Data Science Housing Project

by Maximilian Häusler

Client: Jacob Phillips

Buyer

Specifications:

- Historic (<1965)
- 4+ Bathrooms or small house closeby with 4+ bathrooms
- Big lot for tennis,pool and golf (>150000sqft)
- No waterfront

Hipotheses

1. House prices are dependent on the month of the year

2. The price/sqft is higher in populated areas

3. House condition correlates with the grade of the house

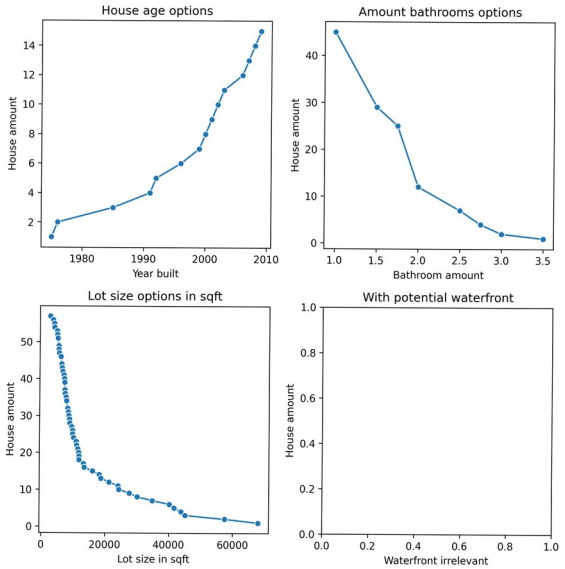
Options without small house

Varying the specifications, we get the following options:

- The age has to be at least 10 years newer
- One of the bathrooms not full size
- Lot would not fit a golf court
- No more options with waterfront

Recommendation:

1 small size bathroom or built a small house directly on the property



Options with small house closeby

Follow the link to see all options:

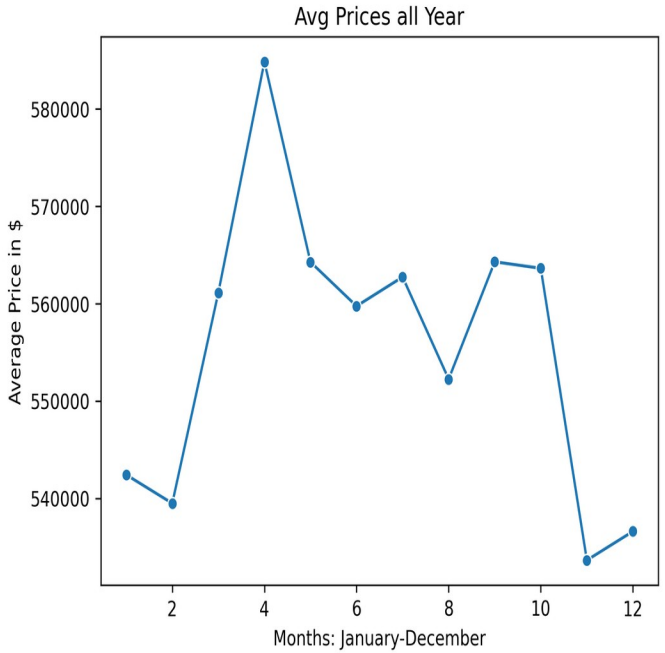
/home/mahaeu/Exercises/Spiced_Projects/eda-housing-data/combined_map.html

Choose freely and ask for more details

1. House prices are dependent on the month of the year

Avg house Prices over all houses:

