



HOUSING

PRICE PREDICTION MODELING

HOUSING PRICE
PREDICTION

PROJECT OVERVIEW

COLLECT DATA

King County housing data for over 20,000 properties will be collected using various online sources

CREATE MODEL

Using this data, a model will be created to accurately predict the property value of new houses on the market

AQUIRE CLIENTS

With this model in hand, the sales team will acquire clients who need this info, including investors and real estate agents

MONETIZE PLATFROM

Clients will purchase a subscription to use the model, or pay a fee for each singular prediction

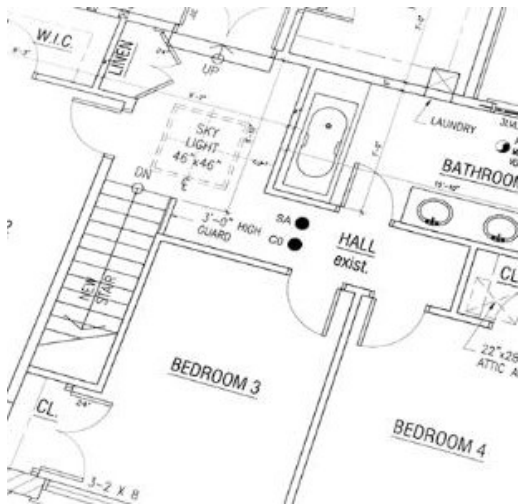


PREDICTIVE HOUSING PRICES

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DATASET FEATURES

WHAT'S INCLUDED IN THE DATA WE'VE COLLECTED?



01 SQUARE FOOTAGE
of living room, above ground, basement, and lot size



02 FEATURES
Including condition, view, grade, number of bedrooms, bathrooms, floors, and price



03 LOCATION
Using longitude, latitude, and the zip code of the property

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MODEL APPROACH



Multiple Linear Regression

FEATURE RANKING



Rank the predictors in order of their ability to accurately predict the price of a house

CHECK ACCURACY

Evaluate the equation with the chosen predictors for accuracy of predicting housing prices of new data introduced to the model

70

PREDICTORS

▼ 145

Start with 145 independent variables or predictors for the price of a house

REMOVE FEATURES

Remove predictors that do not have an impact and simply model to avoid overfitting to the original data

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FINAL MODEL

The final model is a regression equation, which includes 70 coefficients. The model uses the square footage of the property lot, the above ground space, and the basement, as well as the year the house was built, and the zip code of the property to predict the price.

+ **84% Accuracy**

Our final model has shown to predict the price of houses in the state of Washington, given the required predictors, with an accuracy of 84%

FINAL MODEL



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BUSINESS DECISIONS



BUSINESS DECISIONS



PREMIER SERVICES

Real estate agents and other real estate professionals can be charged a monthly fee for premier services such as a CRM system and personalized pages



ADVERTISEMENT SALES

Businesses such as interior designers, home organization retailers, general contractors can be charged for ad space to reach users who use our free tools



DATA SALES

Once enough consumers use our tools and our database grows, this information can be sold to stakeholders who are trying to identify trends in the market

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NEXT STEPS

WHERE SHOULD WE GO FROM HERE?

