

# **REAL ESTATE MANAGEMENT PORTAL ONLINE REAL ESTATE MANAGEMENT SYSTEM**

**A PROJECT REPORT SUBMITTED IN PARTIAL  
FULFILMENT OF REQUIREMENT  
FOR THE AWARD OF THE DEGREE**

**MASTER OF COMPUTER APPLICATIONS (MCA)**

**OF**

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

**BY**

**ROHAN CHERIAN**

**Reg No: 22PMC145**



**MARIAN COLLEGE  
KUTTIKKANAM**

**(AUTONOMOUS)**

**MAKING COMPLETE**

**Marian College Kuttikkanam Autonomous**

**Peermade, Kerala – 685 531**

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**Under the guidance of**

**Ms. RENY JOSE**

**ASSISTANT PROFESSOR**

**PG Department of Computer Applications**

**Marian College Kuttikkanam Autonomous**



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# **PG DEPARTMENT OF COMPUTER APPLICATIONS**

## **Marian College Kuttikkanam Autonomous**

**MAHATMA GANDHI UNIVERSITY, KOTTAYAM**

**KUTTIKKANAM – 685 531, KERALA.**

### **CERTIFICATE**

This is to certify that the project work entitled

#### **REAL ESTATE MANAGEMENT PORTAL**

is a bonafide record of work done by

#### **ROHAN CHERIAN**

**Reg. No. 22PMC145**

In partial fulfillment of the requirements for the award of Degree of

#### **MASTER OF COMPUTER APPLICATIONS [MCA]**

During the academic year 2022-2023

**Ms. Reny Jose**

Assistant Professor

PG Department of Computer Applications

Marian College Kuttikkanam Autonomous

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**External Examiner**

**External Examiner**

## **ACKNOWLEDGEMENT**

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Finally, I express my deep appreciation to all my friends and family members for the moral support and encouragement they have given to complete this project work successfully.

ROHAN CHERIAN

## **ABSTRACT OF REAL ESTATE MANAGEMENT PORTAL**

Real estate is a type of business for selling, buying, renting land, buildings and offices. Real estate agencies duties include, to give the property on rent or else to sell the property. Properties like building, retail sites, flats, houses, bungalows etc. Many people search for property for many purposes like residence, offices, faculty and etc. Every individual wants his house to be in the best location with best facilities. Offices should be near market area in order to increase sales and productivity. The system is built fully in Django Framework in back-end and HTML and CSS in front-end. The manual real estate agency follows a lengthy and hectic process. People need to meet the agent in person, for checking the Property details and also needs to visit the location. it takes long time to look for the desired location and desired type of property.

This online Property management system can help you to get best property by just sitting at home or anywhere. People can book their favourite property online just after a few clicks. In this system the agents can add the property for selling/ renting purpose and users can buy or book a property for rent. This system has three modules namely, Admin, Owner and Buyer. Owner can add the property details for buildings, retail sites, flats, houses, bungalows. Admin can approve registered clients. Users need to register and then login just by using credentials. Users can view the properties for rent or for buying purpose. He/ she can mark the favourite properties and can also book appointment for visiting the viewed favourite places. The system is built fully in Django Framework in back-end and HTML and CSS in front-end. This online Property management system can help you to get best property by just sitting at home or anywhere. People can book their favourite property online just after a few clicks. In this system the agents can add the property for selling/ renting purpose and users can buy or book a property for rent. This system has three modules namely, Admin, Owner and Buyer. Owner can add the property details for buildings, retail sites, flats, houses, bungalows. Admin can approve registered clients. Users need to register and then login just by using credentials. Users can view the properties for rent or for buying purpose. He/ she can mark the favourite properties and can also book appointment for visiting the viewed favourite places. The system is built fully in Django Framework in back-end and HTML and CSS in front-end.

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# **1. INTRODUCTION**



## **1.1 Problem Statements**

The manual real estate agency follows a lengthy and hectic process. People need to meet the agent in person, for checking the Property details and also needs to visit the location. it takes long time to look for the desired location and desired type of property. This system is a manual where storing information is very difficult. This is not a web-based system and cannot be accessed easily

## **1.2 Proposed System**

This online Property management system can help you to get best property by just sitting at home or anywhere. People can book their favourite property online just after a few clicks. In this system the agents can add the property for selling/ renting purpose and users can buy or book a property for rent. This system has three modules namely, Admin, Owner and Buyer. Owner can add the property details for buildings, retail sites, flats, houses, bungalows. Admin can approve registered clients. Users need to register and then login just by using credentials. Users can view the properties for rent or for buying purpose .Users need to register and then login just by using credentials. Users can view the properties for rent or for buying purpose. He/ she can mark the favourite properties and can also book appointment for visiting the viewed favourite place

