



# KING COUNTY HOUSES BUSINESS PROPOSAL

# PROJECT

*Presented by: Group 15*



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# PROJECT OVERVIEW



## BUSINESS PROPOSAL

This team aims to provide actionable insights to a leading real estate firm in King County, Washington. We focus on refining property appraisals by analyzing data to equip the firm with valuable resources for informed decision-making in the dynamic real estate market.



## OUR MISSION

We aim to equip the firm with valuable resources for informed decision-making in the dynamic real estate market, covering aspects like buying, selling, and renovations. By establishing a systematic methodology to optimize clients' return on investment amid the complexities of the local real estate landscape.



# THE DATA

Table 1

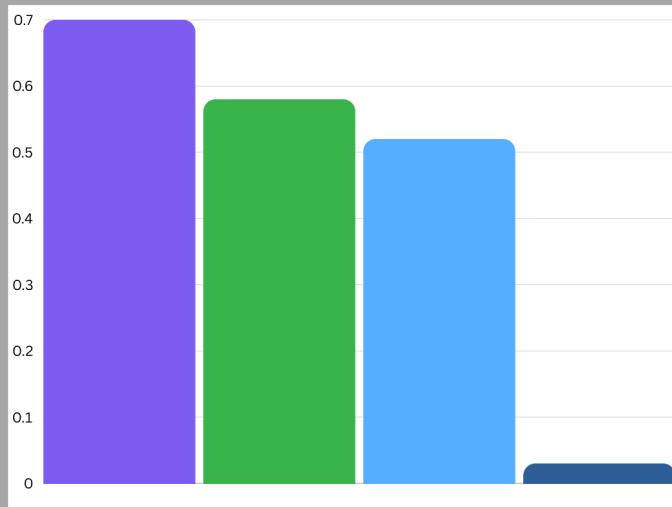
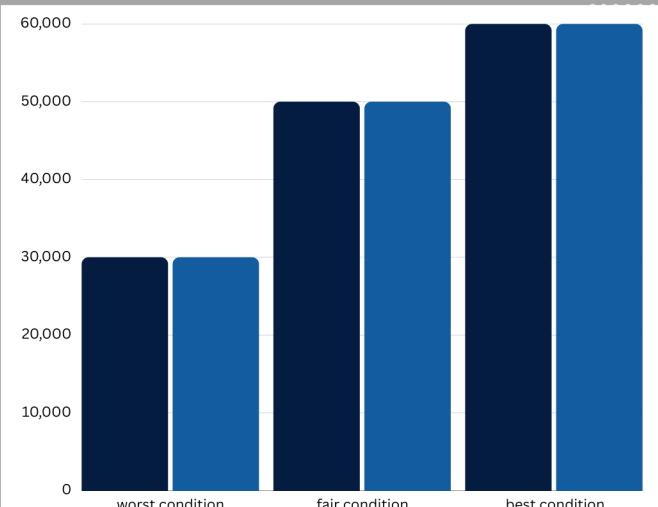