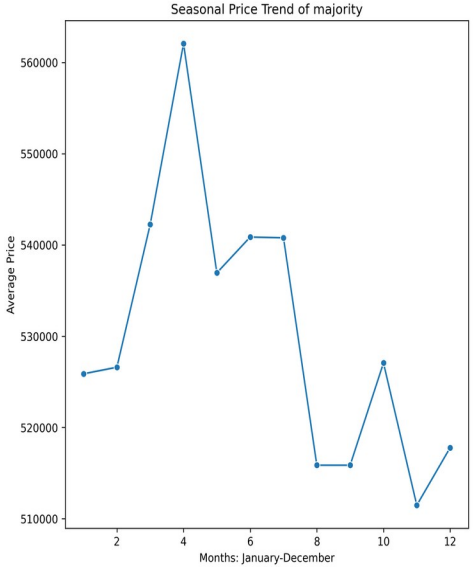
- Slight trend to high prices in spring and summer

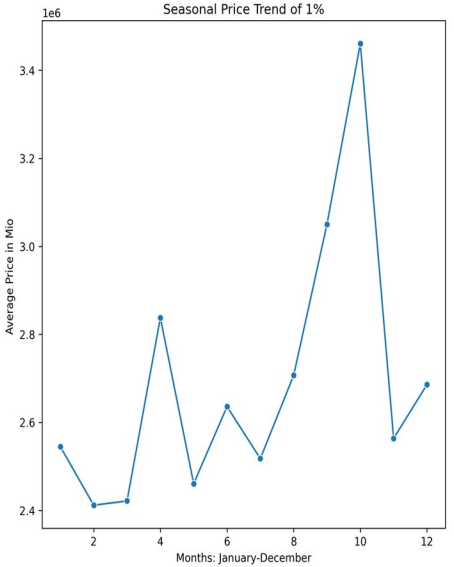


Luxury vs Avg house prices

High prices in May for avg houses

High prices in October for Luxury houses starting at ~2 Mio $

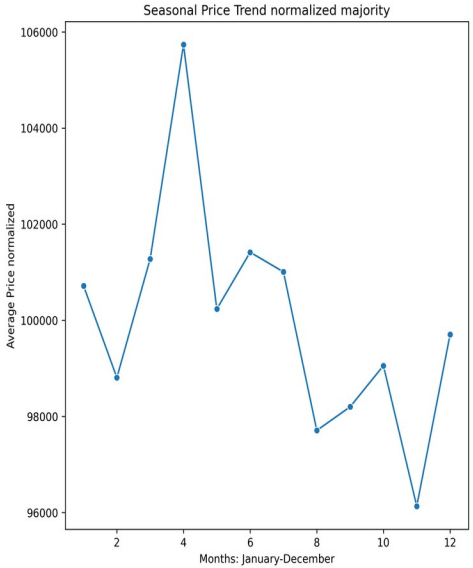


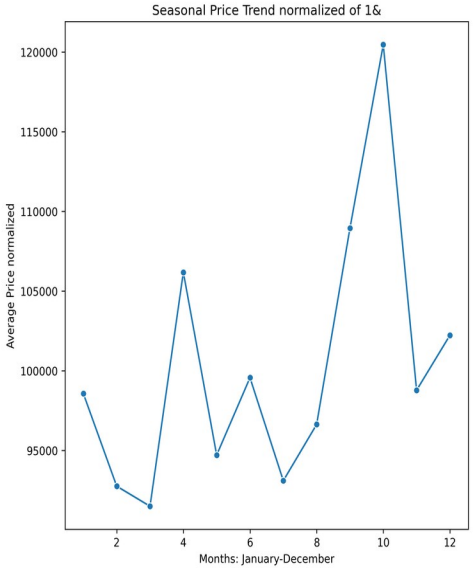


Luxury vs Avg house ratio

House prices normed to 100.000$

Price fluctuations higher for luxury houses



