King County House Price Analysis

Torben Holst - 06/03/2020

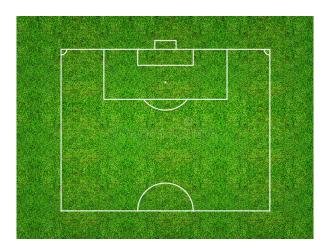


Agenda

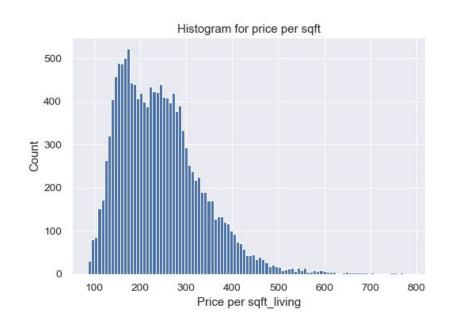
- 1. Defining the Target
- 2. Data Insights
- 3. Predicting Model
- 4. Recommendations
- 5. Future Work

Target: How to max the sales price in KC

- Target group: A "normal" family who want move:
 - a. 1.5 Mio USD
 - b. limit in living space: 6.000 sqft
 - c. limit in lot space: 25.000 sqft
 - d. minimum 3 bedrooms
 - e. minimum 1.5 bathrooms

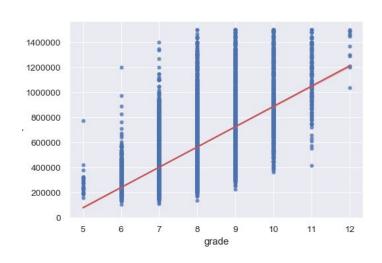


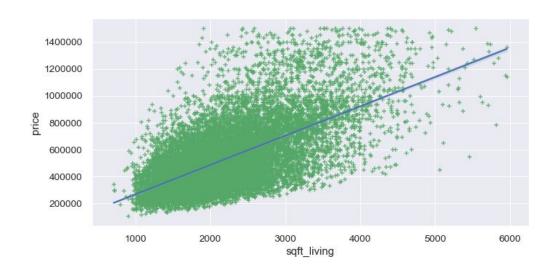
Data Insights



- Mean price: 517.929 \$
- Mean price per sqft (living space): 238 \$/sqft

Data Insights



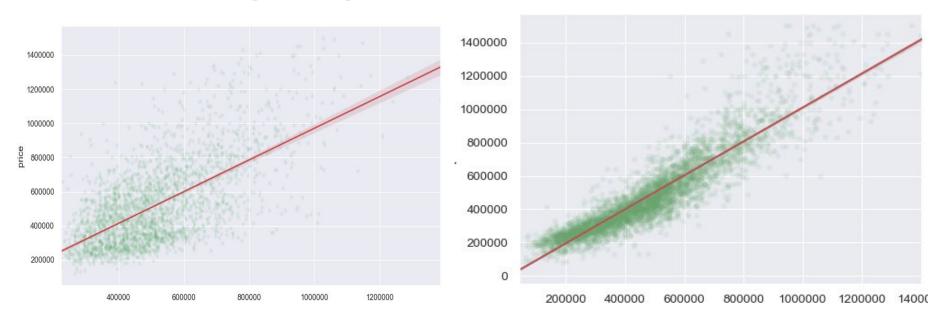


Modell: Price Prediction

- factors with a big impact on house prices
 - KC Residential Building Grad
 - Size of the living area
 - Location
- Using a multivariate linear regression
- Model is able to predict with an average error of 20%



Modell for price prediction: First vs. Best

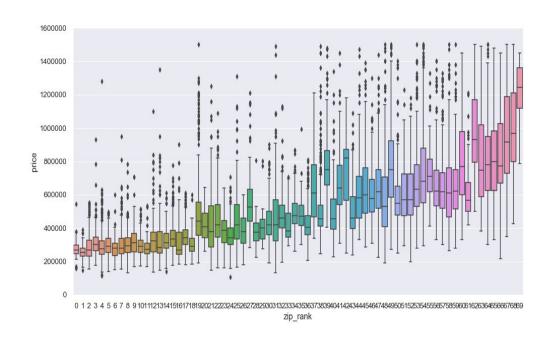


Recommendations

if you want to sell your house:

 be located in a good area (is a factor but not influencable by yourself in such a situaton

... so what else:



Recommendation



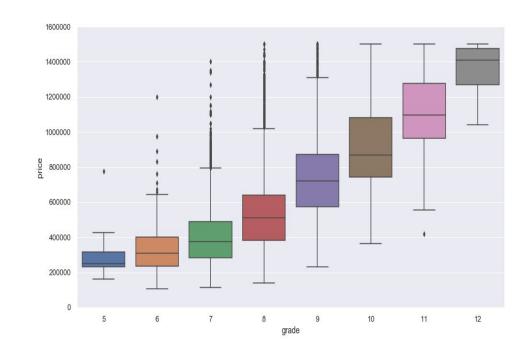
Try to improve your grade score:

grade is influenced by:

- → size: no easy adjustment
- → floors: no easy adjustment
- → view: not improvable

but also:

- → # of bathrooms
- → construction year



Future Work

- Putting more effort into the effect of location
- Adding external data to the model like crime statistics, access to health- and childcare etc.
- Further improvement of the prediction model
- Get more recent data or compare datasets from different times to evaluate change

Thank you for your Attention!