

AMES Housing Analysis

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Objective



TO ANALYSE THE AMES HOUSING DATASET FROM THE AMES ACCESSOR'S OFFICE CONTAINING INFORMATION OF RESIDENTIAL PROPERTIES SOLD IN AMES (IOWA) FROM 2006 TO 2010



TO DEVELOP A REGRESSION MODEL TO PREDICT THE SALE PRICE OF HOUSES



TO PROVIDE RECOMMENDATION WITH INSIGHTS FOR HOMEOWNERS ON WHAT HOME IMPROVEMENT WHICH WILL IMPROVE HOUSING PRICE

Introduction

Analyzed historical housing sales data in Ames, Iowa



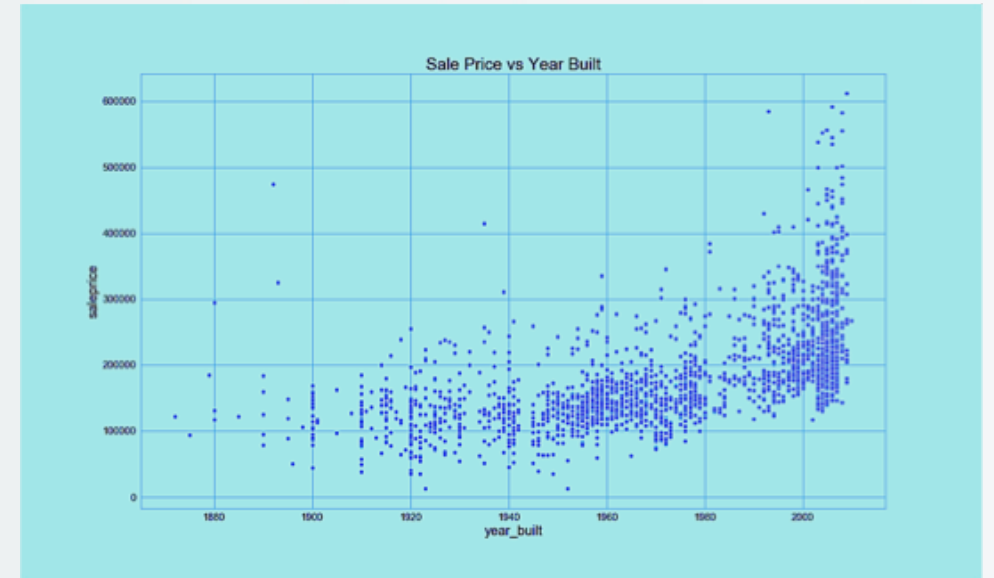
2,051 transactions between
2006 and 2010



