HOUSING

PRICE PREDICTION MODELING

HOUSING PRICE
PREDICTION

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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
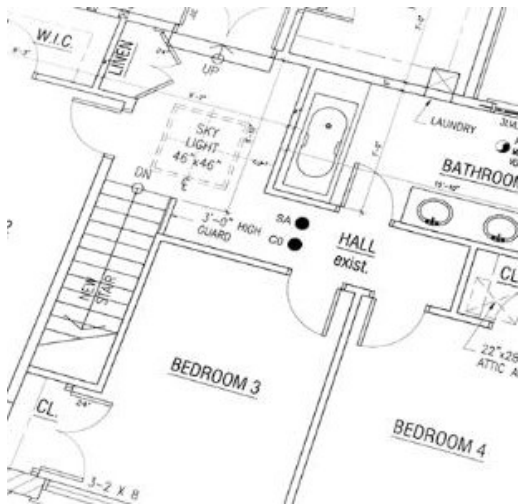
PREDICTIVE HOUSING PRICES

HOUSING PRICE PREDICTION

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.

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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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NEXT STEPS

WHERE SHOULD WE GO FROM HERE?

04

03

02

01

Step 1

Ask for client feedback to better improve the product for their needs

Step 2

Continuously evaluate the model when presenting new data to check for improvements

Step 3

Research new sources of data and predictors to improve the accuracy of the model

Step 4

Study the effectiveness of the model on new locations and update accordingly

FINAL STEP

Continually improve in an ever-changing business environment