# **EDA Project**

Client: Erin Robinson

Salesmen: Taraka Kannuri

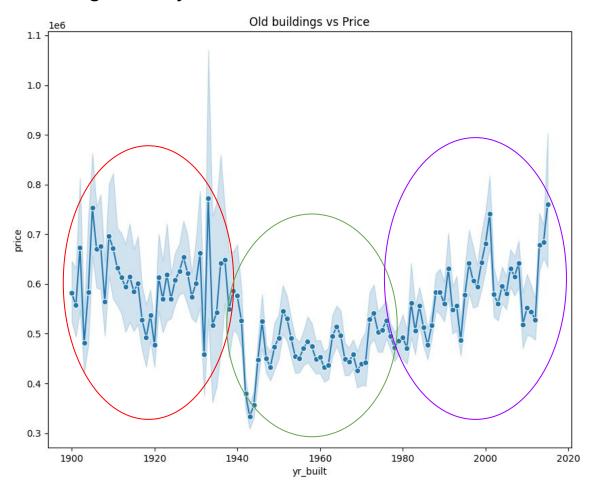
#### Client

Erin Robinson is a Buyer who likes to invest in poor neighbourhoods, buying & selling, costs back + little profit, socially responsible.

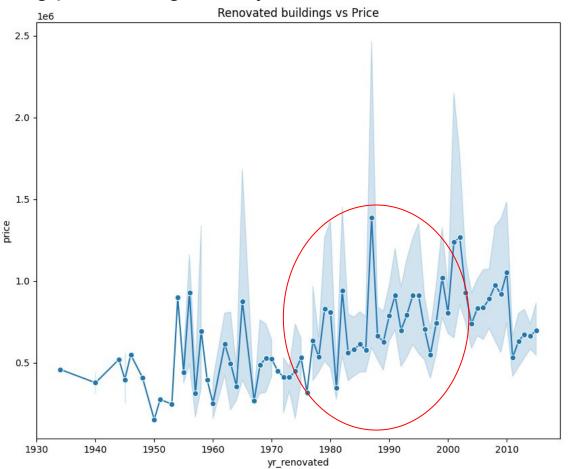
#### Aim:

- More interested in poor neighbourhood
- Renovate and Sell
- Cut costs and make small profit

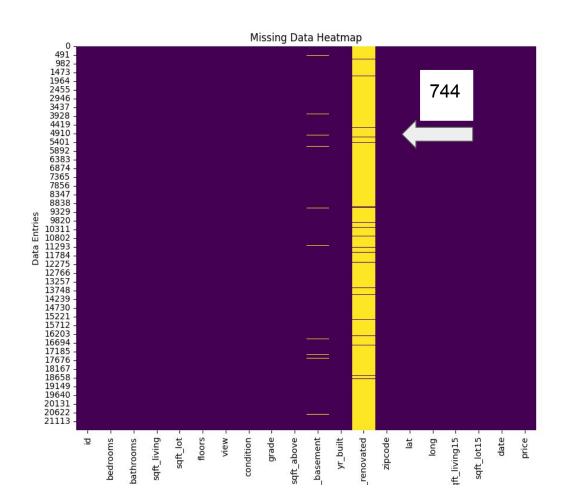
# Old building price change over years



# Renovated Building price change over years



## Missing Data



#### My Hypothesis:

- 1. As the years passes the price of old buildings are more or less consistent
- 2. As the years passes the price of Renovated buildings cost increases
- 3. They are less customers going for higher price houses
- 4. Bathrooms effect the price more than the number of bedrooms
- 5. If Sqft\_living increase the price, even if the Sqft\_lot is high
- 6. Resale value of renovated house are more than the old houses.

