Data Science Immersive: Module One David Mauger & Kulle Omer October 4, 2019



Problem Statement

"How much should I sell my house for? Is there anything I can do to increase my profit?"



Question #1

Does location affect the sale price of houses?



Question #2

Does time of year affect the sale price of houses?

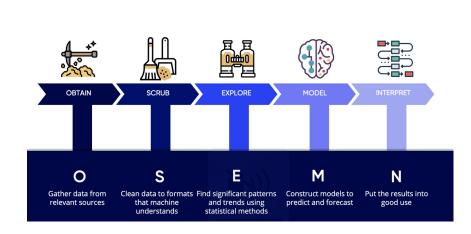


Question #3

What house feature(s) affect house prices the most?

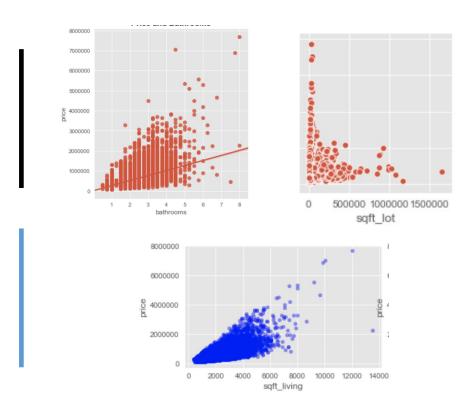
Methodology

Process: OSEMN



Source: Towards Data Science

Our Model: Multivariate Linear Regression



Does Location Affect Home Prices?



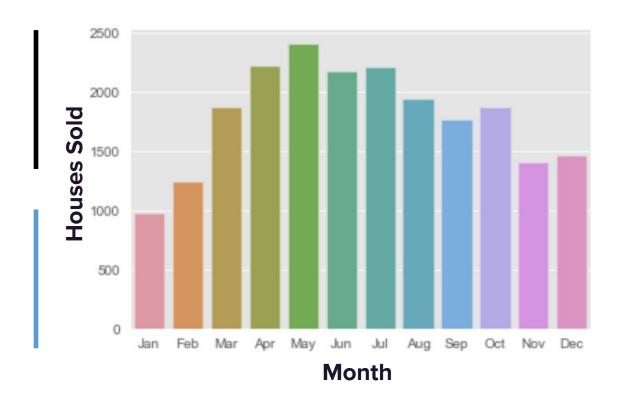
Observation:

Location clearly affects the price of houses, most noticeably the increased prices of houses on the waterfront.

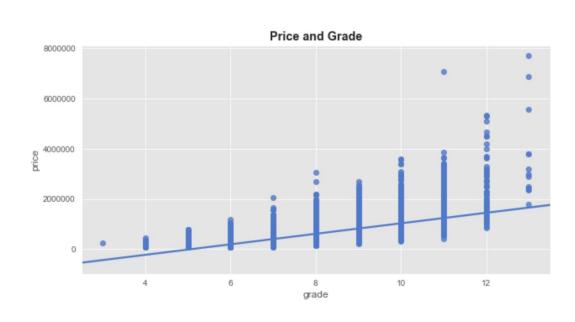
Does Time of Year Affect Prices?

Observation:

The best time to sell a house in Kings County is in the late Spring time to early Summer months - March, April, May, June.



How Does the Grade Affect Prices?



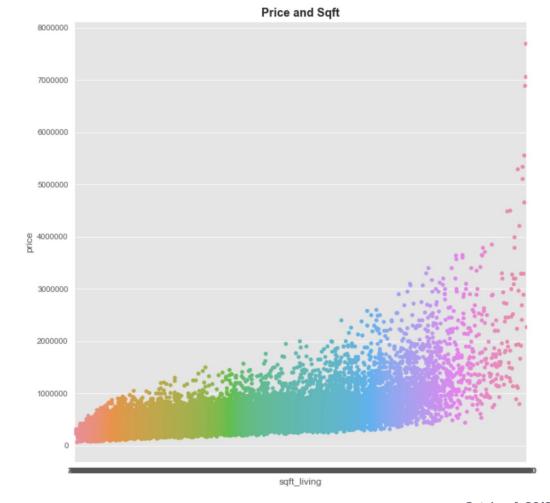
Observation:

The Grade of a house significantly affects the sale price. The higher grade houses (12/13) average nearly \$1 million higher than lower grade houses.

How Does the Square Footage Affect Prices?

Observation:

As expected, houses with more square footage come with a higher price tag.



Additional Areas to Explore

How does the number of times viewed affect sale price?

We observed a correlation between an increase in house price resulting from renovation, but need to explore further.

Examine any changes in houses that were re-inspected or re-sold.

What are the key takeaways for potential buyers in this market?

THANK YOU!

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