### **1.3 Features of the Project**

1. The real estate management system is simple, user-friendly, and can be easily integrated with the existing system.
2. Highly Secure, Scalable & Reliable.
3. Updates record properly
4. Enhances visibility
5. Quick property inspections
6. Improved communication

## **2. FUNCTIONAL REQUIREMENTS**

## FUNCTIONAL REQUIREMENTS

Real Estate Management System is divided into three modules:

1. User Module
2. Admin Module
3. Owner Module

User Module details:

### ***1. View and book Available Properties***

It is a system design especially for large, premium and small real estate business. The user can view available properties and book the car for property according to their wish. All the details of the properties along with price is provided.

### ***2. View property Booking details***

The user can view the booking details after booking their desired property from the list of available properties.

### ***3. View latest Properties***

The user could view the latest properties available within the system

Admin Module details:

### ***1. Dashboard***

In this section, admin can view the overview of the real estate management(Like total properties, total booking)

### ***2. Manage registered users***

Admin can view/delete the registered users

### ***3. Manage registered owners***

Admin can view registered owners and verify them accordingly or reject them.

Owner Module Details:

***1. Property***

Owner can add/edit/delete new property details

***2. Manage Requests***

Owner could view, approve and reject the requests sent by the users

***3. View Property***

Owner can view the properties that are recently added to the website.

### **3. NON-FUNCTIONAL REQUIREMENTS**

## NON-FUNCTIONAL REQUIREMENTS

### *a. Reliability*

The reliability of the overall project depends on the reliability of the separate components. The main pillar of reliability of the system is the backup of the database which is continuously maintained and updated to reflect the most recent changes, Also the system will be functioning inside a container. Thus, the overall stability of the system depends on the stability of container and its underlying operating system.

### *b. Availability*

The system should be available at all times, meaning the user can access it using a web browser, only restricted by the down time of the server on which the system runs. A customer friendly system which is accessible for people around the world should work 24 hours. In case of a hardware failure or database corruption, a replacement page will be shown. Also, in case of a hardware failure or database corruption, backup of the database should be retrieved from the server and saved by the Organizer. Then the services will be restarted. It means 24 X 7 availability.

### *c. Maintainability*

A commercial database is used for maintaining the database and the application server takes care of the site. In case of a failure, a re-initialization of the project will be done. Also, the software design is being done with modularity in mind so that maintainability can be done efficiently.

### *d. Supportability*

The code and supporting modules of the system will be well-documented and easy to understand. Online documentation can help system requirements.

## **4. FEATURES AND HIGHLIGHTS**



## Features

- Primary focus of this project is to reduce the difficulties related to property booking.
- This online Property management system can help you to get best property by just sitting at home or anywhere.
- Main reason for launching this website reduces the complexities related with the program arrangements and reduces the workload of the user.
- Buyers can sign up.
- Admin or owner can sign up.
- User can view property uploaded details and images, or quote or book property.
- Owner can view request details and accept or reject them.
- This project will automate all the activities related to an property booking task.

The most important source information is the end users of the current system, who are often also the potential users of the new system. They may range from novices to highly skilled individuals. The information gathered from end users will be crucial during the analysis and design phases. Later, the analyst will also discuss technical aspects of the system with programmers, network engineers and other technical staff.

A secondary source of information for the analyst can be found in the existing paper work or document within the organization. Documents represent the formal information flow through the current system. The analyst must collect sample copies of all relevant documents, e.g. input forms, output document, report, invoices etc. to understand how data flows and is used in the current system. This information can be important in the subsequent design of files for the new system. This analyst will use a range of techniques to gather information about the current system. The most important are interviewing, questioners and observation.

In this project I have used observation as a technique for gathering information. Observation is a technique used to gather information by observing people performing various aspect of their loans.

It allows the analyst to determine what is being done, how it is being done, who does it, when it is done, how long it takes, where it is done and why it is done.

Real estate is a type of business for selling, buying, renting land, buildings and offices. Real estate agencies duties include, to give the property on rent or else to sell the property. Properties like building, retail sites, flats, houses, bungalows etc. Many people search for property for many purposes like residence, offices, faculty and etc. The key focus is given on data security, as the project is online and will be transferred in network. The speed and accuracy will be maintained in a proper way. Every individual wants his house to be in the best location with best facilities. Offices should be near market area in order to increase sales and productivity.