Prices range from **USD 12,789**
to **USD 611,657**



28 neighbourhoods



Process



Exploratory data Analysis



Remove outliers



Handle null values in dataset based on group



Feature Engineering



Model selection



Feature filtering



Train model and score



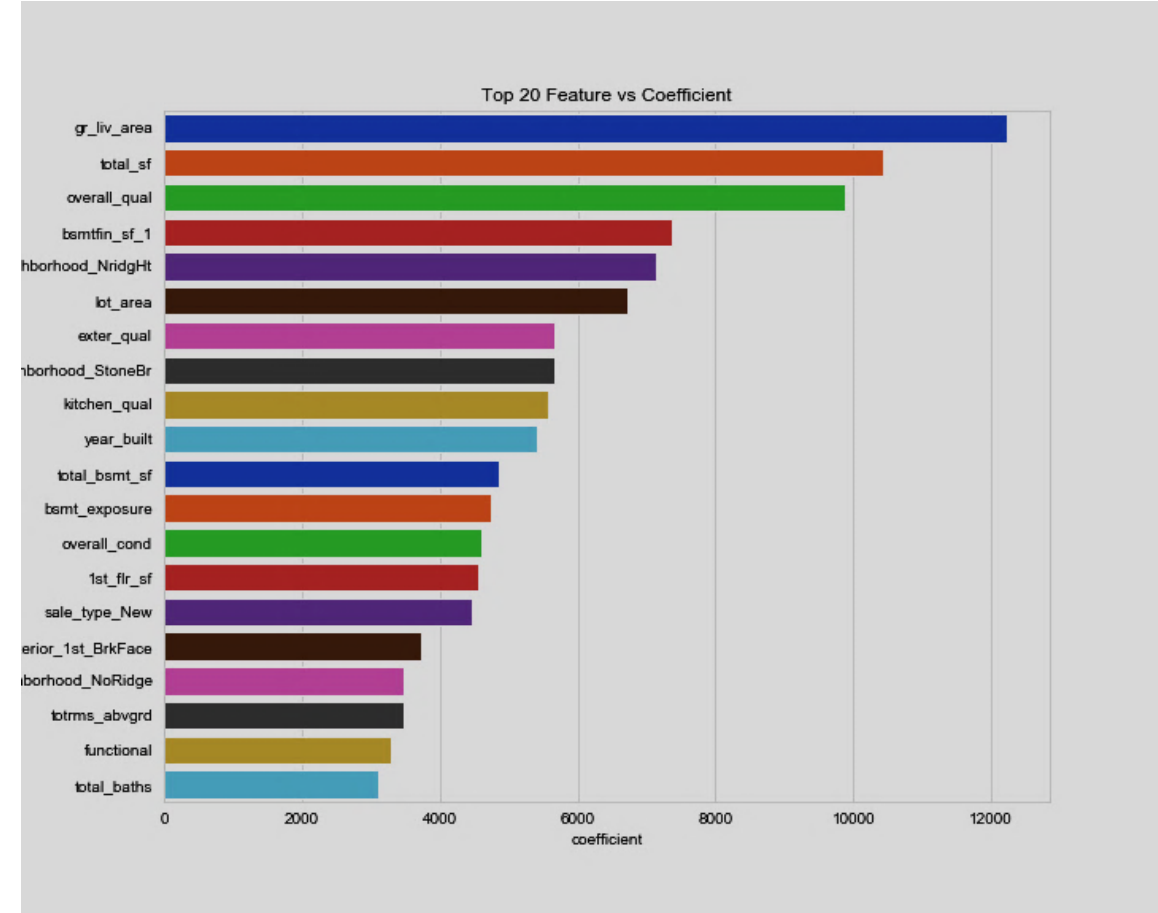
Validate with Kaggle test set

Insights from our model



Valuable features to increase housing pricing

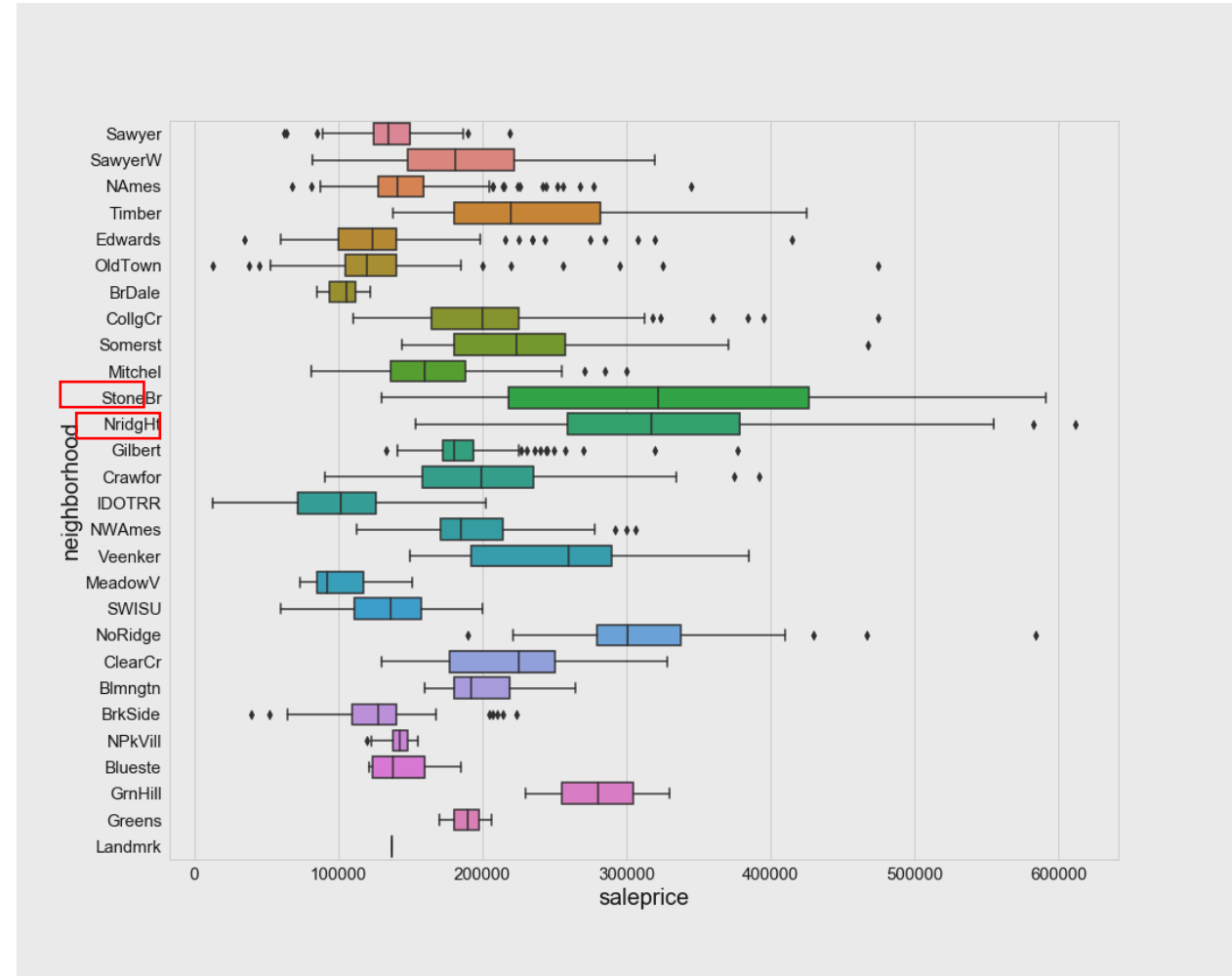
- Total Surface Area
- Overall quality of house
- Year Built of housing

