



House Prices in King County - Recommendations

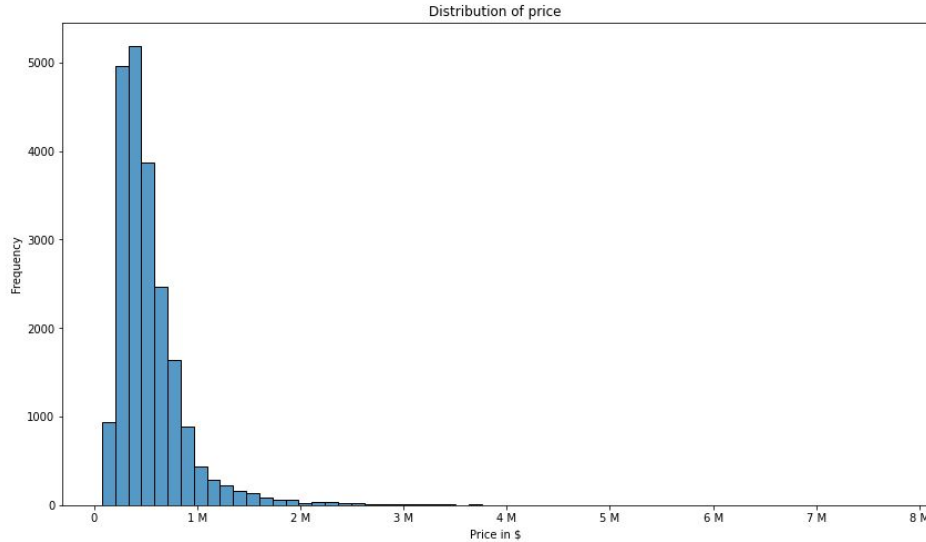
A guide by Christine Merkel

What is my Stakeholder looking for?

- investment in poor neighborhood
- buying and selling: costs back and little profit
- social responsibility

About the Data:

- Houses sold in King County:
Washington in May 2014 - May 2015
- 21597 observations



- Average price a house was sold: 540,296\$
- Lowest price a house was sold: 78K\$
- Highest price a house was sold: 7,7M\$

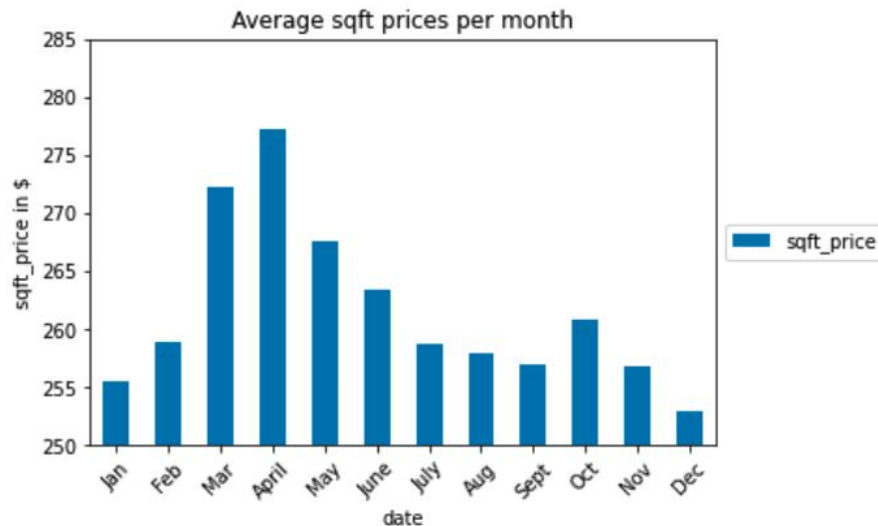
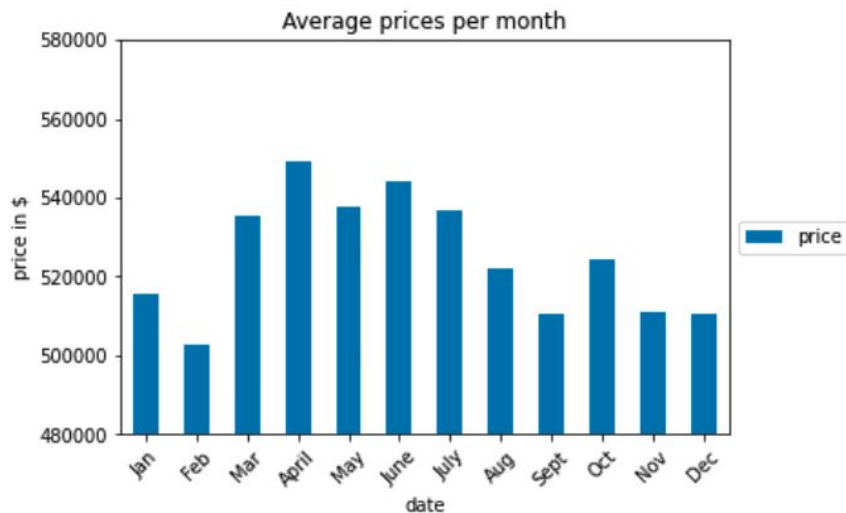
Task:

