Seasonal Realtors

Find The BEST Property

OCTOBER 2023
GROUP 14

PROJECT TEAM

Anuththara Divyanjalie
IT21029868

Udani Navarathne
IT20708276

Amasha Nishadi
IT21088582

Vijini Tennekoon
IT21015212

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.

CHOICE OF TECHNOLOGY

Application Development

Flask

Model Development

python

Frontend Development

Bootstrap

JS

HTML

ABOUT THE DATASET

From

Dubai Properties - Apartments

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

kaggle

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!