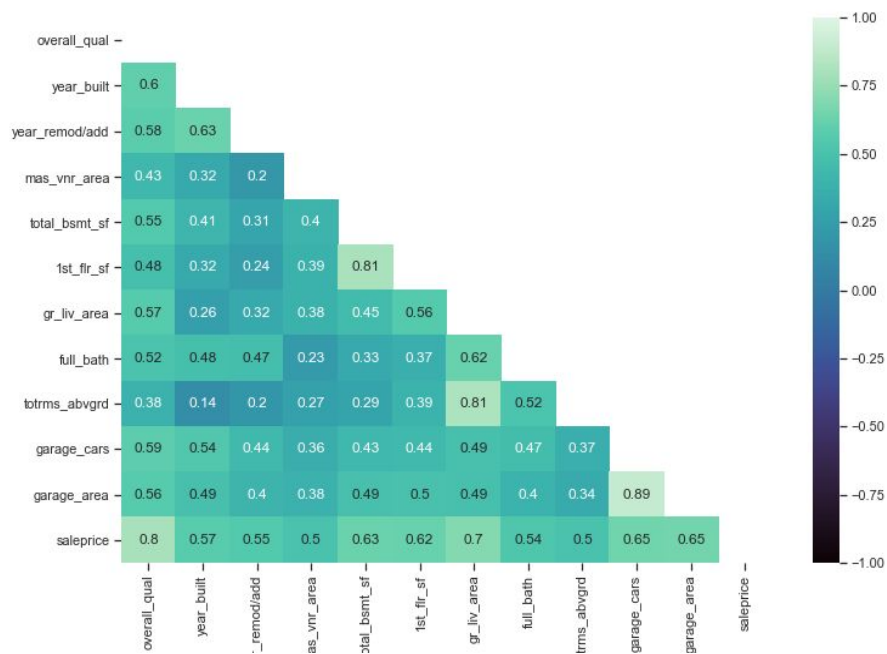


CORRELATION B/T SALE PRICE AND FEATURES



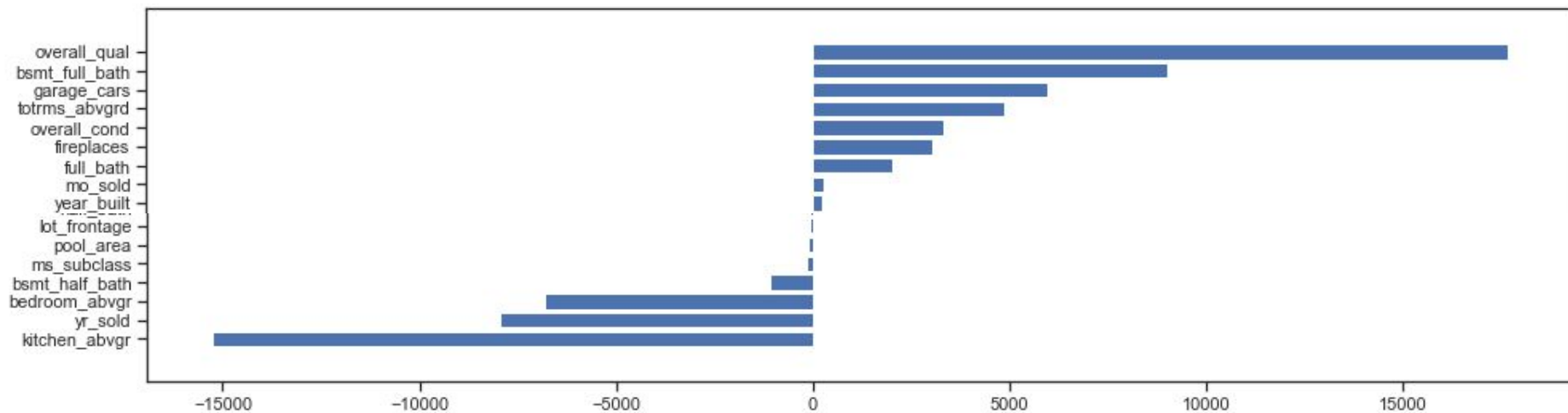
- Features that had the most positive correlation are **Overall Quality, Above Ground Living Area and Garage Area**