- Dataset has 20 features:
grade, waterfront, views, bathrooms, condition , location,
- Find the best features to predict the price
- Predict the best time and location to buy
A house that suits the interest of my stakeholder

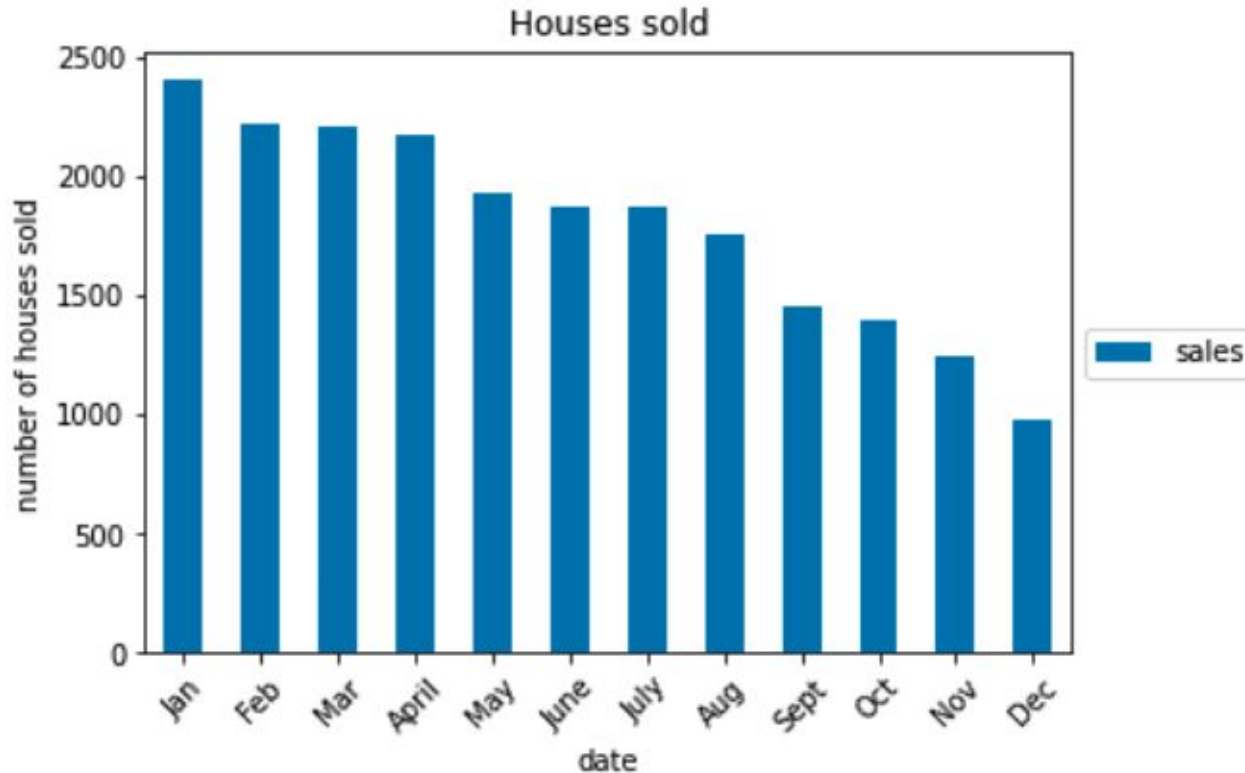
Hypothesis 1:

Price depends on seasons - Summer best time to buy

Average prices and sqft prices get lower towards the end of year



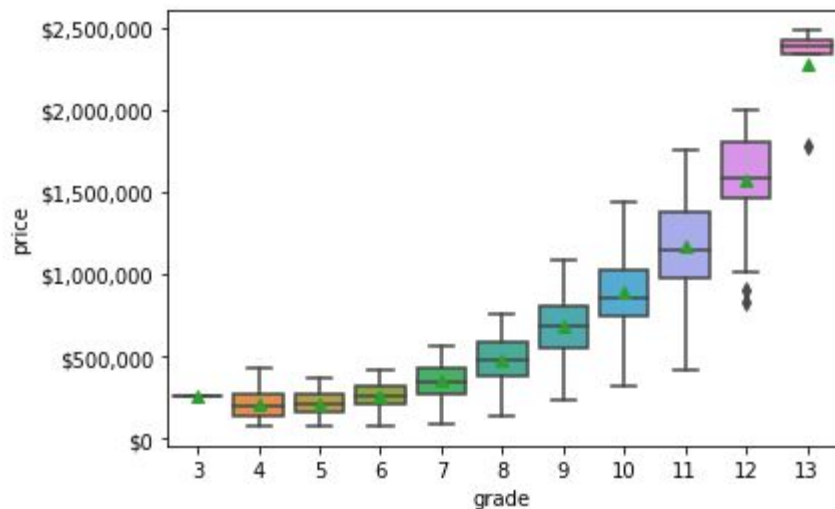
In december fewest house sales



Hypothesis 2:

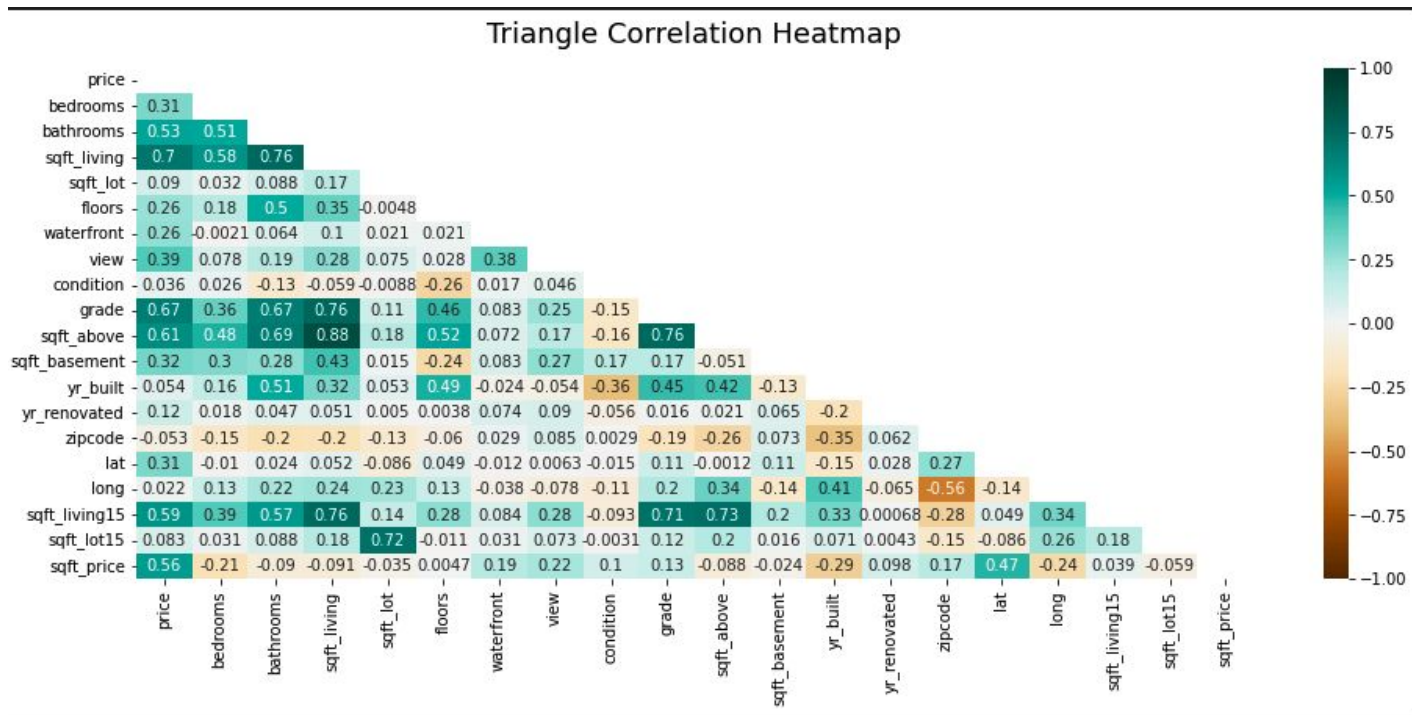
High grade houses are sold at higher price

