

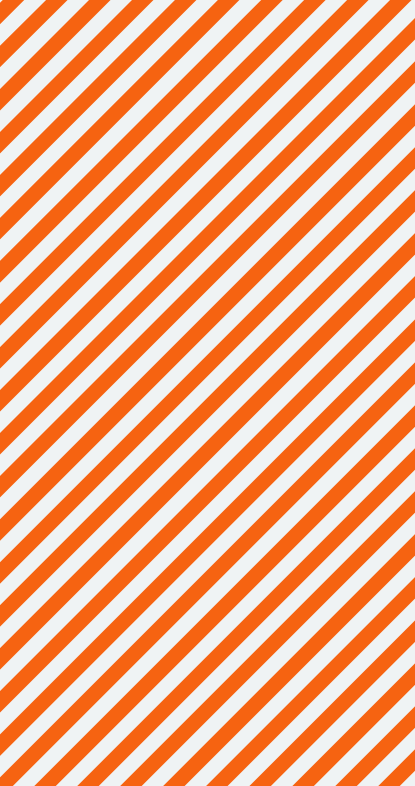


Seasonal Realtors

# Find The BEST Property

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OCTOBER 2023  
GROUP 14







# 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



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# Main benefits of buying property in Dubai

Tax-free environment

Low crime rate

Strong economy

Diverse population

Freehold property policies

Property management

Lifestyle

Community

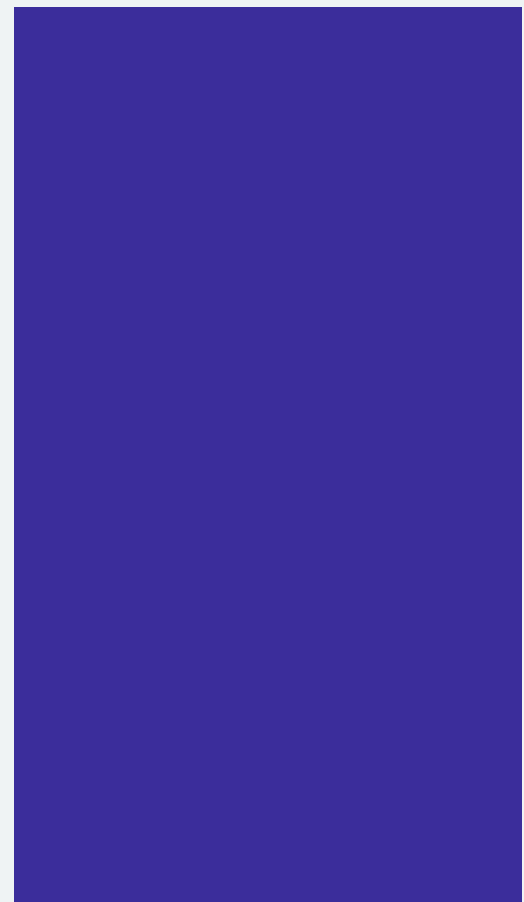
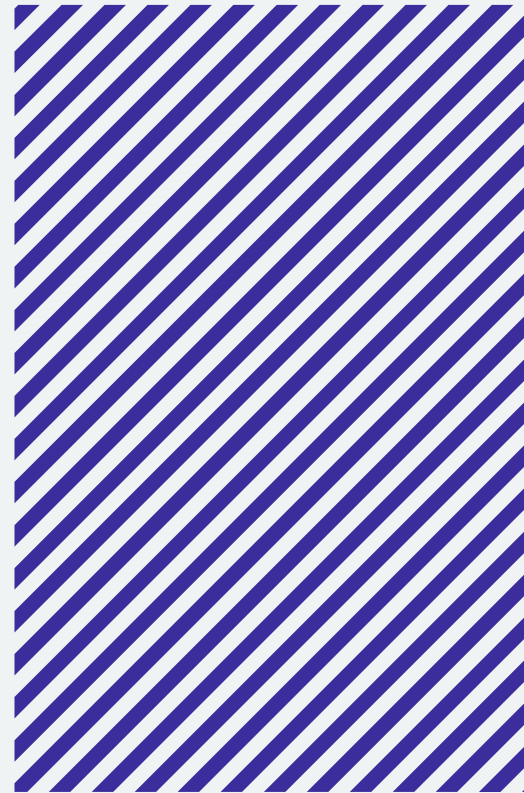
**BACKGROUND**



# TARGET AND BUSINESS GOALS

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- 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



# 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 guarantee that the model may be accurate for data from various time periods

## ■ MODEL MAINTENANCE

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!**