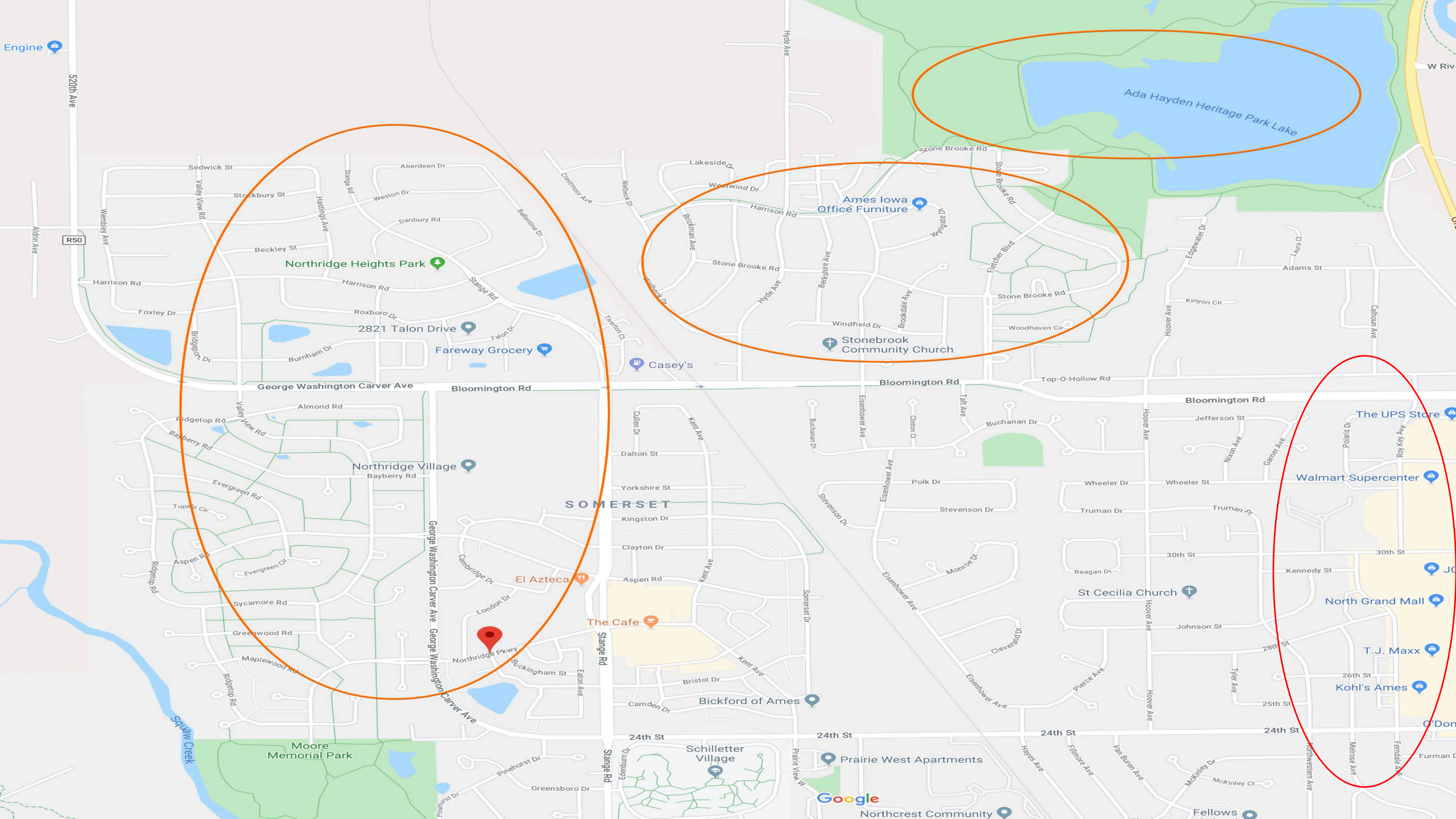


Prime Neighbourhood

North Ridge Heights

Stone Brook





Northridge Heights Park

2821 Talon Drive

Fareway Grocery

Casey's

Ames Iowa
Office Furniture

Stonebrook
Community Church

Ada Hayden Heritage Park Lake

George Washington Carver Ave

Bloomington Rd

Bloomington Rd

Bloomington Rd

Northridge Village

SOMERSET

El Azteca

The Cafe

Bickford of Ames

Schilleter
Village

Prairie West Apartments

Google

Northcrest Community

St Cecilia Church

Walmart Supercenter

North Grand Mall

T.J. Maxx

Kohl's Ames

The UPS Store

Recommendations

New Property

- Surface Area
- Neighborhood

Existing Property

- Housing Condition
- Housing Quality