Table 2



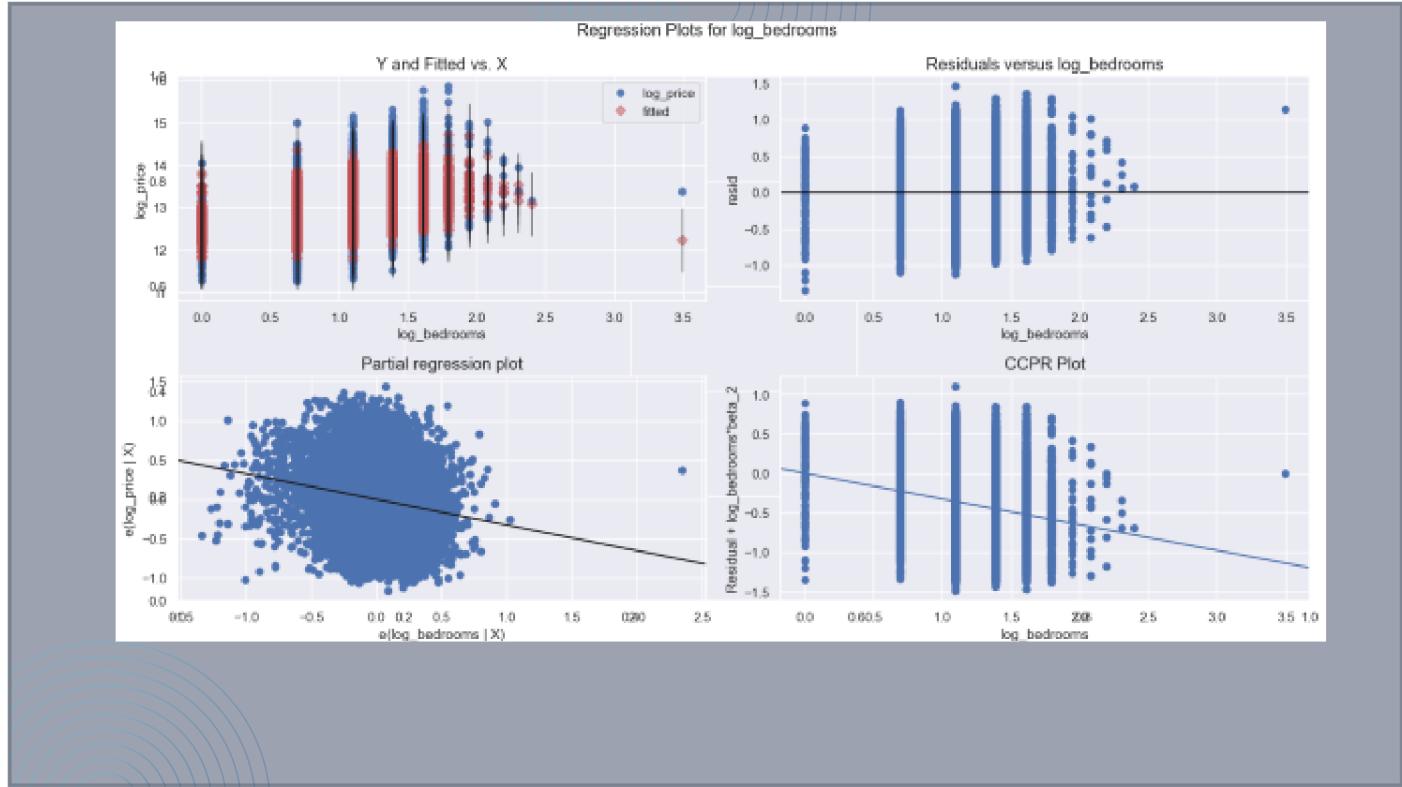
- Our analysis demonstrates in Table 1 a clear link between specific property features, including bedrooms, bathrooms, and square-foot living, and their impact on market value.
- Also, the data analyses in Table 2 reveal the overall condition plays a significant role in determining property value.