FEATURES WITH CORRELATION ABOVE 50% WITH PRICE

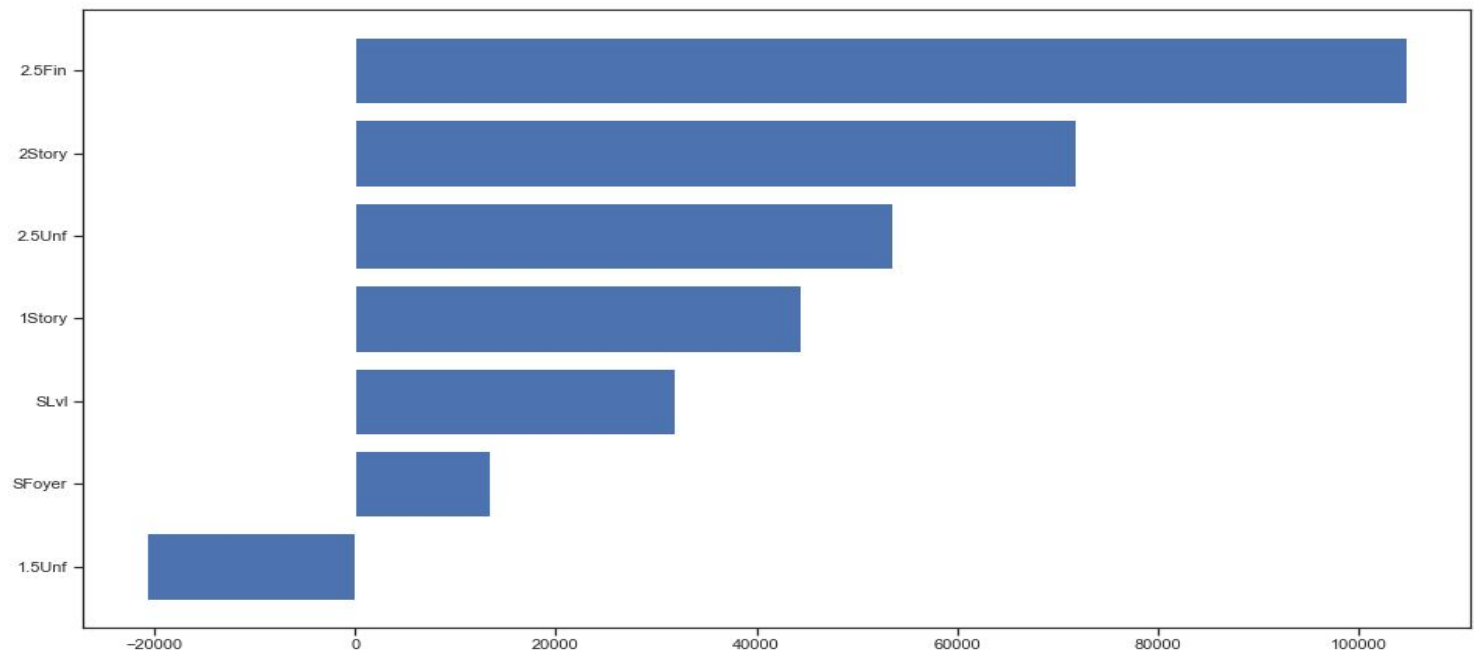


1. Overall Qual
2. Gr Liv Area
3. Garage Area
4. Garage Cars
5. Total Bsmt SF
6. 1st Flr SF
7. Year Built
8. Year Remodel/Add
9. Full Bath
10. Total Rooms Above Ground

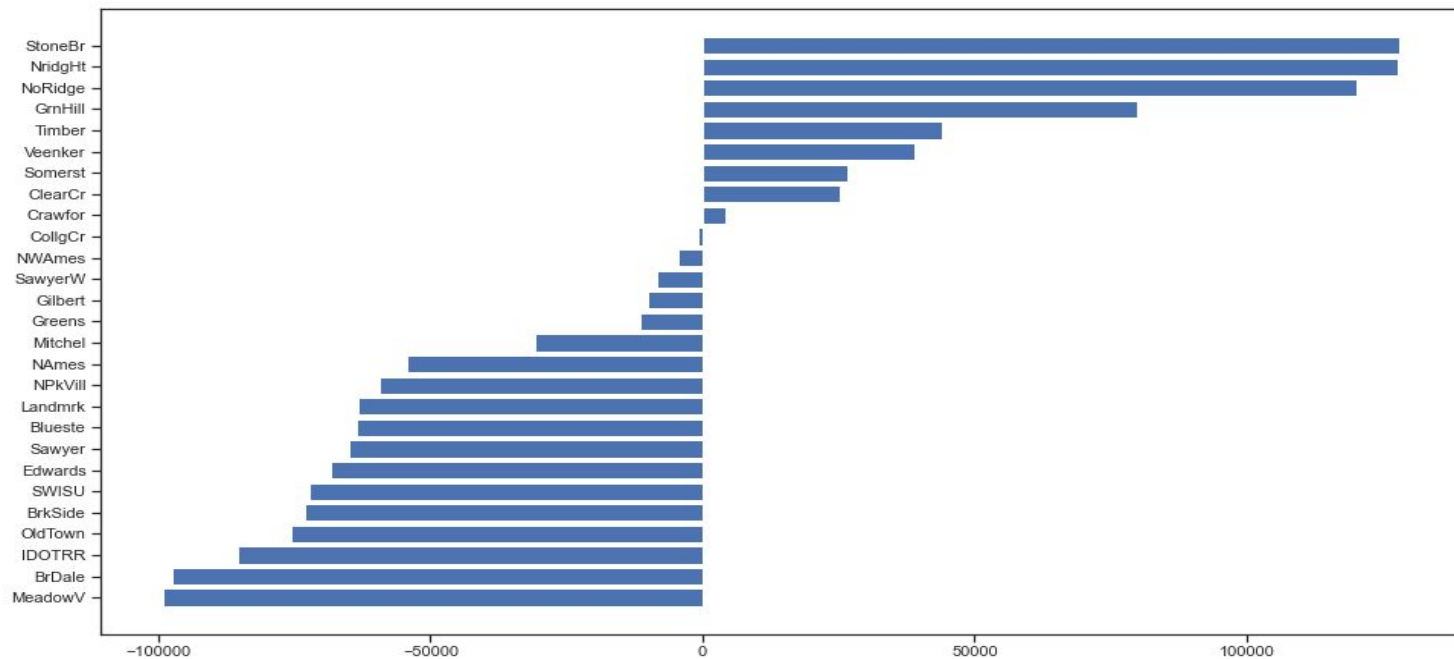
USING THE MODEL(HIGHEST COEF _ FEATURE RELATION TO SALE PRICE)



HOUSE STYLE MODEL COEF_



LOCATION MODEL COEF_



RECOMMENDATION

- Overall Quality, condition, age and location of the house are the most essential in determining the sale price
- In Order to Get the best ROI
 - Invest in Stone Brook, Northridge Heights and Northridge
 - Add a fireplace(if not already)
 - Renovate the garage if it is in bad condition
 - Having more room above ground
 - Newer Houses
 - Having 2 or more Story substantially increase the price