

Predicting Housing Prices in King County, WA

Module 1 Project

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Objective:

Predict housing prices and impacting variables in King County, WA.

Using:

Information on over 21,000 house sales in 2014 and 2015.

This dataset looks at:

- Size
- Location
- Neighboring properties
- Waterfront
- Views (by prospective buyers)
- Dates of construction, renovation

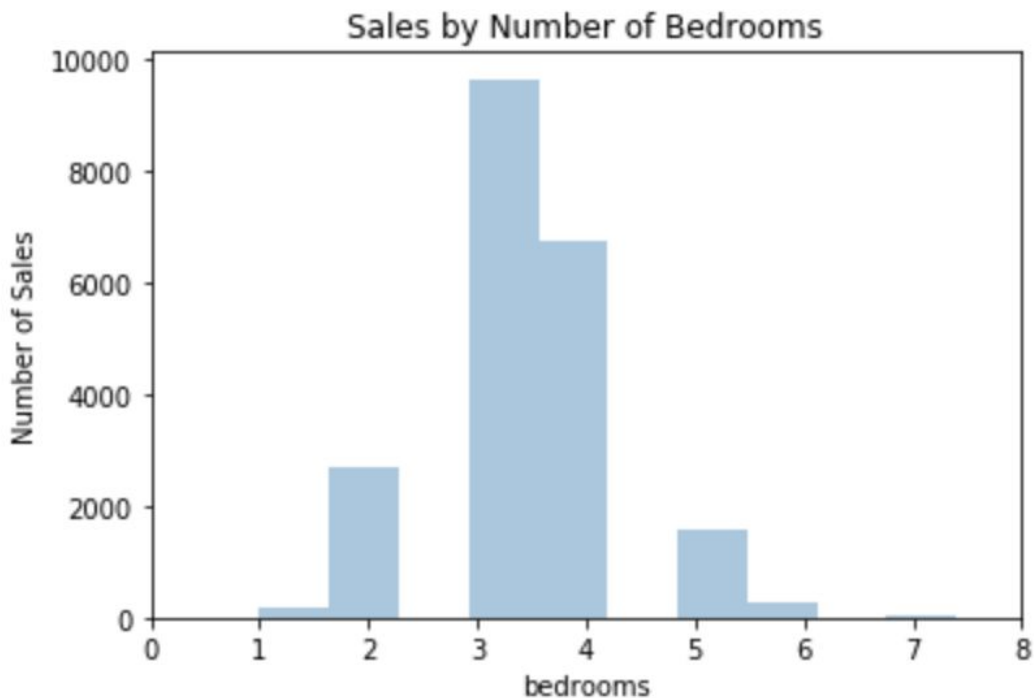
Methodology



- First: cleaning
- Next: exploratory questions
- Build a model to predict (with 79% accuracy) the sales price of a home, given these conditions

What's the most common size of house sold?