This online Property management system can help you to get best property by just sitting at home or anywhere. People can book their favourite property online just after a few clicks. In this system the agents can add the property for selling/ renting purpose and users can buy or book a property for rent. This system has three modules namely, Admin, Owner and Buyer. Owner can add the property details for buildings, retail sites, flats, houses, bungalows. Admin can approve registered clients. Users need to register and then login just by using credentials. Users can view the properties for rent or for buying purpose. He/ she can mark the favourite properties and can also book appointment for visiting the viewed favourite places. The system is built fully in Django Framework in back-end and HTML and CSS in front-end. This online Property management system can help you to get best property by just sitting at home or anywhere. People can book their favourite property online just after a few clicks. In this system the agents can add the property for selling/ renting purpose and users can buy or book a property for rent. This system has three modules namely, Admin, Owner and Buyer. Owner can add the property details for buildings, retail sites, flats, houses, bungalows. Admin can approve registered clients. Users need to register and then login just by using credentials. Users can view the properties for rent or for buying purpose. He/ she can mark the favourite properties and can also book appointment for visiting the viewed favourite places.

An Online Management system, we have developed a secure, user-friendly Property Management System. This system is capable of taking care of each work that needs to be done in the real estate business.

Today's real estate management software is used to connect property managers and tenants like never before. That's because modern real estate management tools incorporate the same technology used in customer relationship management (CRM). With CRM for real estate management, property managers can now offer their tenants the kind of high-level customer service that is so important to developing long-term business relationships.

## **5. TECHNICAL ASPECTS**

## Architecture of Project

### ***1. Presentation Layer***

Templates: HTML templates are used to define the structure and layout of the user interface. Django's template engine allows you to dynamically populate the templates with data.

### ***2. Application Layer***

Controllers: In Django, controllers are implemented as views, which handle the request/response flow and control the overall behavior of the application.

### ***3. Business Logic Layer***

Models: Django's models define the data structure and business logic of the application. Models represent entities like users, bookings, flights, hotels, etc. They handle database operations, such as querying, inserting, updating, and deleting data. Models can also include methods to perform complex business logic.

### ***4. Jazmin***

Django Jazmin is a customizable and modern admin interface for Django applications. It provides an alternative user interface for the Django admin site with a more visually appealing design and additional features. Jazmin aims to enhance the user experience and improve the productivity of developers working with Django.

By installing and configuring django-jazzmin in your Django project, you can customize the admin interface by changing themes, layouts, icons, and other visual elements. It offers features such as responsive design, drag-and-drop sorting, inline editing, and support for various third-party Django packages. To use Django Jazzmin, you typically need to install it using a package manager like pip, add it to your Django project's settings, and configure it according to your preferences.

Here's a basic example of how to install Django Jazzmin using pip:

**pip install django-jazzmin**

Once installed, you would need to add 'jazzmin' to the INSTALLED\_APPS list in your Django project's settings.py file:

```
INSTALLED_APPS = [
```

```
...
```

```
'jazzmin',
```

```
...
```

```
]
```

Afterwards you can customize Django Jazzmin by modifying the settings in your Django project's settings.py file.