Linear relationship between grade and price



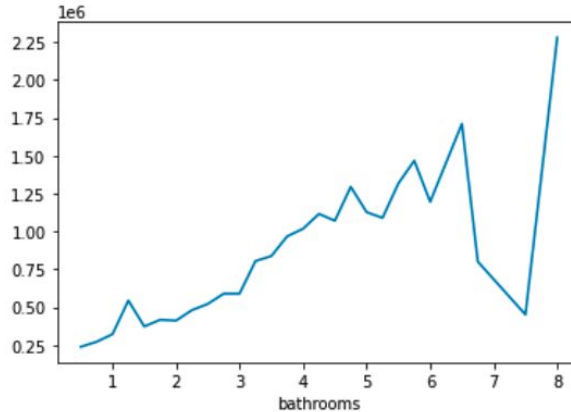
- *grade* explains ~62 % of price
- Every extra point in grade costs 170 K\$

Price depends on more features:



bathrooms, sqft_living15, Sqft_living, grade

Houses with fewer bathrooms are cheaper in average



Bathroom, sqft_living, sqft_living15 and grade explain ~66% of price

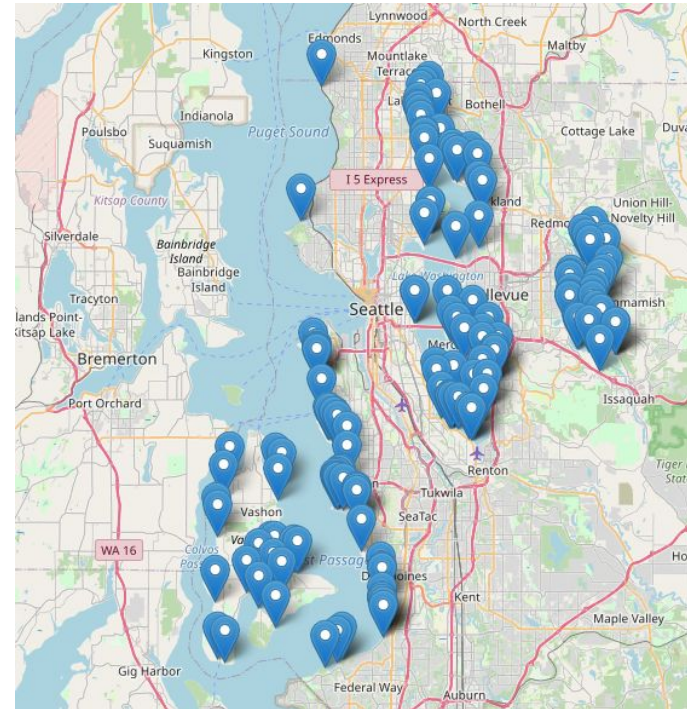
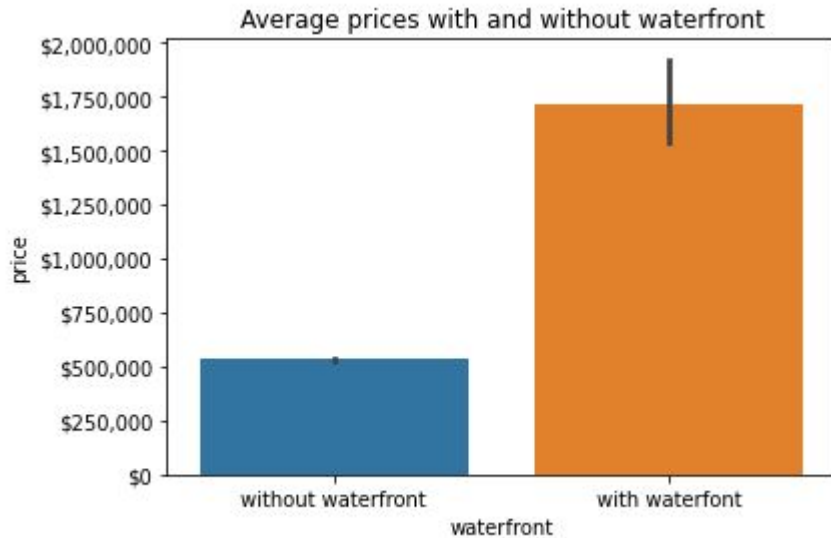
Hypothesis 3:

Prices rely on area, i.e. zipcode

zipcode explains ~43% of price



Houses with waterfront are more expensive in average



Conclusions & Recommendations:

1. Buy lower graded houses, with fewer bathrooms, lower sqft prices
 2. December seems the best month to buy
 3. Look here: Auburn, Seattle and Kent
 4. Avoid: Medina and Bellevue, and houses with waterfront (Shoreline)
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