#### Overall data vs Price and correlation

Minimum Price: \$78K

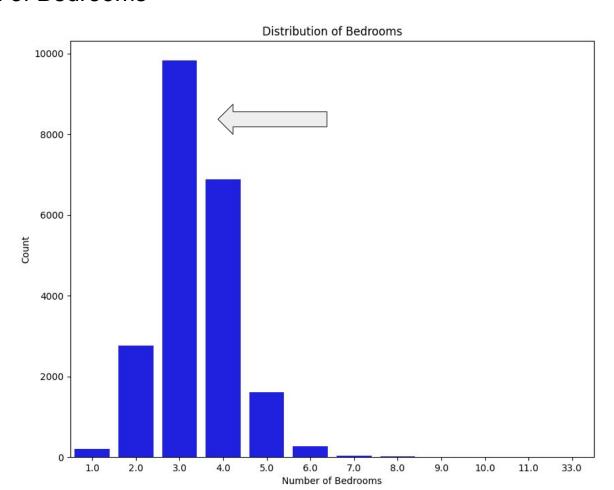
Average Price: \$540K

Maximum Price: \$7.7 mil

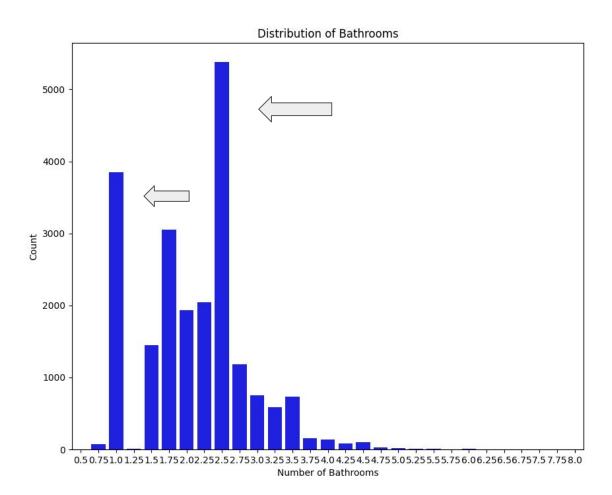
- Correlation is between -1 to 1.
- Near to one is positive correlation and 0 is no linear correlation.
- 0.3 to 0.5 is considered as moderate correlation.
- Near to -1 is considered as negative correlation

price	1.000
sqft_living	0.702
grade	0.668
sqft_above	0.605
sqft_living15	0.585
bathrooms	0.526
view	0.396
sqft_basement	0.325
bedrooms	0.309
lat	0.307
floors	0.257
<pre>yr_renovated</pre>	0.119

