Analysing the Housing Market in King County, WA

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Summary

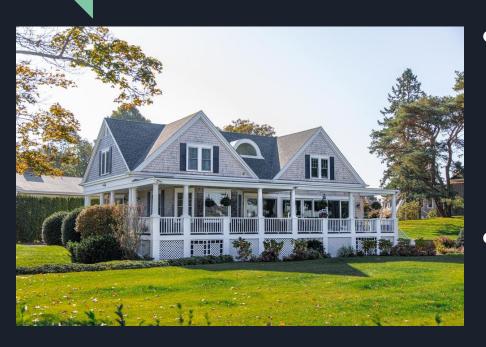
A thorough analysis of the housing data provided (involving exploratory data analysis, data cleaning, predictive model building, and evaluation) informs a prospective house buyer or real estate agent the following:

- 1. King County grade (1-13) and interior living space square footage are <u>the most important</u> and valuable features to consider
- 2. Despite a common way people gauge a house's value, the *year the house was built* poorly correlates with price
- 3. The square footage of the lot is not a strong predictor of the house's price

Outline

- Business Problem
- Data and Methods
- Results
- Conclusions and Recommendations
- Limitations and Next Steps

Business Problem

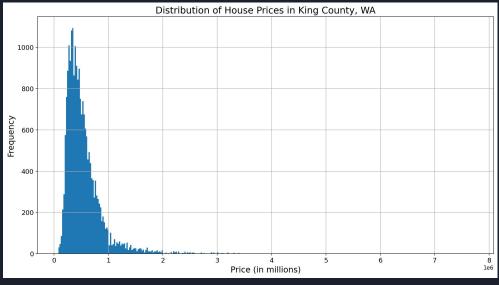


- Franklin Bluth wishes to become the best real estate agent in King County and gain a deep understanding of the housing market
- Predictive model will help him get an advantage over his peers and facilitate his job

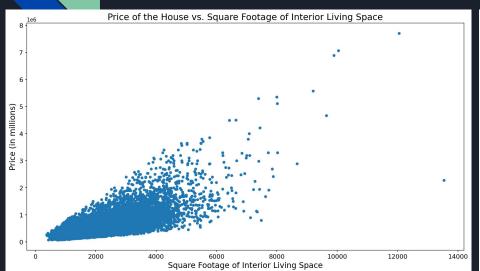
Data and Methods

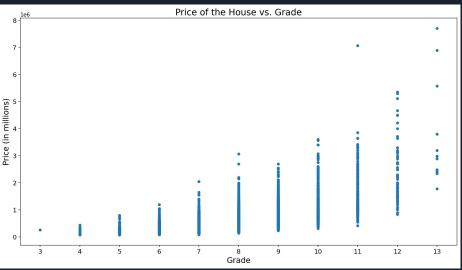
- Data provided by King County, WA includes house sales between May 2014 and May 2015
- Contains general information for over 21K sales such as sale price, number of bedrooms, square footage, etc.
- The main methods used in this project were exploratory data analysis and multiple linear regression





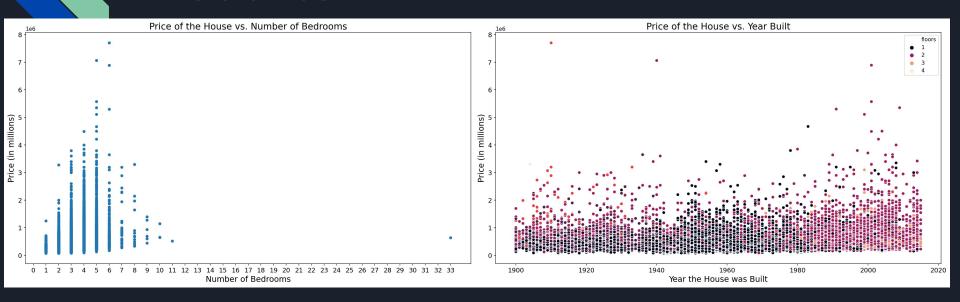
Results





- A house's sale price increases gradually as square footage increases
- Similarly, a house's sale price tends to increase as the King County grade increases

Results

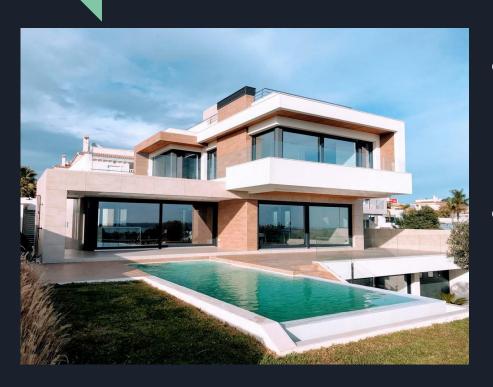


- Sale price doesn't always increase as number of bedrooms increases
- Newer house doesn't necessarily mean more expensive

Conclusions and Recommendations

- Final regression model suggests that an increase in grade by 1 is associated with a 16.79% increase in price!
- A one percent increase in interior living space square footage is associated with a 0.32% increase in price
- Bigger houses don't necessarily mean they're more expensive!

Future Work



- Besides internal features, a house's value is commonly gauged by its location!
- Research if house prices
 near Seattle are significantly
 higher than in the outskirts

Thank You!

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