Understanding House Prices in King County

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Overview

- We have been hired to create a model that will identify key features that help predict housing prices in King County, WA

Steps

1. Explore and clean the King County Dataset
2. Select which features to include in our model
3. Model our data

Model Information

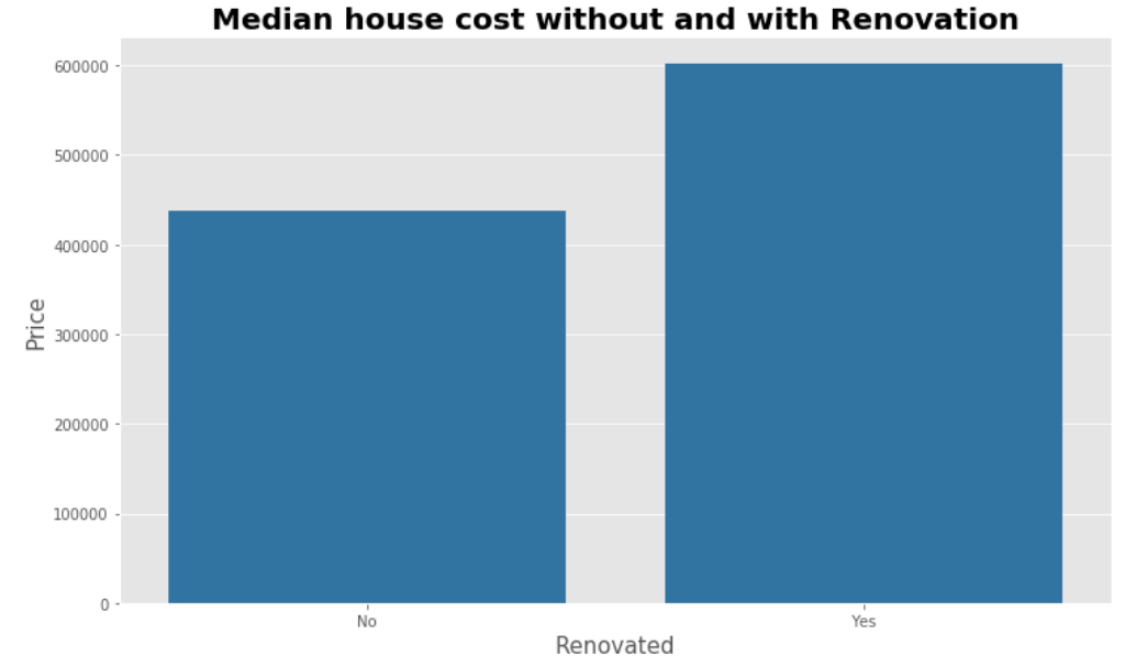
Model Accuracy

- 79%

Features Used in Model

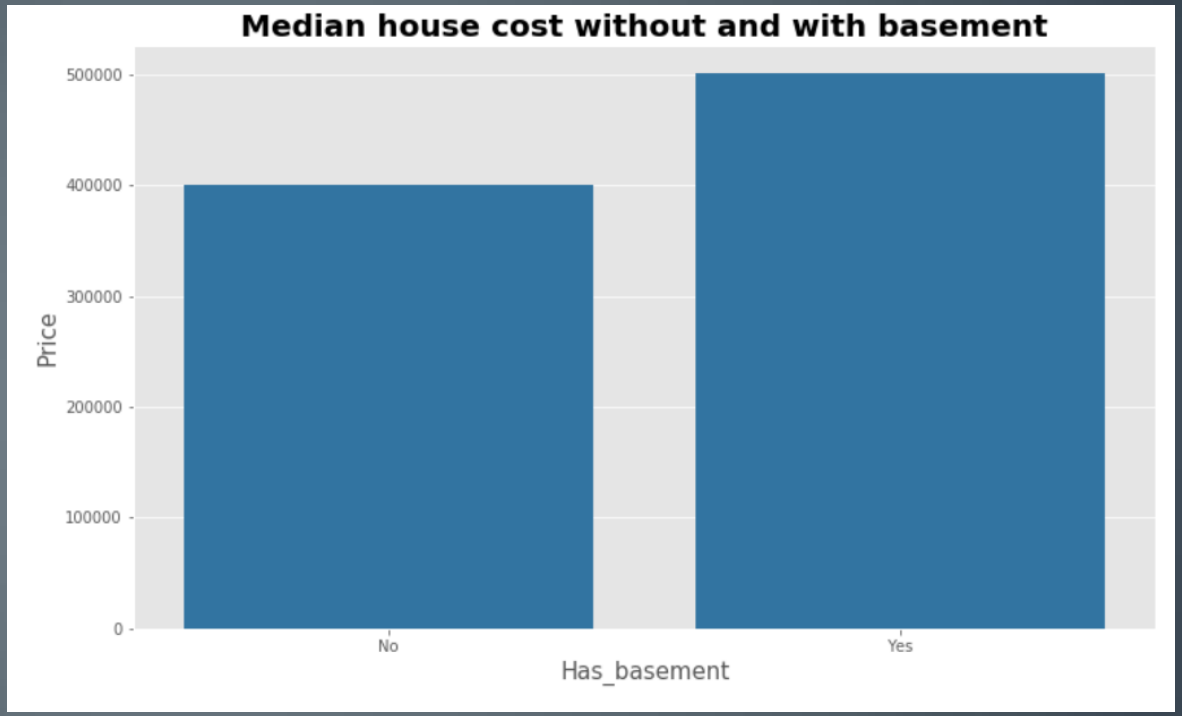
- Whether a house has a basement
- Whether a house was renovated
- The condition a house is in
- The view a house has
- The number of floors
- The grade of the house
- The amount of bedrooms
- The amount of bathrooms
- If the house is in a cheap or expensive zip code
- Sqft of each house
- Sqft of the lot for each house
- The year the house was built in
- Whether a house is on the waterfront

