King County, WA Housing Sale Price Analysis

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CONTENTS

- Overview
- Data Understanding
- Exploring the Data
- 4 Modeling
- Regression Results
- 6 Recommendations
- 7 Limitations
- 8 Next Steps

OVERVIEW

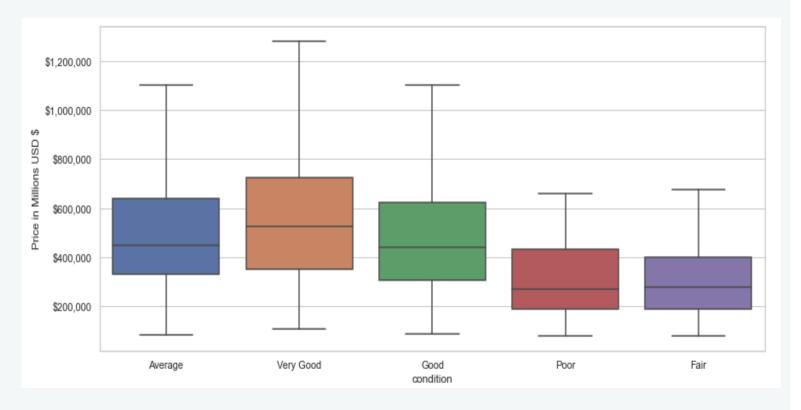
- **Business Problem:** King County Realtors need to provide their clients with guidance on how to improve the value of their homes prior to listing.
- Business Question: Which home renovations might increase the estimated value of their homes, and by what amount?

BUSINESS AND DATA UNDERSTANDING

- Stakeholder: King County Realtors
- 2014-2015 King County Housing Dataset
 - **price** sales price
 - **bedrooms** number of bedrooms
 - bathrooms number of bathrooms
 - **sqft_living** square footage of living space in the house
 - **sqft_lot** square footage of the lot
 - **floors** number of floors (levels) in house
 - waterfront whether the house is on a waterfront
 - **grade** overall grade of the house. Related to the construction and design of the house
 - yr_built year when the house was built
 - condition how good the overall condition of the house is. Related to maintenance of the house

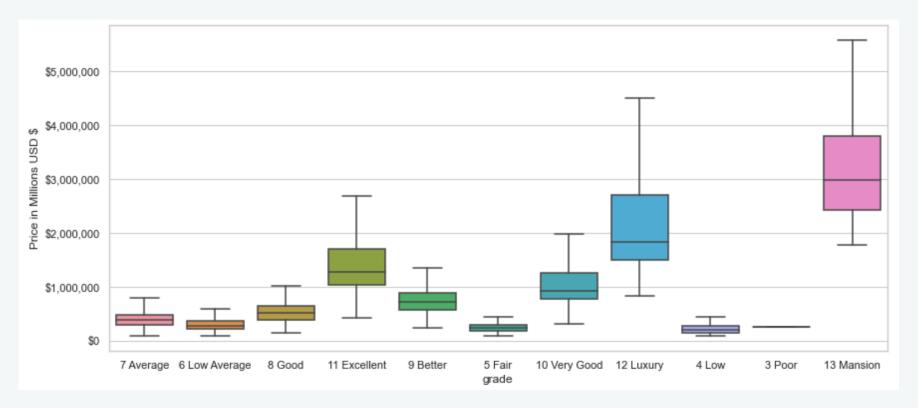
FEATURE: CONDITON

Better maintained homes result in a higher selling price



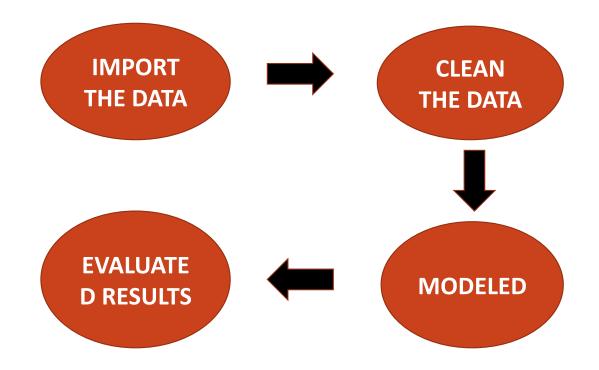
Want to ask for my money? Maintenance is **IMPORTANT**

FEATURE: GRADE



HIGH QUALITY MATERIALS = HIGHER SELLING PRICE

MODELING PROCESS



RESULTS AND RECOMMENDATIONS

| FEATURE | ADDING 1 UNIT | COEFFICIENT INTERPRETATION |
|-----------|-------------------------------------|-------------------------------|
| Grade | For every grade level increase | Price increases 19.3% |
| Condition | For every condition rating increase | Price increases 10.4% |
| Floor | For ever additional floor | Price increases 1.7% |

LIMITATIONS

- Our final model only explains 58% of the variance of the data.
- Not every feature of a home was included in the model, such as location, or school districts.

NEXT STEPS

 Collect more recent data to obtain more accurate figures with the current market of King County, WA.

 Add more features into our model to see how the model's accuracy is affected.

THANK YOU

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https://github.com/MHolthouser 1024/Phase-2-housing-project