

# King County Home Remodeling



Author: James Stipanowich  
Date: January 31, 2021



# Outline

- Overview/Business Problem
- Data
- Data Preparation
- Data Modeling
- Conclusions
- Recommendations for Further Analysis
- Contact Information



# Overview/Business Problem

Every year homes are bought and sold in the King County area of Washington State. I am acting with a real estate agency in King County to help homeowners improve their homes to put out on the market. I plan to come up with ideas for homeowners to renovate their homes to increase the worth of their homes to sell them for the highest monetary value possible.



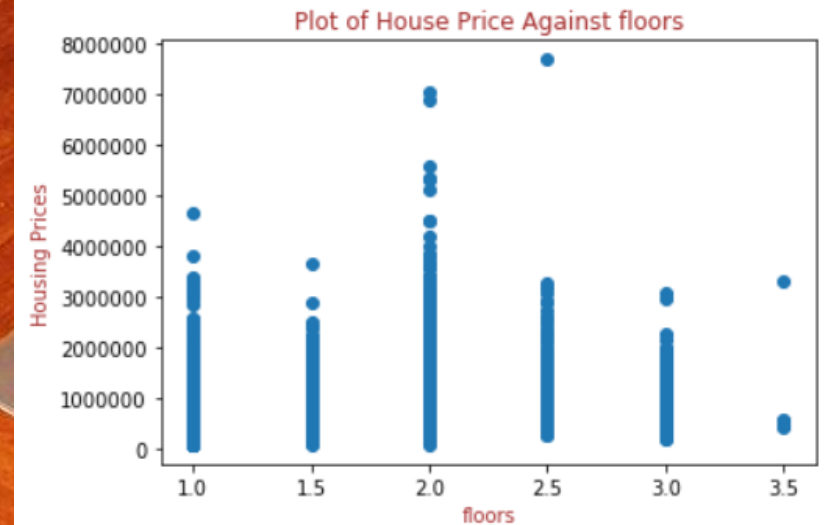
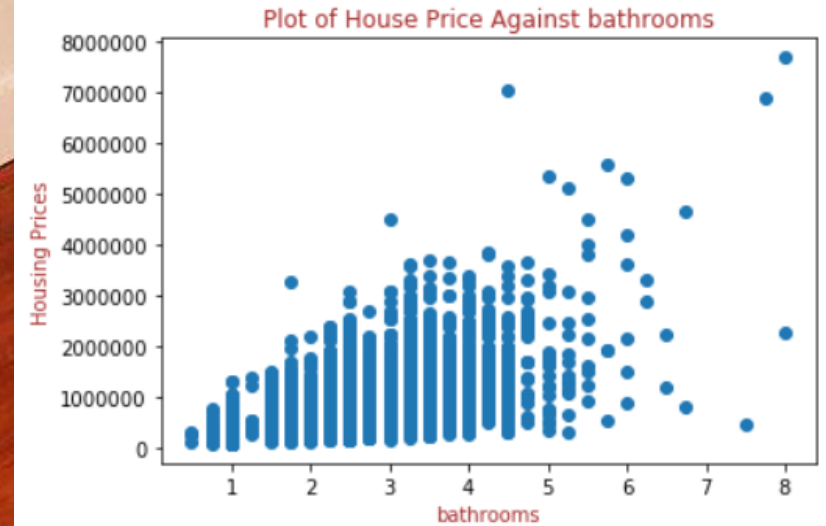
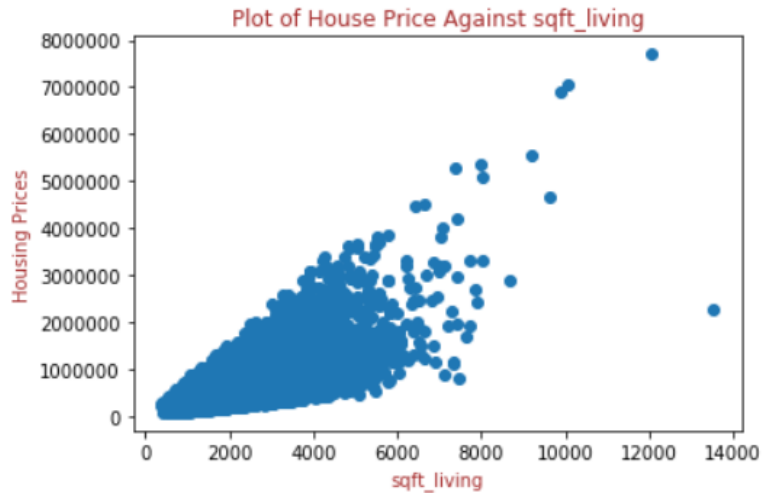
# Data

- This project uses the King County House Sales dataset. The dataset covers house sale prices between May 2014 and May 2015 in King County of Washington state.
- I decided what data from this dataset to use and how to use it.



# Data Preparation

- Created plots of house prices against features; analyzed outlier data





# Data Modeling

- **Model 1:**

- R2: 51%
- RMSE: \$258699.74
- Linear Coefficients:



Square footage: 283128.64

Bedrooms: -55432.12

Bathrooms: 8187.88

Floors: 529.48



# Data Modeling Continued

- **Model 2:**

- R2: 42%
- RMSE: \$169711.26
- Linear Coefficients:



Square footage: 154055.43

Bedrooms: -25333.13

Bathrooms: -107.36

Floors: 13827.04



# Conclusions

- Create homes with more square footage but not necessarily bedrooms
- Allow more variance in the number of bathrooms and number of floors



# Recommendations for Further Analysis

- Find a positive correlation with home sale price and bedrooms
- Include more specified square footage columns from the original King County House Sales dataset in future models



# Contact Information

- Email: [jmstipanowich@gmail.com](mailto:jmstipanowich@gmail.com)
- Github link:  
<https://github.com/jmstipanowich/KingCountyHousingRepo>
- Picture Sources:  
<https://www.racialequityalliance.org/jurisdictions/king-county-washington/>  
<https://www.homes.com/king-county-wa/homes-for-sale/>  
<https://www.zillow.com/king-county-wa/houses/>

Thank you!!