Significant Feature #1- Renovation



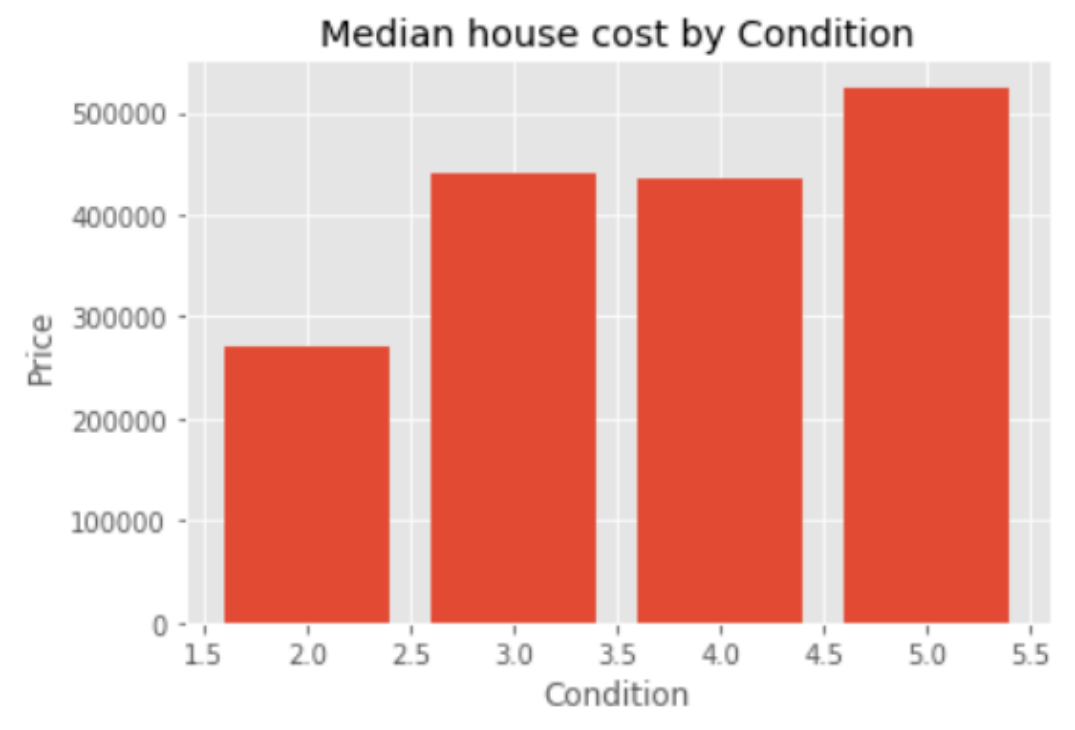
The value of a house rises 37% on average when a renovation is done