### ***5. Data Access Layer***

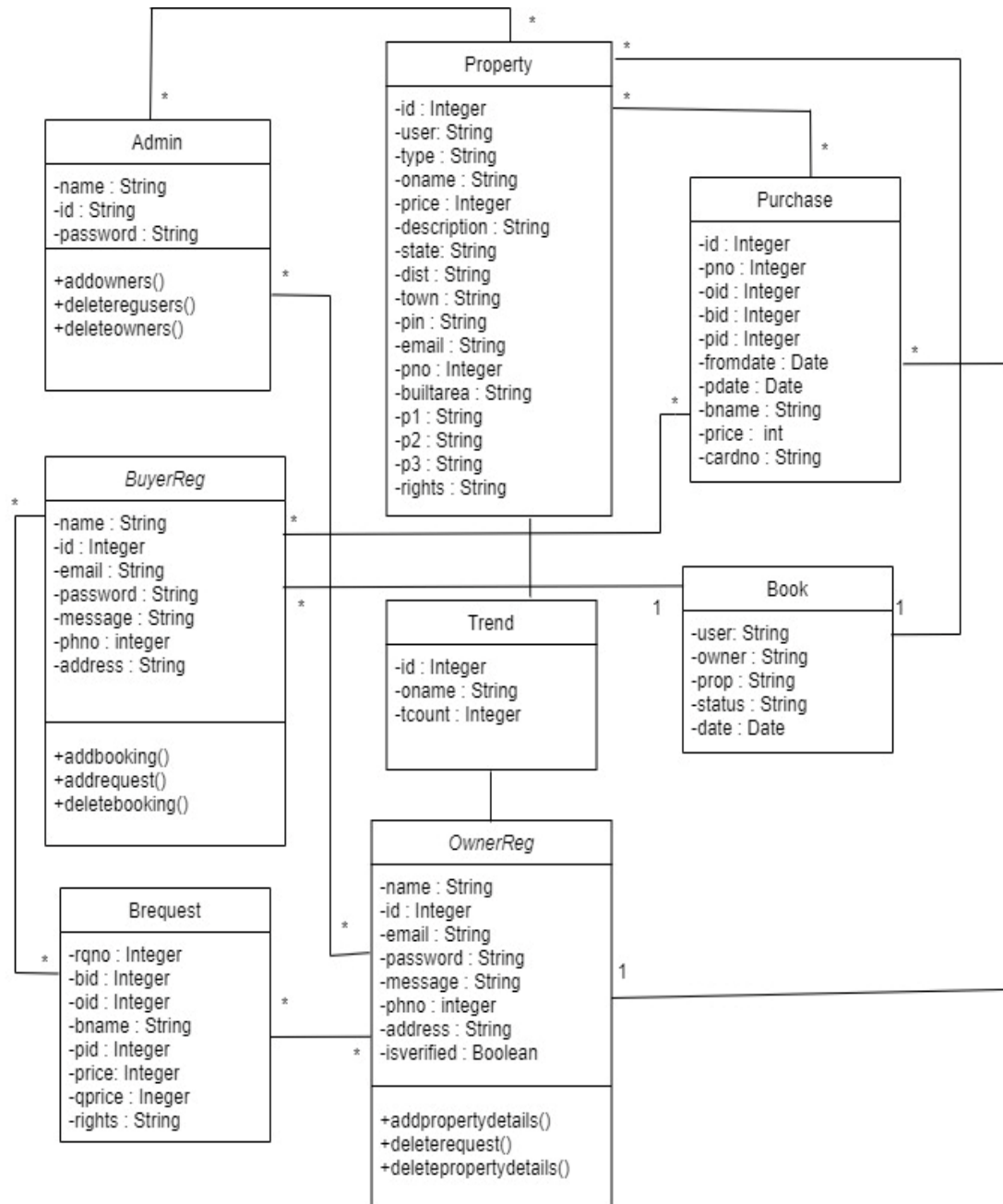
Database: Django integrates with various databases, allowing you to define and manage the application's data schema. You can use Django's Object-Relational Mapping(ORM) to interact with the database and perform CRUD operations.

### ***6. Database Models***

Django's models serve as both business logic entities and database models. They define the structure of the database tables and provide an abstraction layer for interacting with the database .

## Database

### Class Diagram



## **6 . CHALLENGES**



### ***1. User Experience and Design***

Designing an intuitive and user-friendly interface for users and administrators is crucial. Ensuring a smooth user experience, from search and booking to manage details can be challenging, particularly dealing with complex workflows and large data sets.

### ***2. Real-time Availability and Pricing***

Fetching real-time availability and pricing information for real estate services from external providers can be challenging. Dealing with rate limits, handling concurrency, and caching strategies are considerations for ensuring timely and accurate information.

### ***3. User Authentication and Authorization***

Real Estate Management software typically requires user registration, login, and role-based access control. Implementing secure authentication and authorization mechanisms can be complex, especially when dealing with user roles and permissions.

### ***4. Validation Mechanisms***

Implementing validation mechanisms helps ensure that user input is accurate and consistent. You need to validate user data at various stages, such as during registration, booking, or updating information. Validation can include for checking validation in email, phone number, password, pin number etc.

### ***5. Database Management***

Designing an efficient database schema and managing the database operations can be complex. You need to carefully plan the structure of your database, define relationships between entities handle data integrity, and optimize queries for performance.

## **6. FUTURE ENHANCEMENTS**

### 1. Quick and Secure Payments

The website needs integrated, secure payment gateways that let users complete transactions quickly, in a hassle-free manner. For aggregator models, it is possible to offer optional cash collections, where the user pays the cab driver directly upon fulfilment of the journey; the company takes its cut as part of the commission from the driver.