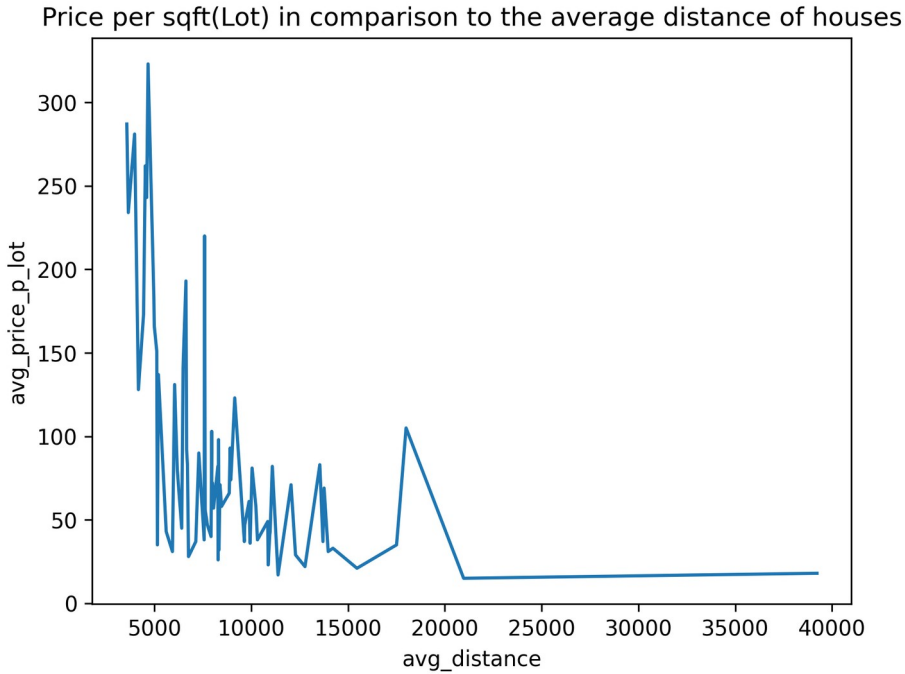


2. The price/sqft is higher in populated areas

- Comparison between the avg distance of houses in each zipcode
- The average price refers to the price per sqft of the lot
  and of the living area

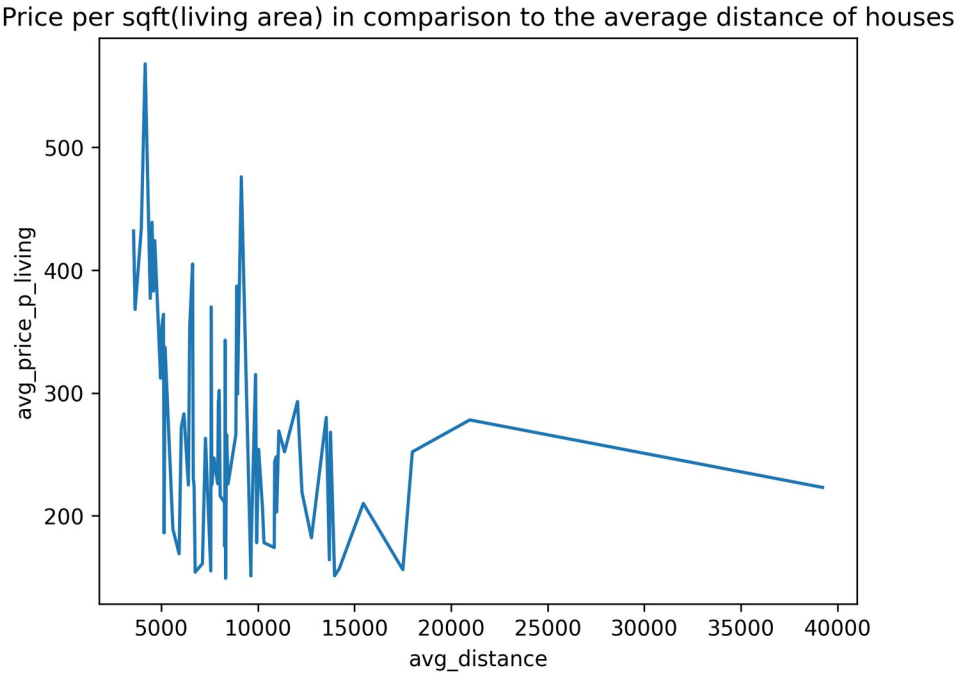
Price in comparison to lot size

Trend for more expensive prize per ft² of lot in relation to the average distance of houses