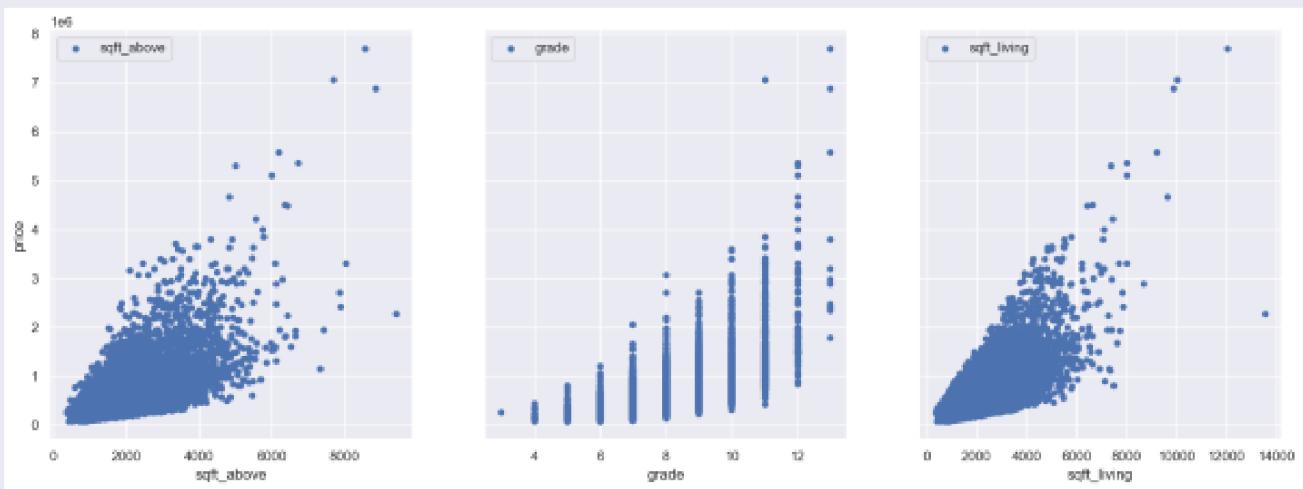


## DATA VISUALIZING

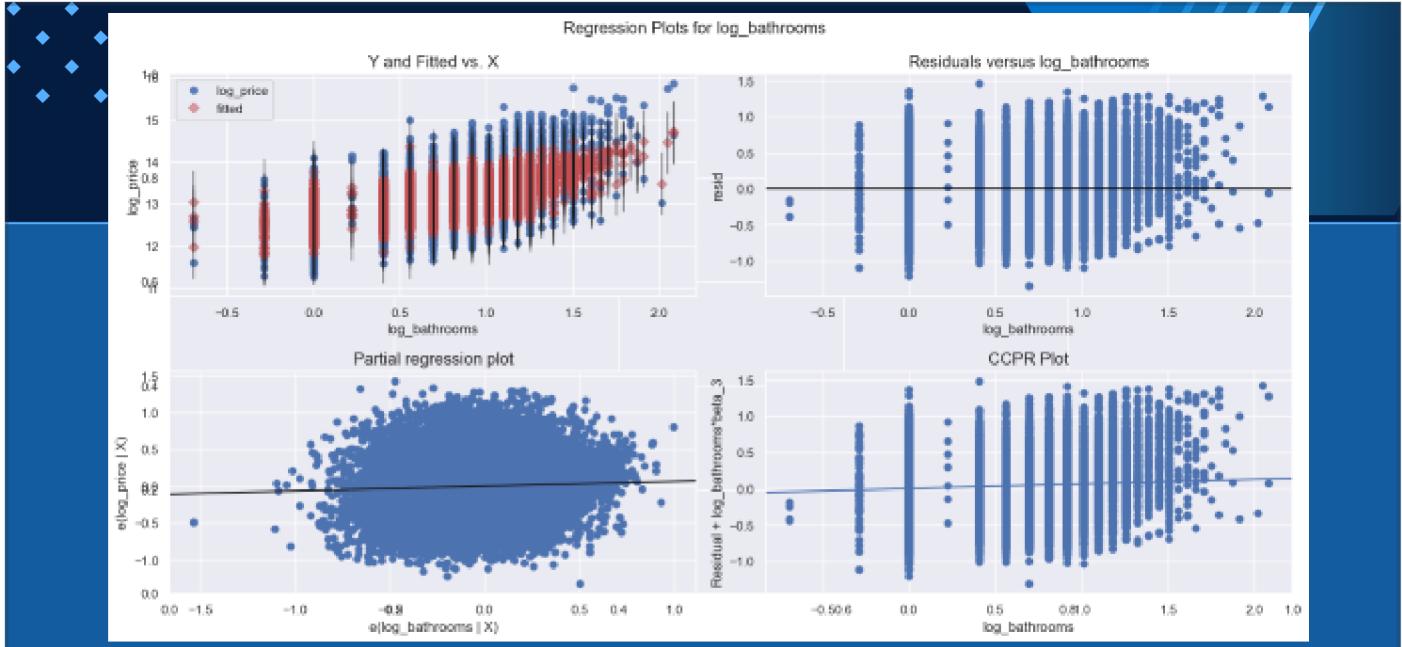
### Growth patterns

We can further visualize how other factors partterns affect prices in the diagrams that are following.





- Sqft\_living seems to be a good predictor because it has the most linear relationship with price.
- Sqft\_ above also has a linear relationship, but there is more variance than with sqft\_living.
- Grade has the least linear-looking relationship. There is a lot of variance as well.



Overall, these plots suggest that the model is doing a decent job of predicting log\_bathrooms with a slight deviation from the ideal patterns, thus giving an ideal pattern to explore other ideal forms of data.

# CONCLUSION

\* For each increase of 1% in sqft\_living, we see an associated increase of about 0.84% in price, therefore we conclude square feet living has a positive effect on price

\* The coefficient for "bedrooms" suggests a negative relationship with the price, indicating that as the number of bedrooms increases, price tends to decrease. For each additional bedroom, holding all other variables constant, the log-transformed price decreases by approximately 0.158 units.

\* The coefficient for "bathrooms" suggests a positive relationship with the price, indicating that as the number of bathrooms increases, price tends to increase. As per the log model, for each additional bathroom, holding all other variables constant, the price increases by approximately 0.0352 units

\* On the other hand, house condition should be given first priority as in the context of our analysis, house condition correlation holds the strongest connection compared to the other features of interest. And the best fetching high value

# RECOMMENDATIONS

we suggest the following actions based on the insights gained from our analysis



Condition: In many cases, the condition of the house is a major factor influencing price. This includes repairs, painting, landscaping, and overall presentation. Consider how improvements in these areas could increase the home's value. dimentum..



\* Bathrooms and square footage: These are often significant factors for buyers. Highlight the number of bathrooms and the total square footage in your listing and marketing materials.  
\* Bedrooms have a negative effect and this might as result market trends and changing lifestyle.



Additional features: Depending on the model and local market, other features like waterfront and grade seems to have a good price value



## NEXT STEP:

**potential areas for future research or improvements in our project.**

Research on the reasons as to why number of bedrooms affect the price negatively