### 2. Social Media Integration

The social media sites are one of the most popular means of sharing experiences for users; Facebook, Twitter, Instagram are literally global marketing platforms. Taking advantage of this, you can integrate your website with these social networking sites, which lets the users post their opinions here.

### 3. Multi-language Support

When you reach out to customers in a language that they are comfortable, greater are chances for client satisfaction. Also more the language the greater is the audience base. Ensure that the software is compatible with at least a few of the languages that are more prevalent in the area. Basic information like car model, type, price range should be available in multiple languages.

### 4. Advanced Search and Filtering:

Enhance the search functionality by implementing advanced filters based on criteria like price range.

## **7.CONCLUSION**

The Online Real Estate Management System is a very helpful tool to fulfill in the field of real estate system provide major advantages such as speed and accuracy of operation, Time Efficiency, Cost Efficiency, Automatic data validation, Data security and reliability, Easy performance check ,Dynamic and User Friendly. Generates real-time, comprehensive reports and ensures access to complete and critical information, instantly. So it will be a good solution for the present problems of Property Management System. Many people search for property for many purposes like residence, offices, faculty and etc. Every individual wants his house to be in the best location with best facilities This online Property management system can help you to get best property by just sitting at home or anywhere. People can book their favourite property online just after a few clicks. In this system the agents can add the property for selling/ renting purpose and users can buy or book a property for rent. Finally, An Online Management system, we have developed a secure, user-friendly Property Management System. This system is capable of taking care of each work that needs to be done in the real estate business. The client can log in using a user id and password. Online payment and verification perform it also a client friend. This system would go to reduce labor and make business more profitable and promising to clients

## **8. REFERENCES**

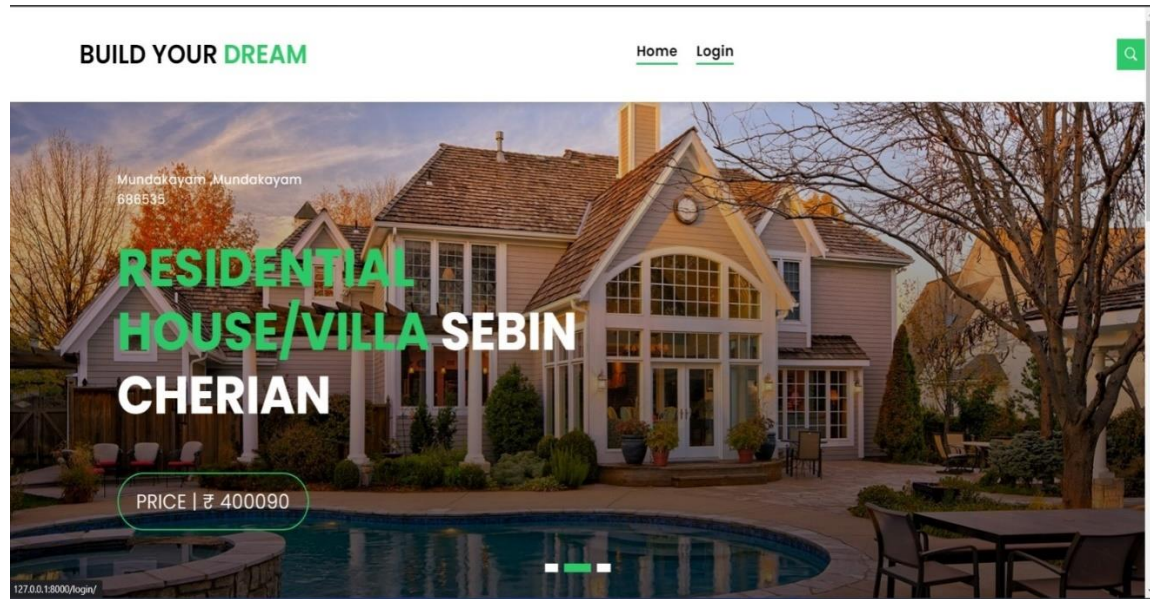
- [https://youtube.com/playlist?list=PL-51WBLyFTg2vW-\\_6XBoUpE7vpmoR3ztO](https://youtube.com/playlist?list=PL-51WBLyFTg2vW-_6XBoUpE7vpmoR3ztO)
- <https://docs.djangoproject.com/en/4.1/intro/tutorial01/>
- [getbootstrap.com](https://getbootstrap.com)

## **ANNEXURE**

# **A. SCREENSHOTS**



## 1.Home Page



## 2.Buyer Registration

EstateAgency

Home Owner Registration Buyer Registration Login

Buyer REGISTRATION

Buyer Name:

