# RENAISSANCE REALTY

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#### **TABLE OF CONTENTS**

01

**INTRODUCTION** 

02

BUSINESS UNDERSTANDING

03

**METHODOLOGY** 

**O4**FEATURE ANALYSIS/DATA ANALYSIS

05
MODELLING

06
RECOMMENDATIONS & FUTURE WORKS



# INTRODUCTION

Renaissance Realty is a well-known Real Estate Company which helps homeowners to buy or sell homes. Our team is tasked with analyzing housing data in King County, aiming to predict house sale prices. Notably, square footage of living space, building grade are all influential variables. By leveraging these insights, our objective is to assist the company in making strategic decisions, emphasizing features such as spacious living areas, high-grade construction, and desirable amenities to maximize returns in the competitive King County housing market.



#### **BUSINESS PROBLEM**

The current business problem is to come up with data driven solutions that can give potential homeowners insight on the best possible investments when it comes to buying or selling houses. Renaissance Realty are keen on identifying the factors that significantly influence higher home sale prices. In our analysis, we will assess, square footage of living space, and elements, including proximity to the waterfront, the grade and condition of the houses. The goal is to pinpoint the key qualities that correlate strongly with elevated home sale prices, enabling strategic decision-making in our projects.



#### **PROJECT OBJECTIVE**

Implement predictive modeling to forecast the future growth in a home's projected worth, considering factors such as square footage, building grade, waterfront proximity, and overall condition.



## **METHODOLOGY**



**Source Data** 

Loading data and libraries



Understand Business Needs

Data Understanding and Interpretation



**Data Preparation** 

Cleaning data
Dropping columns,
Replacing null values,
Statistics and Visualising



Modelling

Baseline Model Iterative Models

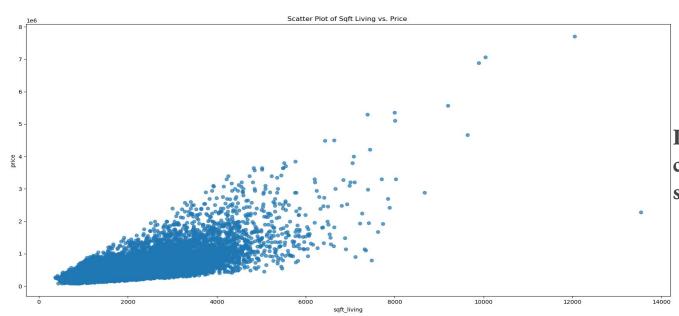


Evaluation & Recommendation

S

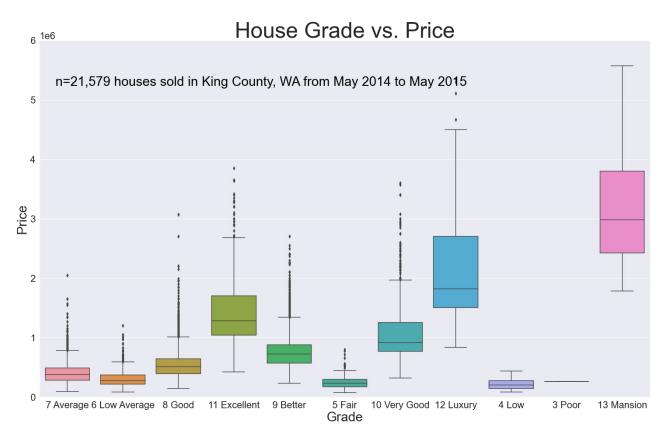
Results analysis and conclusions





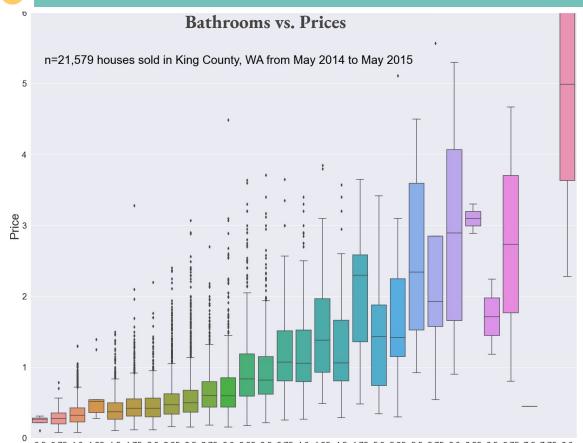
Increase in the square footage corresponds to high home sale value prices

#### **GRADE VERSUS PRICES**



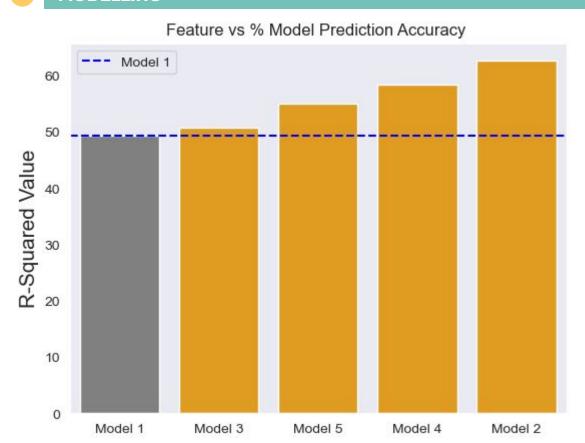
Higher building grades homes attracts high home sale prices

#### **BATHROOMS VERSUS PRICES**



Houses with high bathrooms number align with high home prices

### **MODELLING**



Model 2: High R squared value for features waterfront, grade, condition and waterfront

#### **RECOMMENDATIONS**



Increasing the square-footage of living space



02

Attain the highest possible building grade

**0**3

Build and develop homes in close proximity to the waterfront



04

Attain the highest possible condition

#### **FUTURE WORKS**