Significant Feature #2- Basement



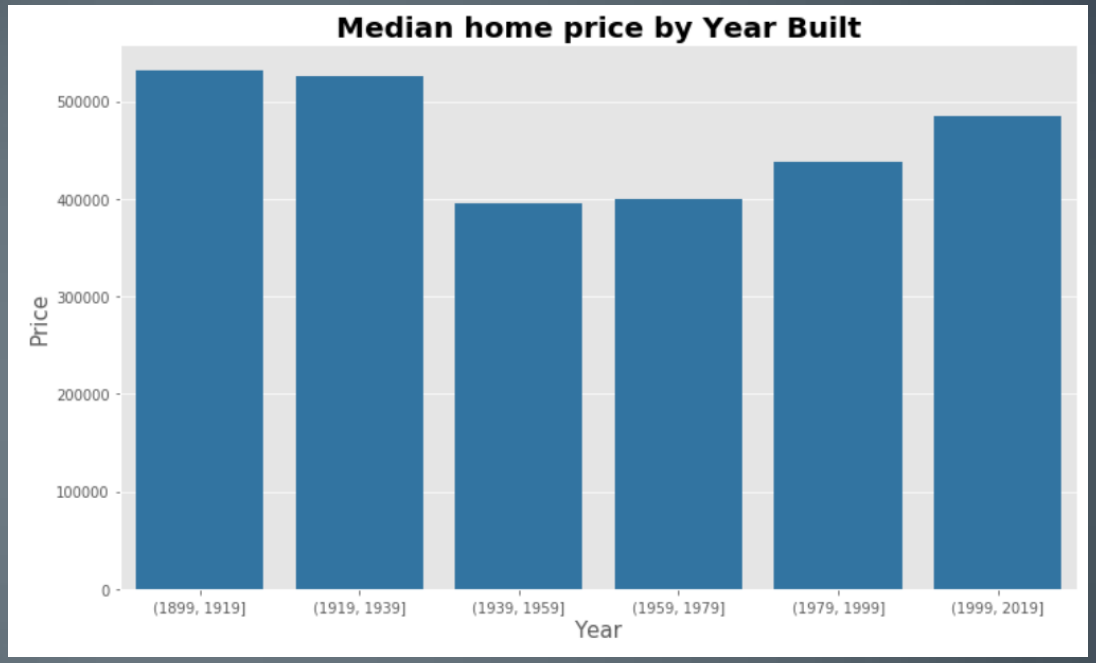
A house with a basement is worth 25% more than a house with no basement on average

Significant Feature #3- Condition



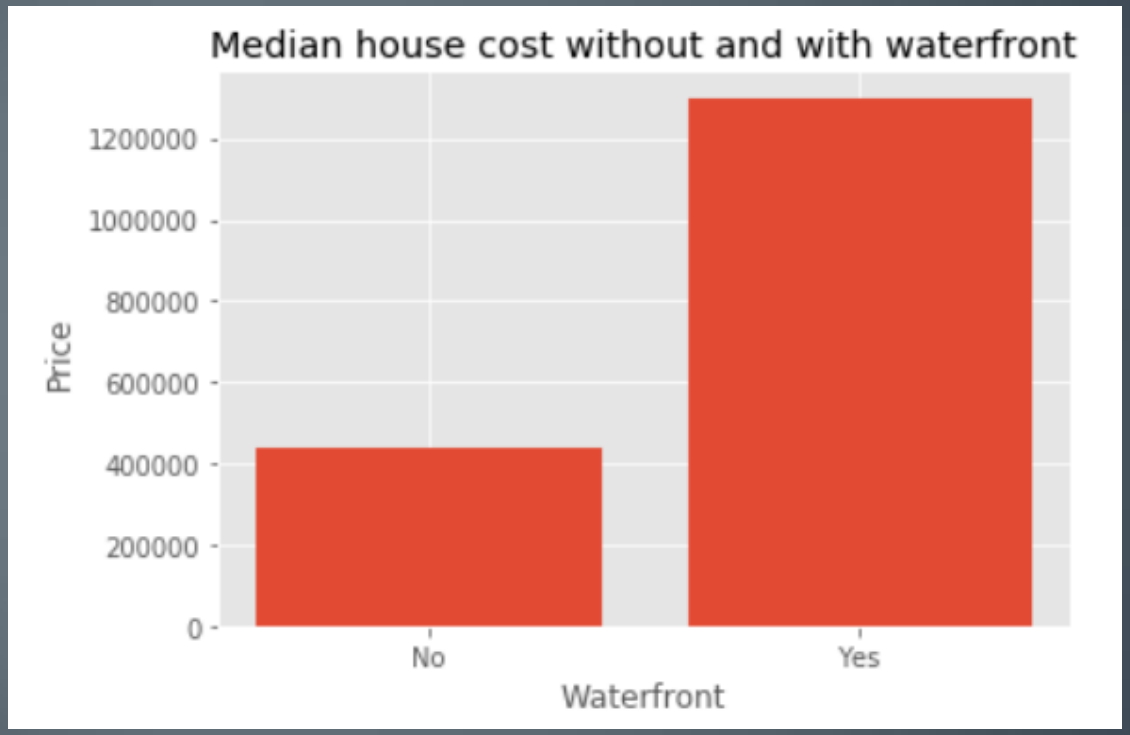
As the condition of a house increases, the price will rise