Phone No:

Email:

Address:

User Name: admin

Password:


REGISTER

LOGIN BACK TO HOME

127.0.0.1:8000/buyer/

### 3. Owner Registration

---

EstateAgency [Home](#) [Owner Registration](#) [Buyer Registration](#) [Login](#) 

---

Owner REGISTRATION

Owner Name:

Phone No:

Email:

Address:

ID Proof:  No file chosen

User Name:


Password:

[LOGIN BACK TO HOME](#)

127.0.0.1:5000/owner/

### 4. User Login

---

EstateAgency [Home](#) [Owner Registration](#) [Buyer Registration](#) [Login](#) 

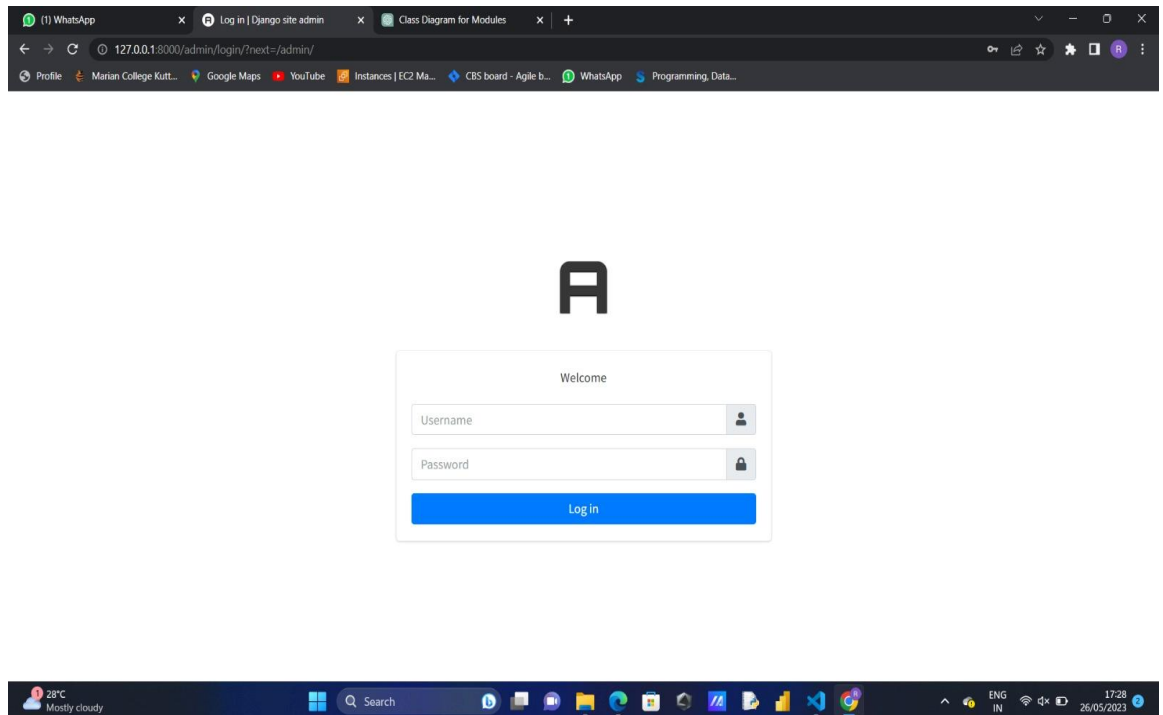
---

LOGIN

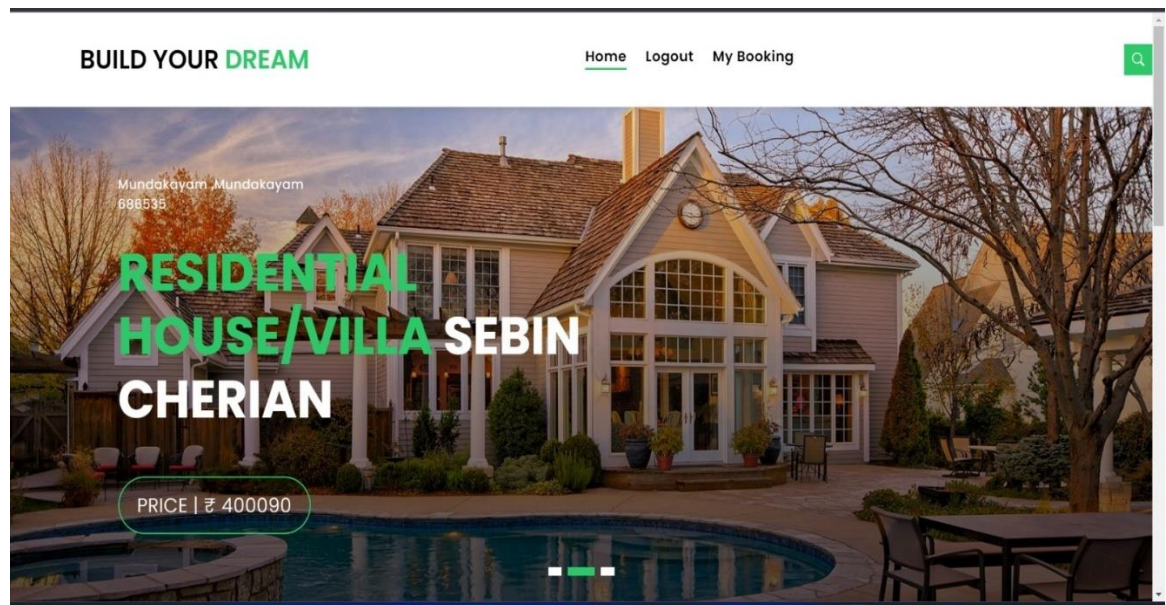
ENTER YOUR USERNAME

ENTER YOUR PASSWORD

## 5. Admin Login



## 6. User Home page



## 7.View Booking

BUILD YOUR **DREAM**

[Home](#) [Logout](#) [My Booking](#)



Property type	District	Town	Area	Book Time	Owner Name	Status	Appointment Date