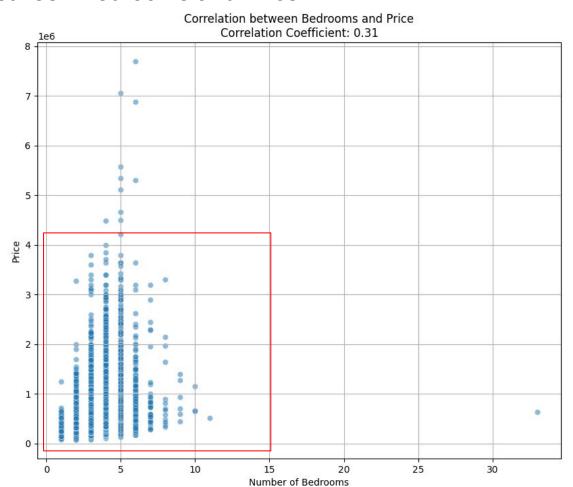
#### Distribution of Bedrooms



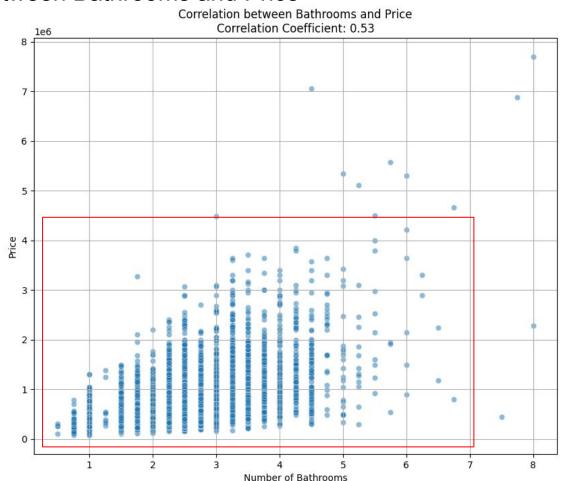
#### Distribution of Bathrooms



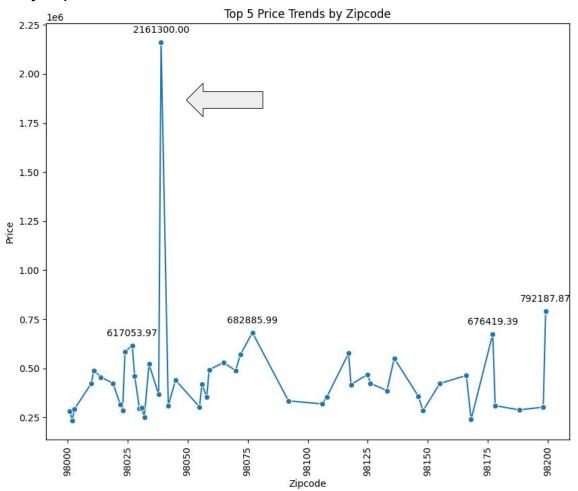
#### Correlation between Bedrooms and Price



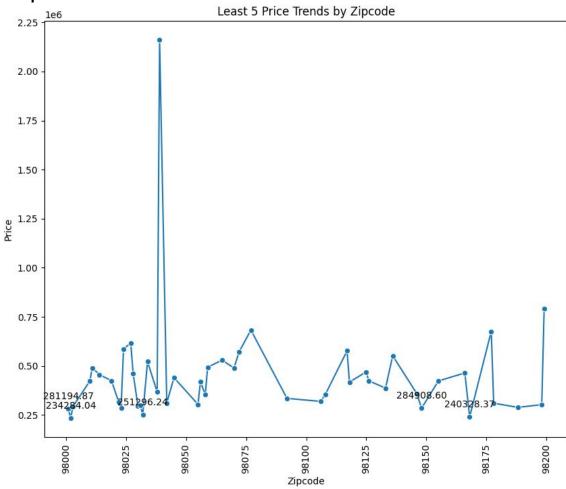
#### Correlation between Bathrooms and Price



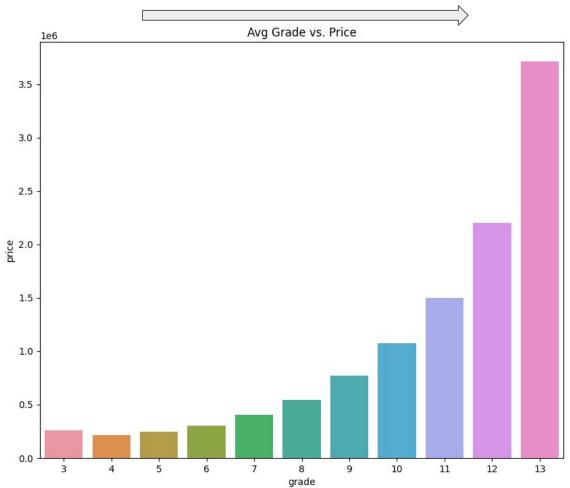
Top 5 price trends by zipcode



### Price trends by Zipcode

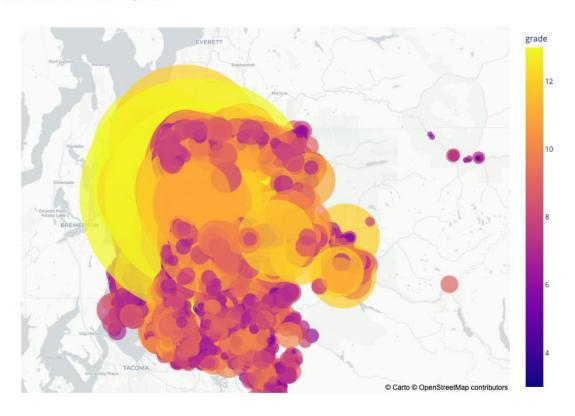


# Avg Grade vs Price



# Geographical Map

Grade vs. Price in Desired Zipcodes



#### Recommendation and investment strategy

- → When searching for houses, it's recommended to focus on those with a grade of 3 to 5, or 4 to 5 if you're looking for a cheaper option.
- → Additionally, consider areas close to schools with grades 7 to 12, as this tends to indicate higher prices.
- → When purchasing a house, target those built between 1950 and 1970, as they are not too old or modern and can be easily renovated to suit your needs.
- → If you plan to resell the house, being near the areas with grades 7 to 12 can result in a higher selling price and potential profit.

# Thank you

Questions?