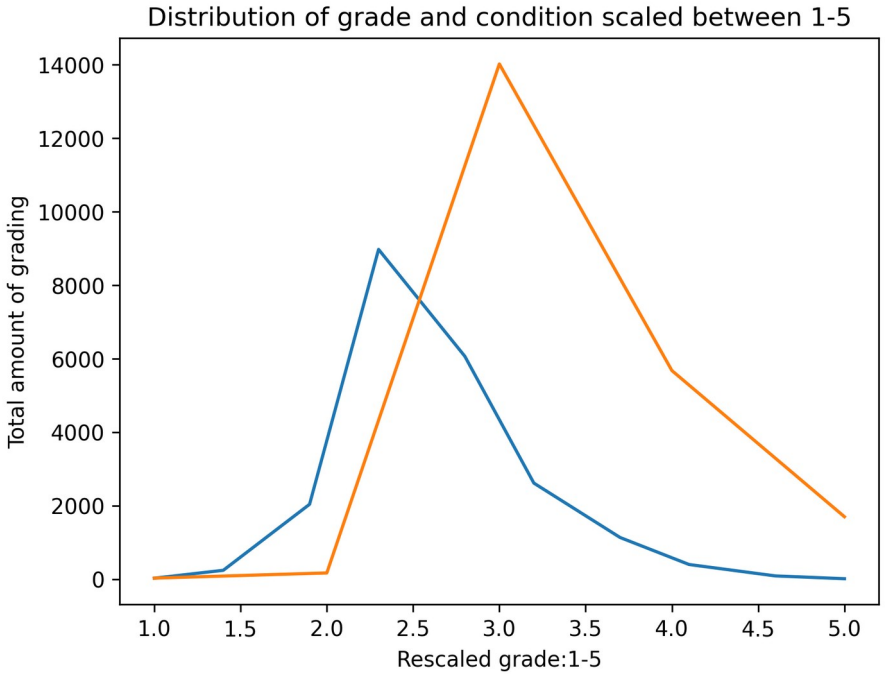
Price in comparison to living area

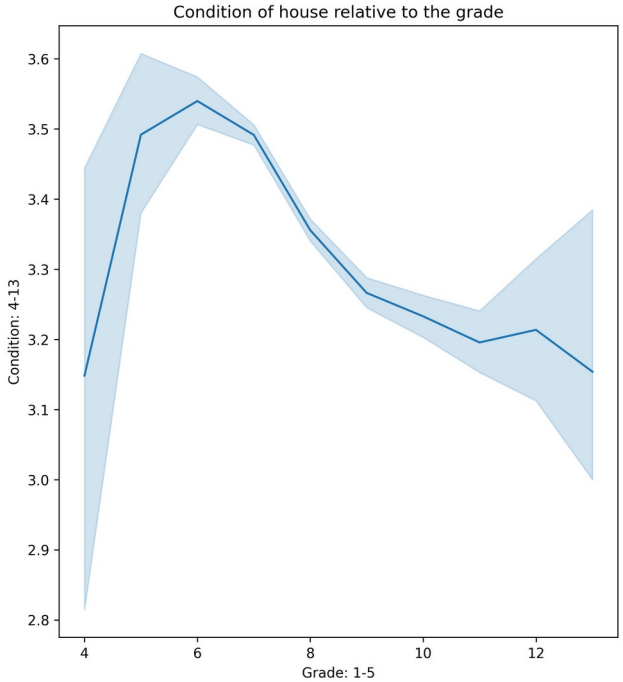
Similar trend for price per ft² living area