Residential House/Villa	Kottayam	Mundakayam	888	May 24, 2023, 1:10 p.m.	rohan	Booked	May 25, 2023
Residential House/Villa	Thiruvananthapuram	varkala	6555	May 25, 2023, 9:15 a.m.	rohan	Booked	May 23, 2023
Residential House/Villa	Kottayam	Mundakayam	888	May 25, 2023, 9:18 a.m.	rohan	Booked	May 22, 2023

## 8.All Property

BUILD YOUR **DREAM**

[Home](#) [Logout](#) [My Booking](#)



All Properties:



**Property Type Residential House/Villa**

**Owner Name:** Sanoop Philip

**District:** Thiruvananthapuram

**Price:** 120

[Click To view](#)



**Property Type Residential House/Villa**

**Owner Name:** Sebin Cherian

**District:** Kottayam

**Price:** 400090

[Click To view](#)



**Property Type Residential Land**

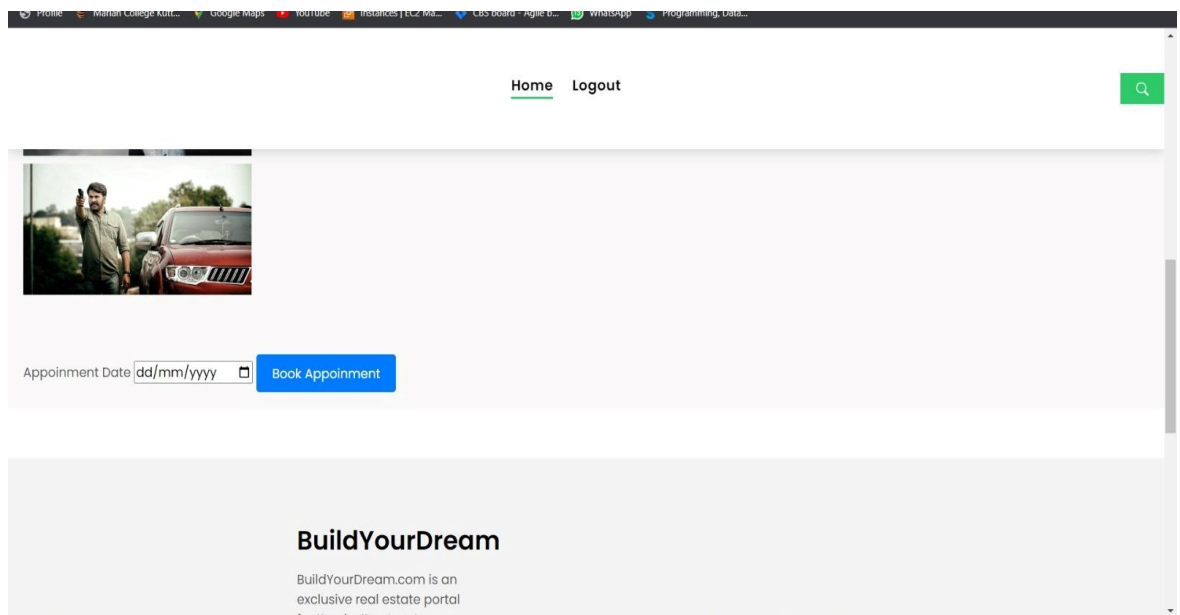
**Owner Name:** Jacob

**District:** Kollam


**Price:** 45000000

[Click To view](#)

