# EDA-
King County Housing Data

Walkthrough

Assessment and Restructuring of the Data

- We have a data set of around 20k house prices in King County that went through initial EDA

- Initially, there were missing values for some factors (variables) that were then replaced with the mean value
  - Factors (variables) with too many missing values were removed

- Finally, I adjusted the data type of the factors to have them all homogenous, before we look for dependencies between them

- After initial assessment of the data set, I deducted that various factors are not important and can be removed, so that our findings get not diluted
  - Those factors were "id", "view", "lat", "long", "sqft_lot15", "sqft_basement", "waterfront", "yr_renovated"

Analysis of Factors

- Looking at the distribution of the price variable, which is probably the one we want to predict in our later model
    - Most houses have a price of around $300k, with many outliers of higher priced houses
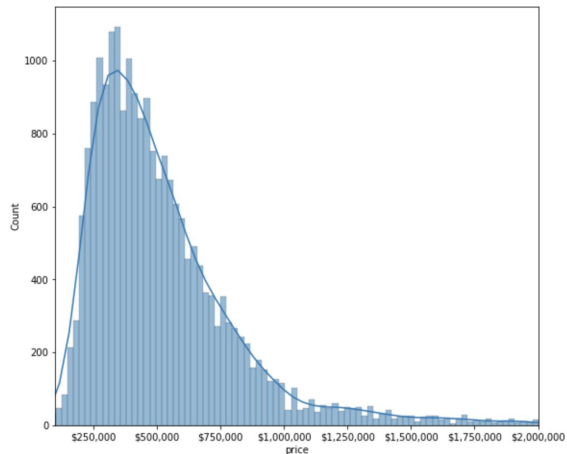
- The distribution of the other variables in our data also gave us some interesting insight
    - e.g. the size of the living space, of the lot, etc.

Analysis of Factors

- I displayed and analyzed the relationship of various variables with the price variables and found significant differences
    - For example, a waterfront view, the built year and date of renovation have a weak, if any impact on the value of a house, so they were omitted from our further analysis

- Now we can focus on factors that likely have a bigger impact on house prices
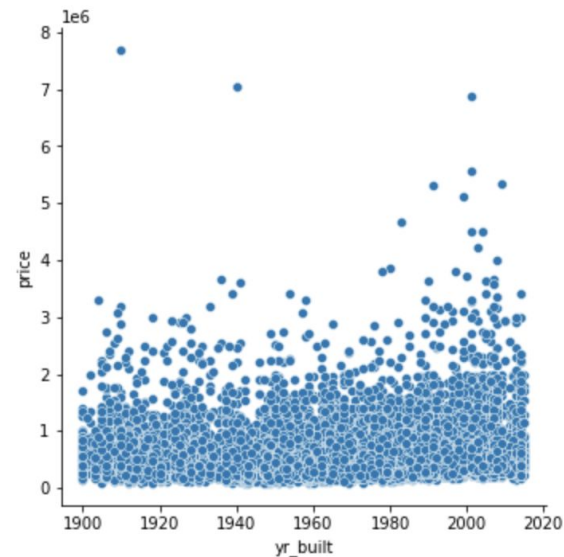
Insights and Recommendations

- As expected living space and the grade of a house have a strong influence on a house price

- Also your zip code and house prices of your neighborhood are important in determining a house price

- But other factors like bedrooms and bathrooms don't deliver more value to a house by themselves. Those factors are heavily dependant on other factors, such as living space

- For an Investor, I recommend to focus on acquiring Real Estate in a highly sought neighborhood, and to consider less the state of the house

- For a private person, I recommend to focus on a bigger sized house in a not so highly sought neighborhood