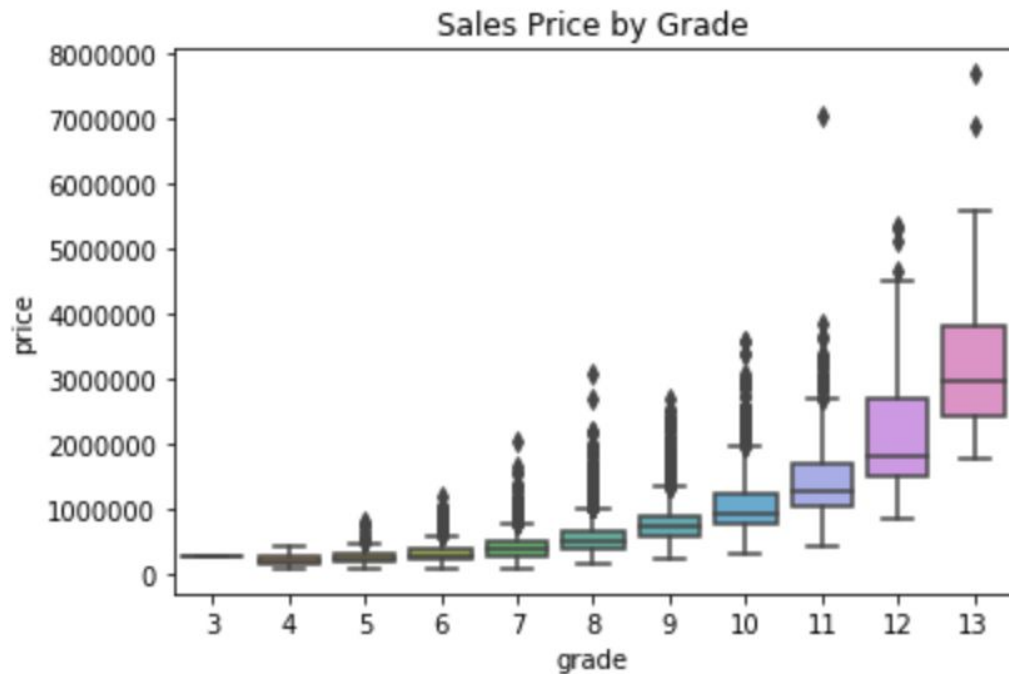
3 bedrooms, followed by 4



Does grade impact sales price?

Yes, absolutely!

Especially grade 10 and above.



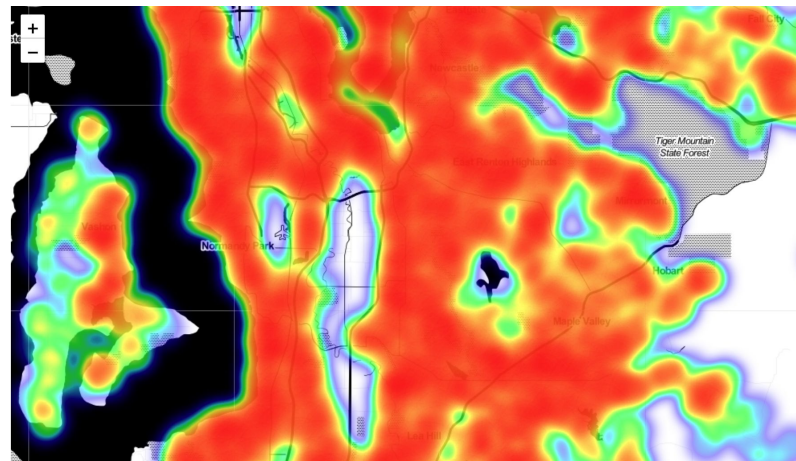
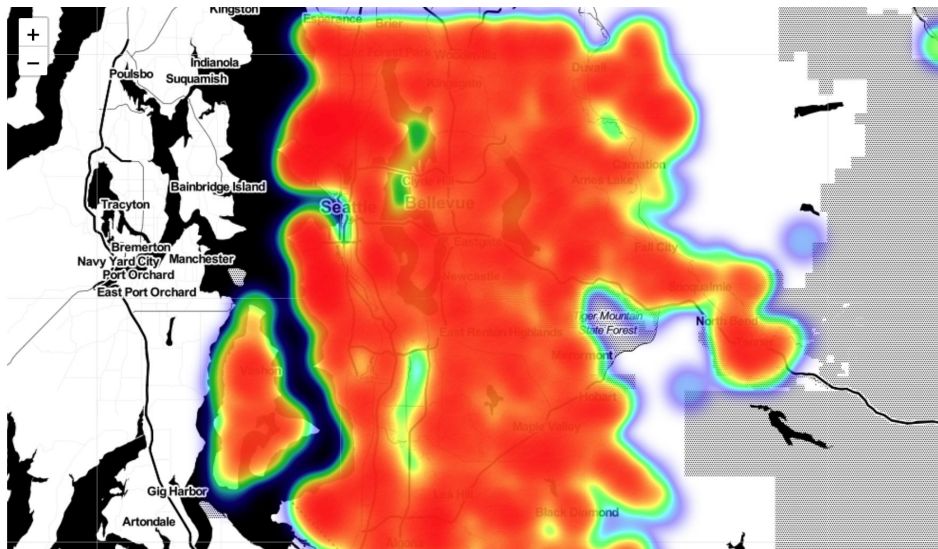
What about year renovated?

Again yes!

Higher number of very expensive (>1 M) sales the more recent the renovation.



What does sales price look like, visualized?



What factors are the most important?

Quality, Size and Location!

- Grade
- Sq feet of living space
- Sq feet of living space of surrounding properties
- Bathrooms
- Latitude



Future Work

Future work for analysis:

- Explore how the timing (month or week of year) impacts the sales price
- Change heatmap to reflect price and not just sales density
- Look at average (or median) sales price by year built (I would expect this to be high for very old homes and then dip in the middle of the range, increase for more recent builds)

Future work for model:

- Split data into test/train sets to confirm model fit
- Explore impact of standardizing data

Thank you!

Appendix:

[Image on cover slide](#)

Slide 3 image: [Google Maps](#)

Slide 7 [image credit](#)