## 9. Book Appointment



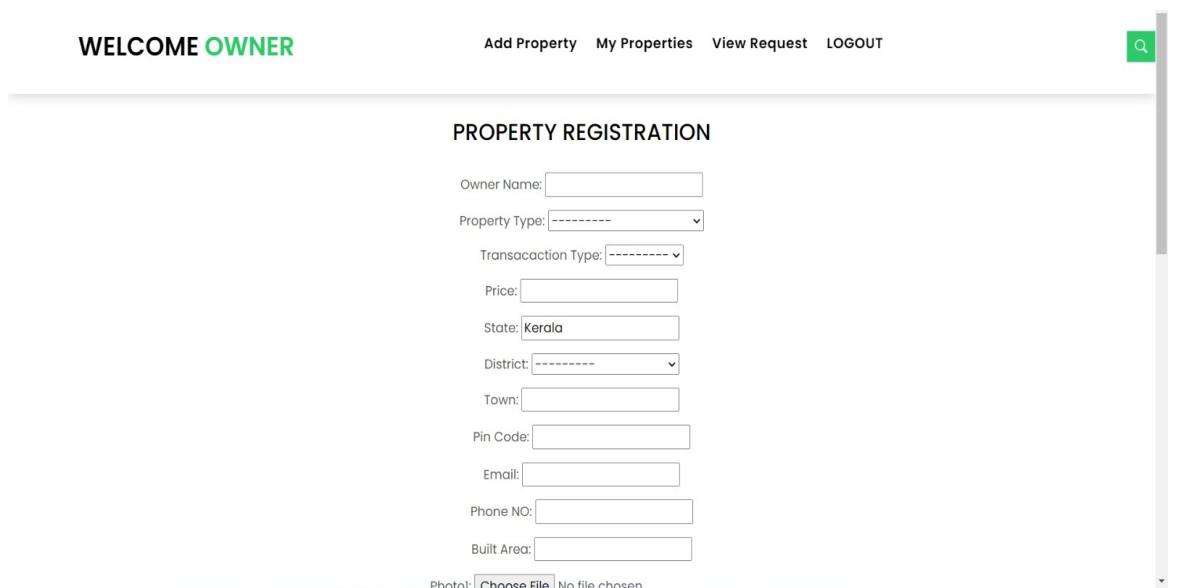
Home Logout

Appointment Date   [Book Appointment](#)

**BuildYourDream**

BuildYourDream.com is an exclusive real estate portal

## 10. Property Registration



WELCOME OWNER Add Property My Properties View Request LOGOUT

**PROPERTY REGISTRATION**

Owner Name:

Property Type:

Transaction Type:

Price:

State:

District:

Town:

Pin Code:

Email:


Phone NO:

Built Area:

Photo: [Choose File](#) No file chosen

## 11. View Property page

**BUILD YOUR DREAM**
Add Property
My Properties
LOGOUT

Property_type	PRICE	DESCRIPTION	STATE	DISTRICT	TOWN	PHONE NO	BUILT AREA(SQFT)	PHOTO	Action
Residential Land	BUY	45000000	neat house	Kerala	Kollam	Vytilla	8078719984	4500	 Delete

## 12. Request Page

**WELCOME ADMIN**
APPROVE OWNERS
LOGOUT

Property type	District	Town	Area	Book Time	Buyers Name	Buyers contact	Status	Appointment Date	Action
---------------	----------	------	------	-----------	-------------	----------------	--------	------------------	--------

**BuildYourDream**

BuildYourDream.com is an exclusive real estate portal for Kerala. It caters to residential, commercial, industrial and agricultural properties within the state. BuildYourDream is a platform which offers a superior search experience through features such as map search, property alert, property comparison to access relevant information easily. Get in touch with us for your feedback and suggestions.

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**The Company**

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- > Legal
- > Agent Admin
- > Careers
- > Affiliate
- > Privacy Policy

**International sites**

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