

**Seasonal Realtors** 

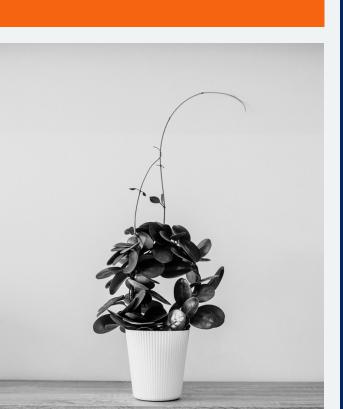
# Find The BEST Property

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## PROJECT TEAM



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Provides you with the most accurate predictions for your real estate needs.

Using the current data mining and machine learning techniques,
we have created two predictive models using,
'Classification' to predict the quality of the property
and 'Regression' to predict the price of the property.

# ABOUT Seasonal Realtors





## Main benefits of buying property in Dubai

Tax-free environment
Low crime rate
Strong economy
Diverse population
Freehold property policies
Property management
Lifestyle
Community

## BACKGROUND

## TARGET AND BUSINESS GOALS

• To facilitate Property investors and individual investors who wish to purchase property in Dubai need to make informed decisions about which properties to buy and when to buy them.

 Building a predictive model that can accurately predict the price and quality of properties in Dubai would be a valuable tool for these investors.

## Application Development



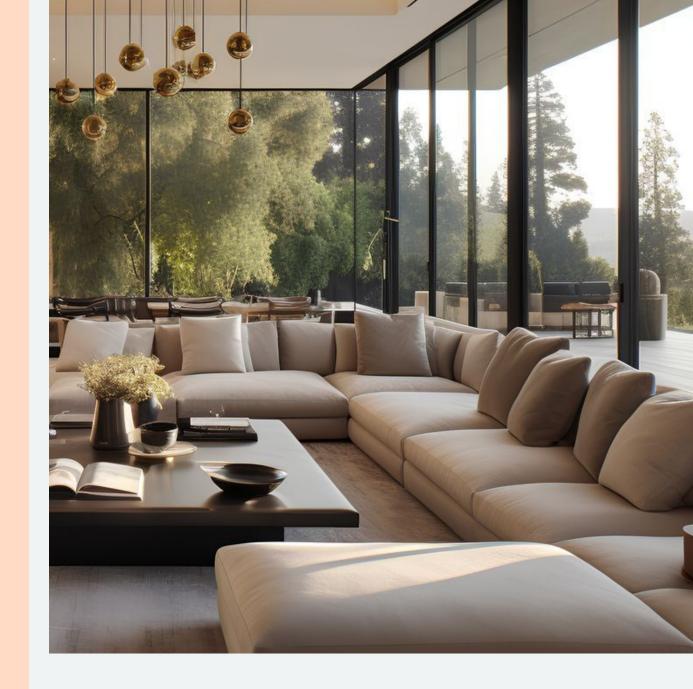
Model Development



## Frontend Development



## CHOICE OF TECHNOLOGY



## **ABOUT THE DATASET**



### **Dubai Properties - Apartments**

Consists of 1800+ data for apartments scrapped from real estate portal.



Why

Reasons for the modifications

## **IMPLEMENTATION**

#### Classification Models

- Decision Tree Classifier
- Naïve Bayers Classifier
- Logistic Regression Classifier
- Random Forest Classifier

### Regression Models

- Multiple Linear Regressor
- Decision Tree Regressor
- Support Vector Regressor
- Random Forest Regressor

#### K-Means Clustering

 The clustering step for the dataset was done as an additional phase as it wasn't our main intention to build a clustering model.

## STRUGGLES AND CHALLENGES

#### **TIME MANAGEMENT:**

Given the complexity of developing two predictive models, we were concerned that we would not be able to meet the deadline. However, through careful planning and execution, we were able to overcome this challenge.

#### DATA AVAILABILITY AND QUALITY:

Since the data we selected may change with time we cannot gaurantee that the model may be accurate for data from various time periods

#### **MODEL MAINTENANCE:**

As the Dubai property market changes, the predictive model may need to update frequently. This requires collecting new data and retraining the model on a regular basis



#### SIMPLE APPLICATION WITH ATTRACTIVE GRAPHICAL INTERFACE:

- Platform for users to interact with in-built models
- Separate forms for each model with space for property details
- Simple button click to send input details to model and redirect user to page with predicted values and user inputs

#### OVERALL PROCESS:

- Convenient and efficient
- Does not require much technical knowledge
- Easy to navigate

In short, the application is a user-friendly platform that allows users to interact with the models without any difficulty.

## FINAL PROJECT VIEW



DEMONSTRATION OF THE SOFTWARE SOLUTION

THANK
YOU!