King County, WA Housing Sale Price Analysis
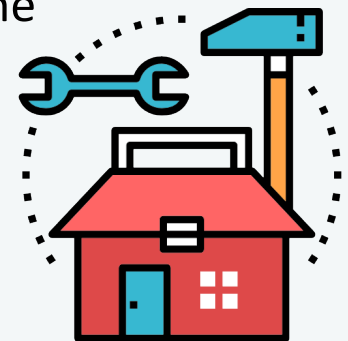
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OVERVIEW

- **Business Problem:** King County Realtors need to provide their clients with guidance on how to improve the value of their homes prior to listing.

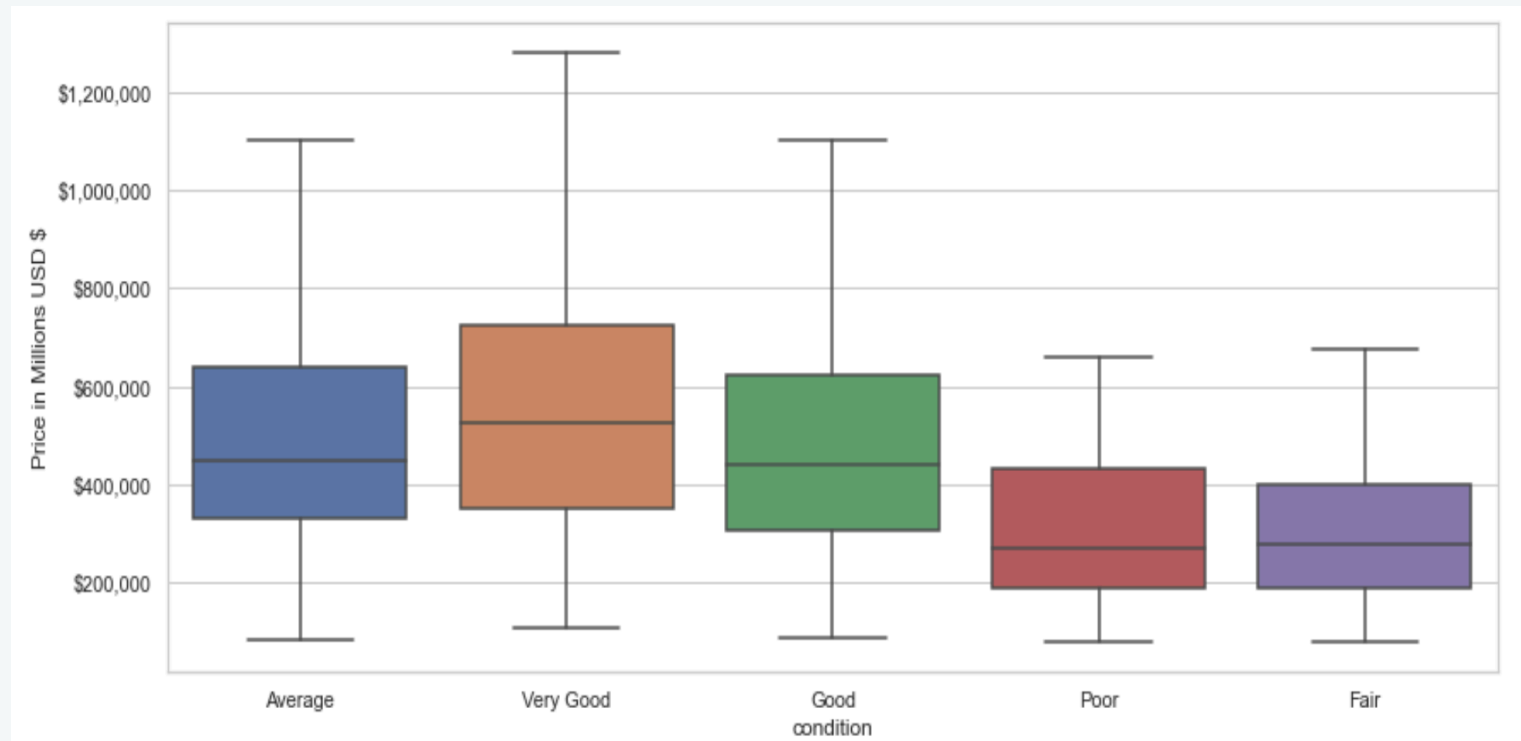- **Business Question:** Which home renovations might increase the estimated value of their homes, and by what amount?

