HOUSE PRICING PREDICTIONS

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BUSINESS VALUE

- EASIER TIME FINDING A HOUSE IF YOU KNOW WHAT YOU WANT AND HOW MUCH YOU CAN SPEND

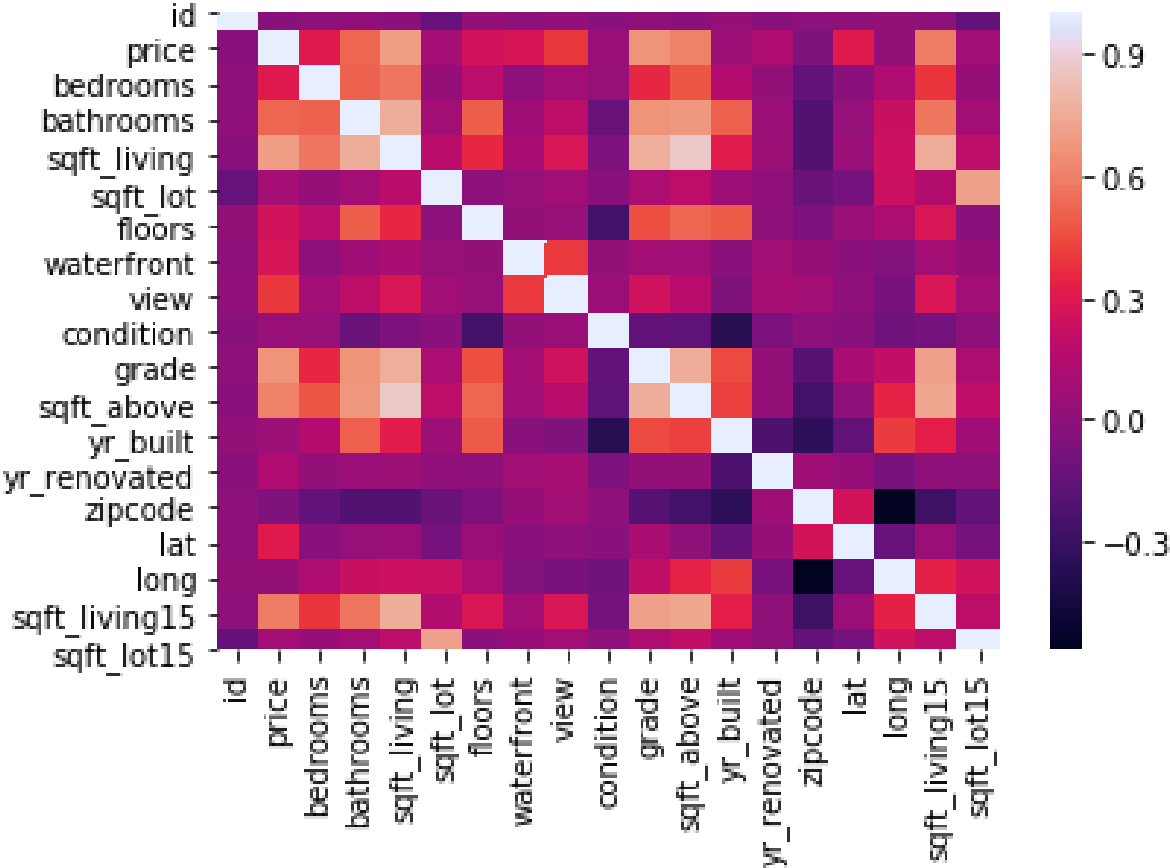- LESS TIME BEING ON THE MARKET

METHODOLOGY

- Data exploration

- Data cleaning

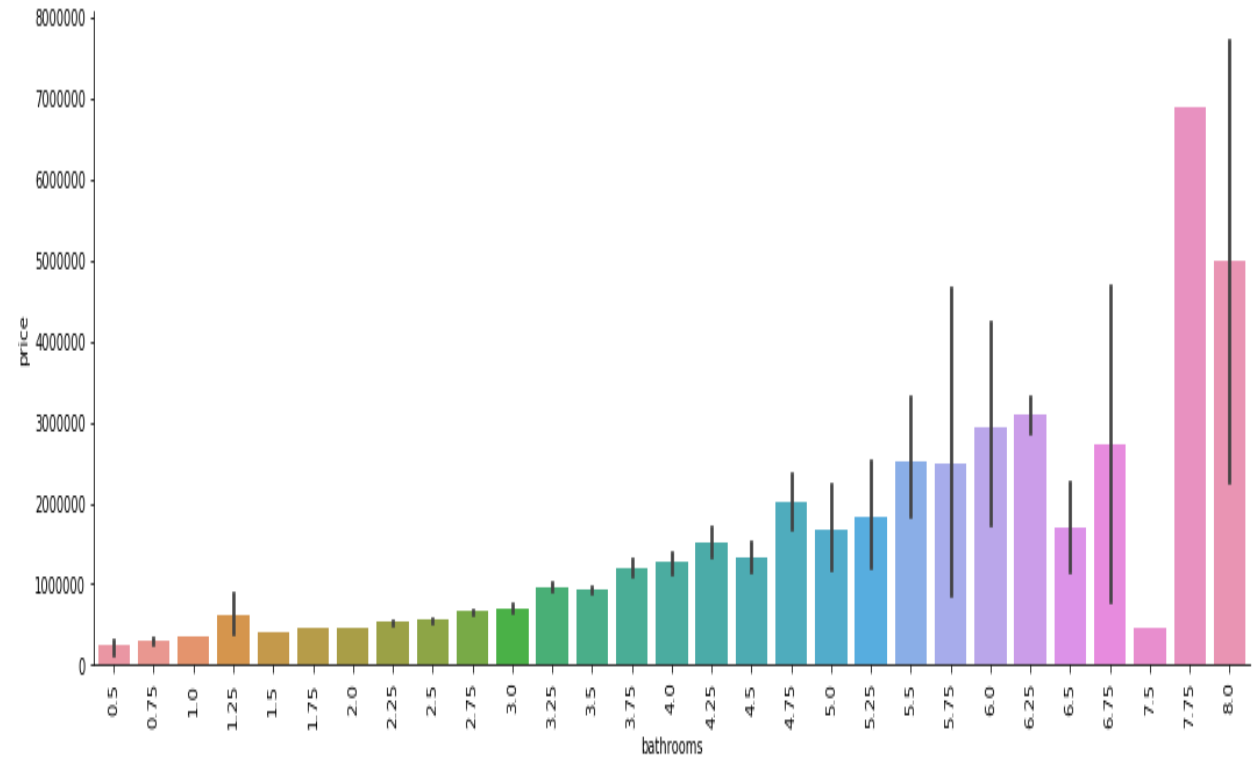- Feature selection

- Multivariate regression

DATA

- NEWEST HOUSE BUILT WAS IN 2015
- THE MOST BATHROOMS A HOUSE HAS IS 8 BUT 75% OF HOUSES HAVE BETWEEN A BATH AND 3 QUARTERS AND A TWO AND A HALF BATH.
- 75% OF THE HOUSES HAVE BETWEEN 3 AND 4 BEDROOMS.
- MOST OF THE HOUSES DO NOT HAVE A WATERFRONT VIEW.
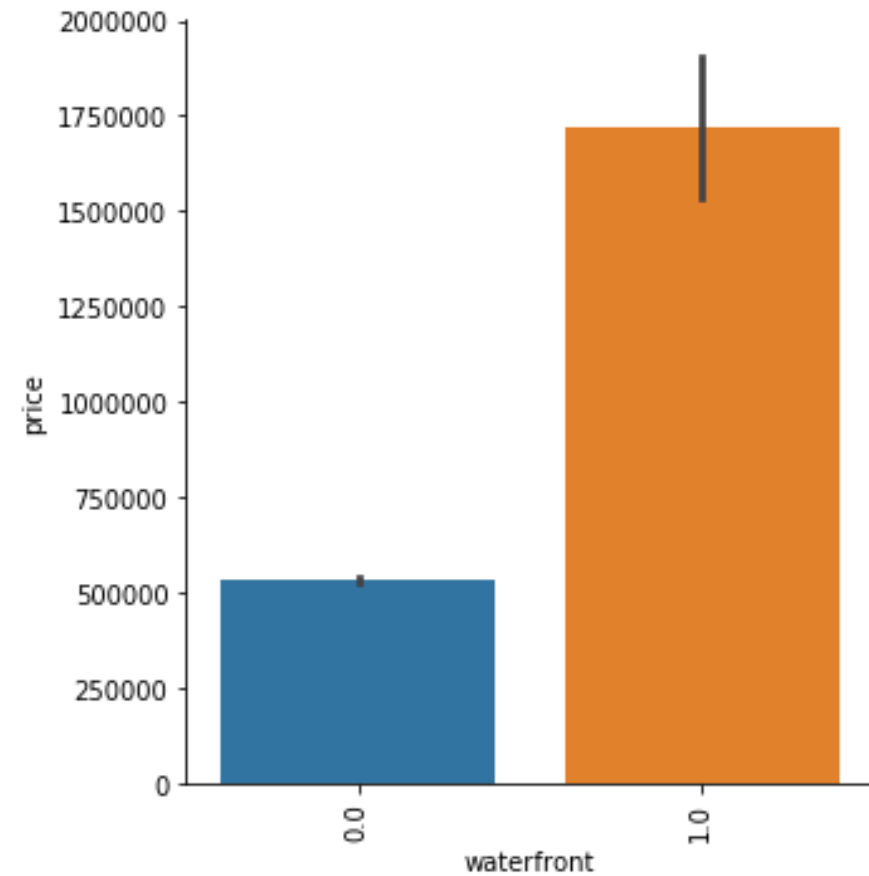- THE AVERAGE NUMBER OF BEDROOMS WERE 3 WHEN ROUNDED DOWN, AND THE AVERAGE NUMBER OF BATHROOMS WERE 2.

HEATMAP

OF BATHROOMS AND BATHROOM SIZE VS. HOUSE PRICE

WATERFRONT VIEW VS. HOUSE PRICE

CONCLUSION

Using the below features, I have a 77% accuracy predicting house prices.

- **bedroomsNumber -** of Bedrooms/House
- **bathroomsNumber -** of bathrooms/bedrooms
- **sqft_living -** footage of the home
- **floorsTotal -** floors (levels) in house
- **waterfront -** House which has a view to a waterfront
- **view -** Has been viewed
- **grade -** overall grade given to the housing unit, based on King County grading system
- **sqft_above -** square footage of house apart from basement
- **sqft_basement -** square footage of the basement
- **zipcode -** zip
- **lat -** Latitude coordinate
- **sqft_living15 -** The square footage of interior housing living space for the nearest 15 neighbors
- **sqft_lot15 -** The square footage of the land lots of the nearest 15 neighbors

FUTURE WORK

- APPLY RIDGE AND LASSO REGRESSION

- DECISION TREE

- ADD FEATURES SUCH AS, DECK AND DECK SIZE, SCHOOLS IN THE AREA, WHETHER THE WATERFRONT VIEW IS RIVER, LAKE, OCEAN, ETC.

THANK YOU