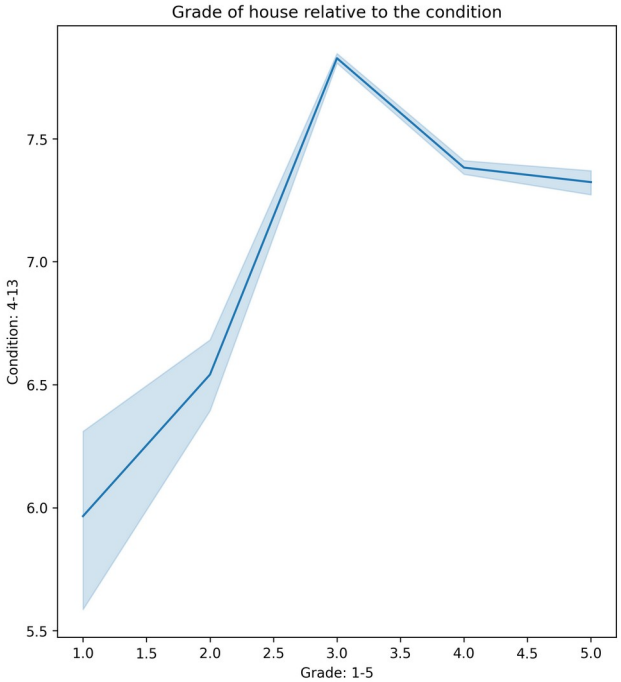


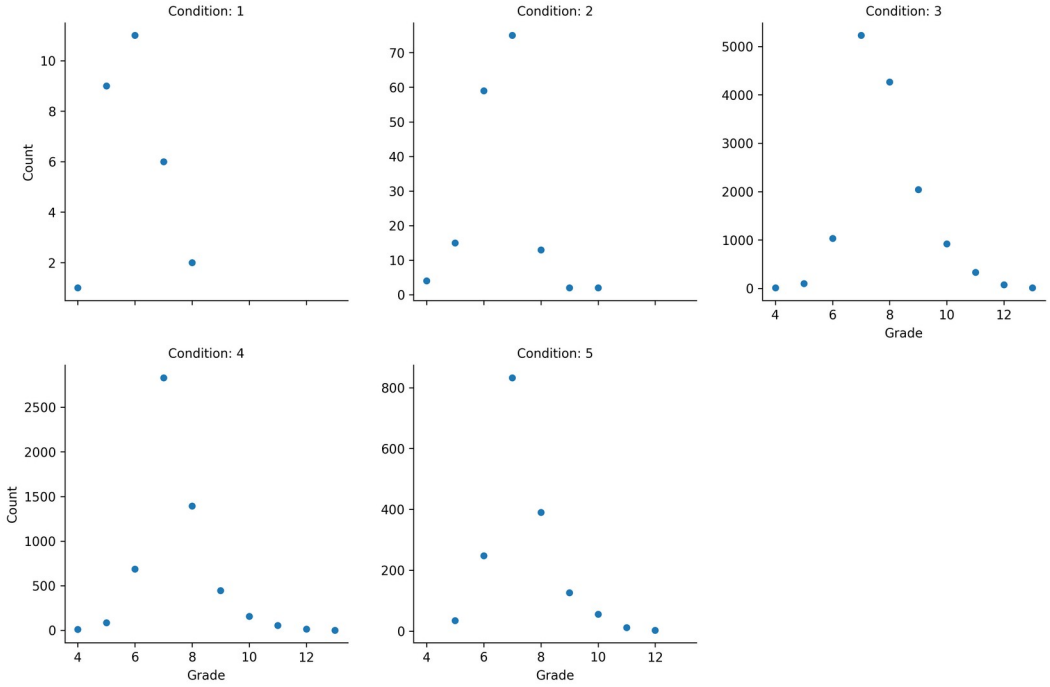
3. Hose condition correlates with the grade of the house

The grade and condition of houses are




Condition of house relative to the grade
Condition: 4-13
Grade: 1-5
3.6
3.5
3.4
3.3
3.2
3.1
3.0
2.9
2.8
4
6
8
10
12


Grade of house relative to the condition
Condition: 4-13
Grade: 1-5
7.5
7.0
6.5
6.0
5.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0


Condition: 1
Condition: 2
Condition: 3
Condition: 4
Condition: 5
Count
Grade