Significant Feature #4- Year Built



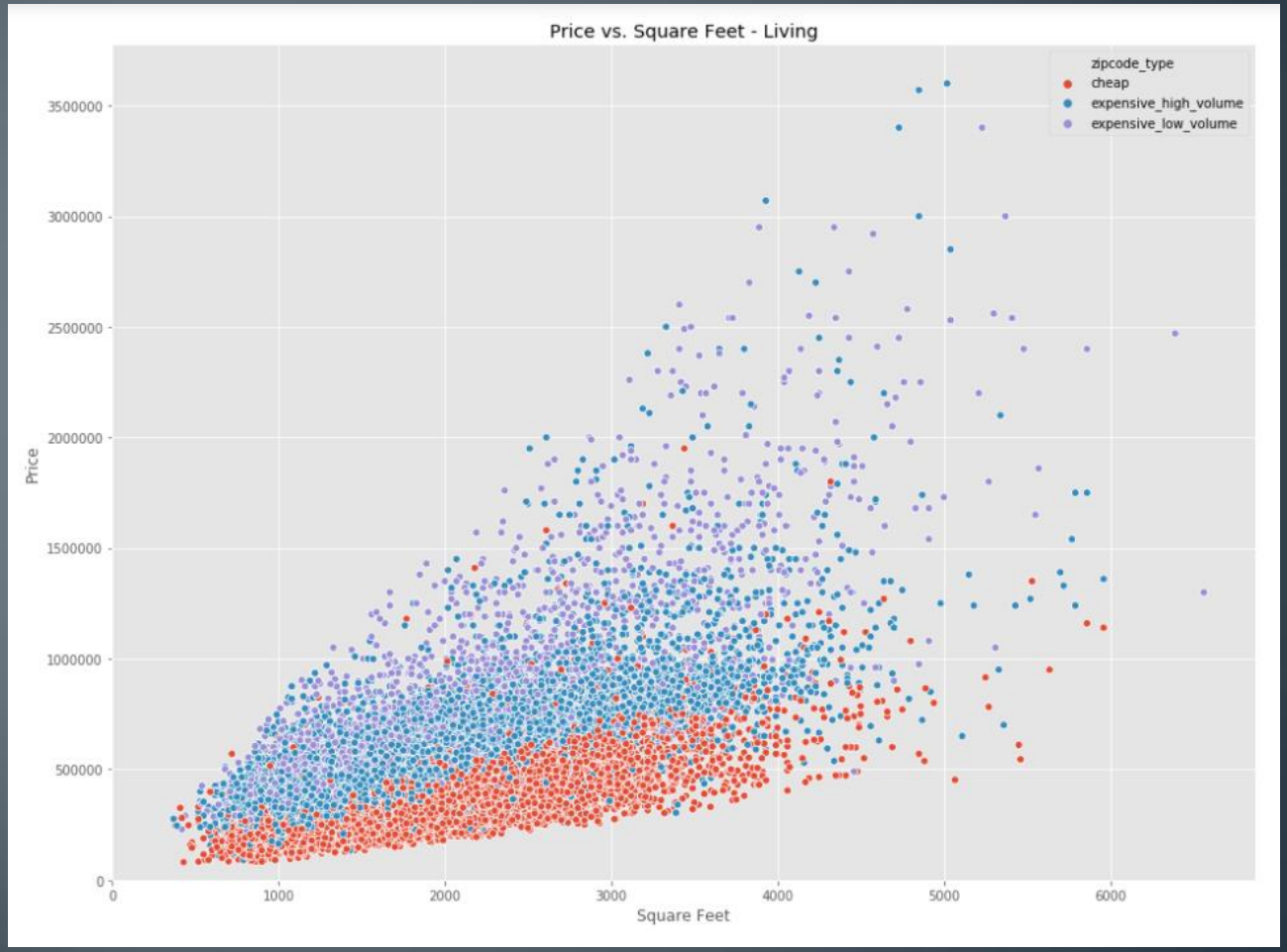
Surprisingly the most expensive houses tend to be the oldest ones. After 1939, the house prices were higher for newer homes

Significant Feature #5- Waterfront



Houses on the water are 196% more expensive than non-waterfront homes on average

Significant Feature #6- Sqft of House



Recommendations

Out of the 6 most significant features from our model, half are able to be changed by someone wanting to increase the value of their home

- Renovating their home
- Increasing the condition of the home
- Increasing the sqft of the home

Future Work

- Add more features such as quality of schools and walkability
- Building a model to predict price based on the inputs of various features
- Possibly have a bigger timeframe for the data

THANK YOU

- Questions?