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 footbage of living space in the home
- `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 house was built
- `condition` - How good the overall condition of the house is. Related to maintenance of house
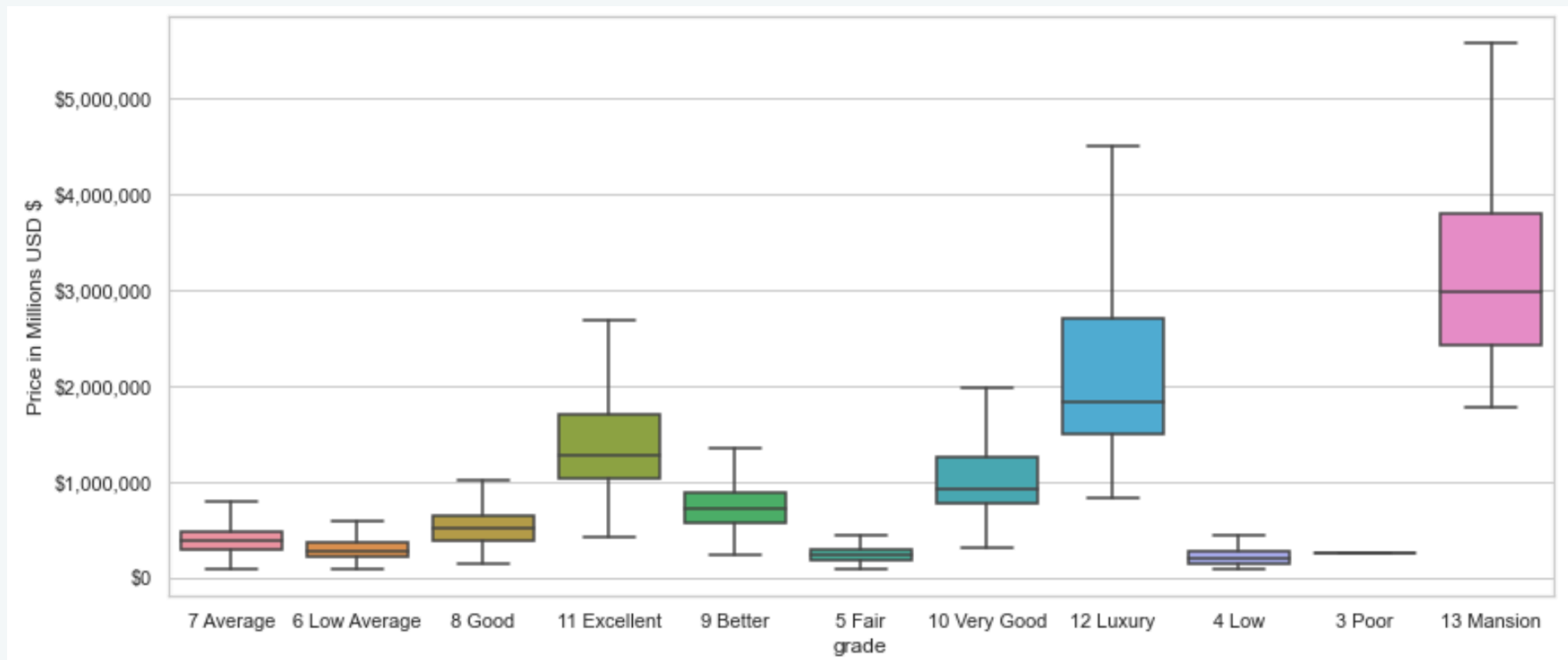
FEATURE: CONDITON

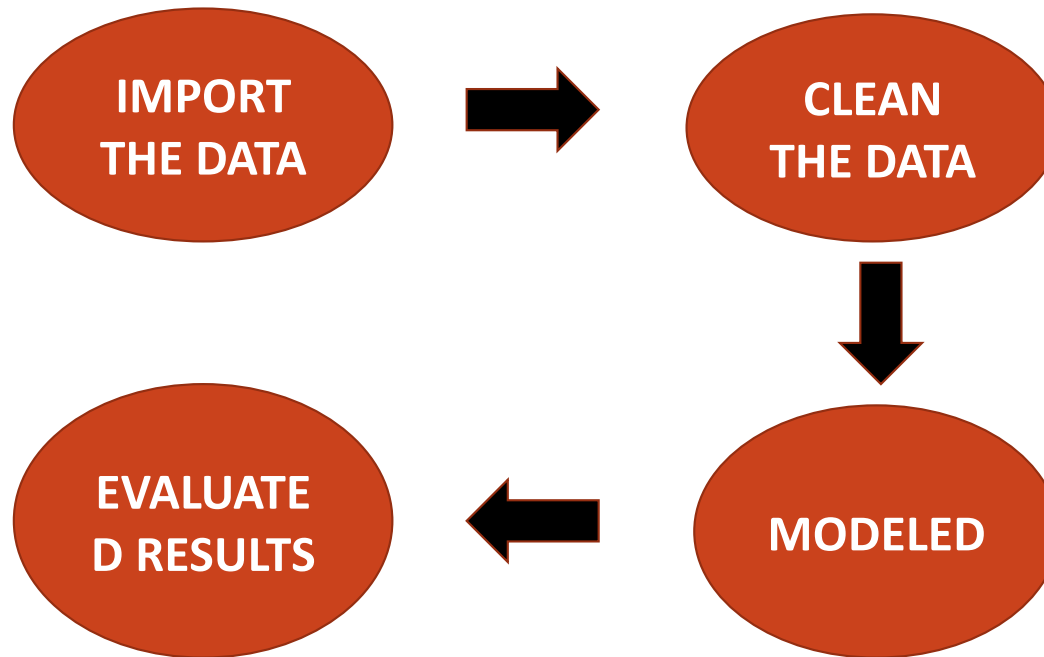Better maintained homes result in a higher selling price

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**