Ames Housing Data and Kaggle Challenge

Muhamad Tahir GA Meeting 02/22/2021

Content:

- Home Sale Prices; Ames
- Cleaning & Exploratory Data Analysis
- Models and hyperparameter tuning
- Predictions and Scores
- Recommendation and Outlook

Major Goal

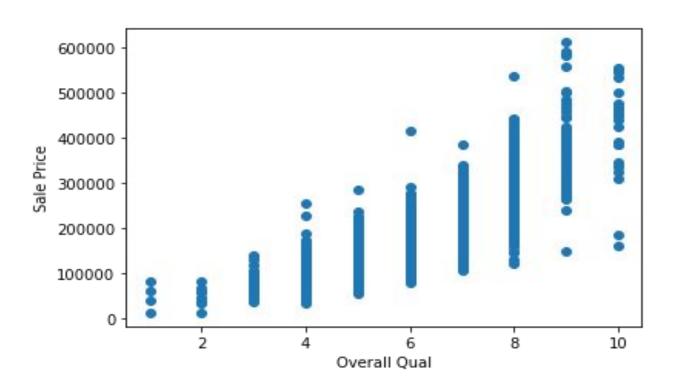
To give Customer better price

Gain reliability in business

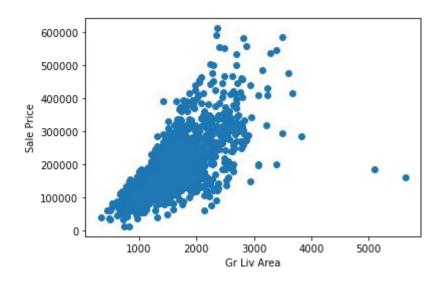
Attract customer in market

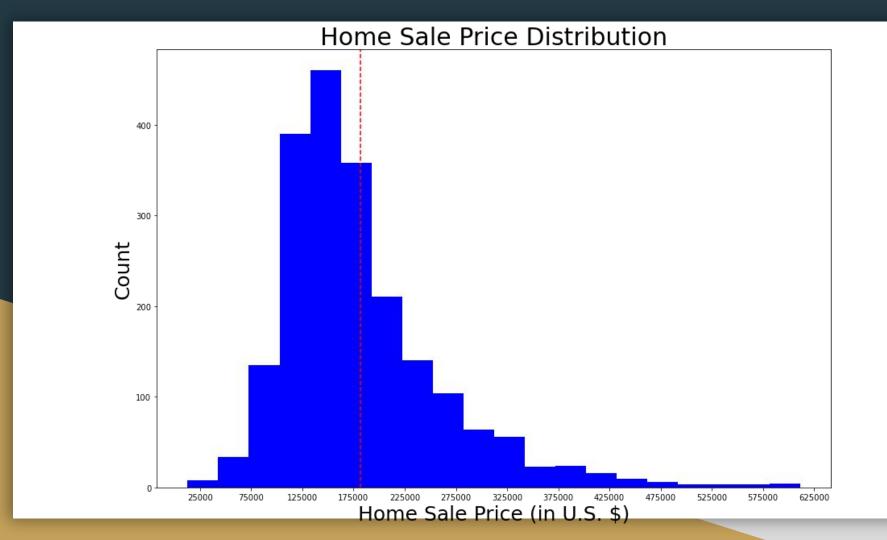
Increase revenue

Sales Price vs Overall Quality

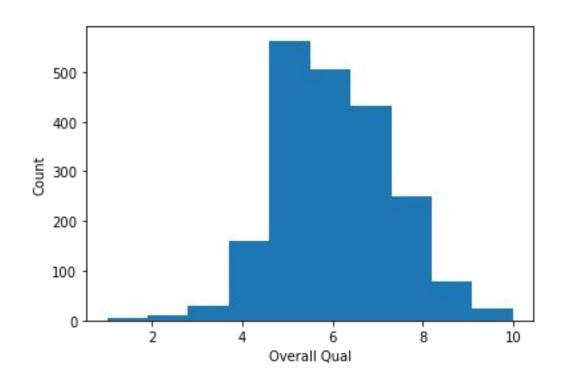


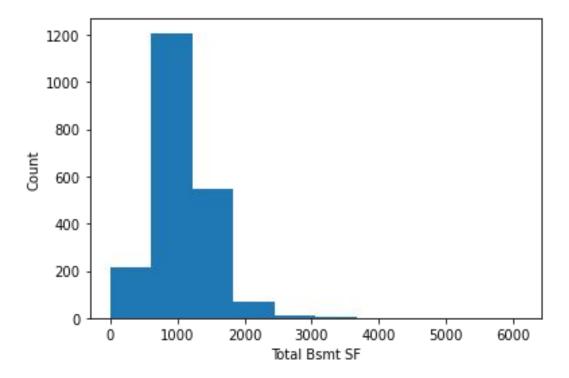
Correlation of 2018 SAT Data





Histogram of Overall Quality





Models and Score

The model used are:

- 1- linear regression, poly = 2
- 2- Lasso, Ridge, ElasticNet
- 3- score is around 0.99 for alpha
- 4- kaggle score of 23024 RMSE

Recommendation & Outlook

- Significant Correlation of House Prices
- Histograms show interesting distribution
- Tuning of Hyperparameters and models are exciting
- Excellent Score and mini Root-mean-square error
- More time and resources can lead to better result