



VIT-AP UNIVERSITY

SOFTWARE ENGINEERING

LAB - L55 + L56

CSE 1005

HOUSE-HUB

BATCH-13

Submitted by

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Problem Statement

In today's fast-paced real estate market, both buyers and renters struggle to find suitable housing options that meet their specific needs, while sellers face challenges in efficiently reaching potential customers. The current online platforms often lack user-friendly interfaces, detailed property listings, and secure, streamlined processes for transactions. Additionally, the absence of tailored authentication systems for buyers and sellers leads to complications in managing accounts and property listings.

House-Hub aims to bridge this gap by creating a comprehensive web platform that provides a seamless interface between customers and sellers. It offers detailed listings of houses available for sale or rent, allowing customers to browse, compare, and complete transactions directly on the site. For sellers, **House-Hub** provides an easy-to-use account management system, enabling them to list their properties with all necessary details, ensuring they reach the right audience. The platform also incorporates distinct authentication mechanisms for users and sellers, ensuring that each group has access to the appropriate tools and features, with all login details securely stored in a database.

House-Hub addresses the need for a unified, secure, and efficient real estate platform that simplifies the buying, renting, and selling processes, ultimately enhancing the experience for all parties.

HOUSE-HUB

(WEB DEVELOPMENT)

SRS DOCUMENT

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1. Introduction

1.1 Purpose

House-Hub simplifies real estate by connecting buyers, renters, and sellers on a single platform. It enables easy property browsing, secure transactions, and efficient property management, enhancing the overall experience for all users.

1.2 Scope

House-Hub will offer a platform where users can browse and secure properties, and sellers can list and manage their offerings. It will include separate authentication for users and sellers, along with secure transaction processing. The platform will be mobile-responsive and scalable for future growth.

1.3 Definitions, Acronyms, and Abbreviations

User: An individual interacting with the House-Hub platform, either as a buyer/renter or a seller.

UI: User Interface, the visual elements of the House-Hub platform that users interact with.

DB: Database, the system used to store and manage user, seller, and property information.

Authentication: The process of verifying a user's identity to grant access to a system or application.

1.4 References

- Zillow Real Estate Data on Kaggle: [Link](#)
- U.S. Real Estate Data from Redfin: [Link](#)

1.5 Overview

This SRS document details the overall description of the system, specific functional and non-functional requirements, and other essential components for the successful development and deployment of the House-Hub system.

2. Overall Description

2.1 Product Perspective

The platform simplifies the real estate process by offering a unified interface for both buyers/renters and sellers. It enables users to browse, compare, and secure properties, while sellers can efficiently list and manage their offerings. With secure transactions and intuitive navigation, it enhances the overall real estate experience for all parties involved.

2.2 Product Functions

- **Property Listings:** Sellers can create and manage property details.
- **User Browsing:** Buyers/renters can search and view property listings.
- **Transaction Processing:** Securely handles property purchases and rentals.
- **Account Management:** Separate authentication for users and sellers.
- **Communication Tools:** Enables direct messaging between users and sellers.

2.3 User Classes and Characteristics

- **Buyers/Renters:** Search for properties, requiring easy browsing and secure transactions.
- **Sellers:** List and manage properties, needing tools for listings and transaction tracking.
- **Administrators:** Manage the platform, monitor activity, and ensure security and functionality.

2.4 Operating Environment

- **Hardware:** Servers for hosting, client devices like desktops and smartphones.
- **Software:** Database (MySQL), and web technologies (HTML, CSS, JavaScript, NODE.JS).
- **Platforms:** Node.js for back-end, React for front-end, AWS, Azure.

2.5 Design and Implementation Constraints

- **Performance:** Ensure the platform loads quickly and handles multiple users efficiently.
- **Security:** Implement strong measures to protect user data and transactions.
- **Compatibility:** Design for compatibility across various devices, OS and browsers
- **Scalability:** Build a scalable architecture to accommodate growth in users and data.

2.6 Assumptions and Dependencies

- **Internet Access:** Reliable internet for platform use.
- **Browser Compatibility:** Modern, updated browsers for full functionality.
- **Cloud Services:** Dependence on cloud services for hosting and scalability.
- **Third-Party Integrations:** Reliable payment and communication services.

3. Specific Requirements

3.1 Functional Requirements

- **FR1:** The system shall allow users to browse and filter property listings based on criteria such as location, price, and features.
- **FR2:** The system shall enable sellers to create, edit, and manage property listings, including adding descriptions, photos, and pricing information.
- **FR3:** The system shall provide secure transaction processing for purchasing or renting properties, ensuring a completion rate of at least 95%.
- **FR4:** The system shall support real-time updates for property availability and transaction status, with updates reflected within 1 minute.
- **FR5:** The system shall log all user actions, property listings, and transactions for auditing and reporting purposes.

- **FR6:** The system shall offer an API for integrating with third party services such as payment gateways and communication tools, to enhance functionality.

1.2 Non-Functional Requirements

- **NFR1:** The system shall ensure data privacy and comply with relevant data protection regulations GDPR, CCPA
- **NFR2:** The system shall be scalable to handle a large number of concurrent users and property listings.
- **NFR3:** The system shall be available 99.9% of the time to ensure reliability and uptime.
- **NFR4:** The system shall have a mean time to recovery (MTTR) of less than 2 hours in case of outages or disruptions.
- **NFR5:** The system shall provide detailed logging and monitoring capabilities to track user activity, system performance, and errors.

2. Appendices

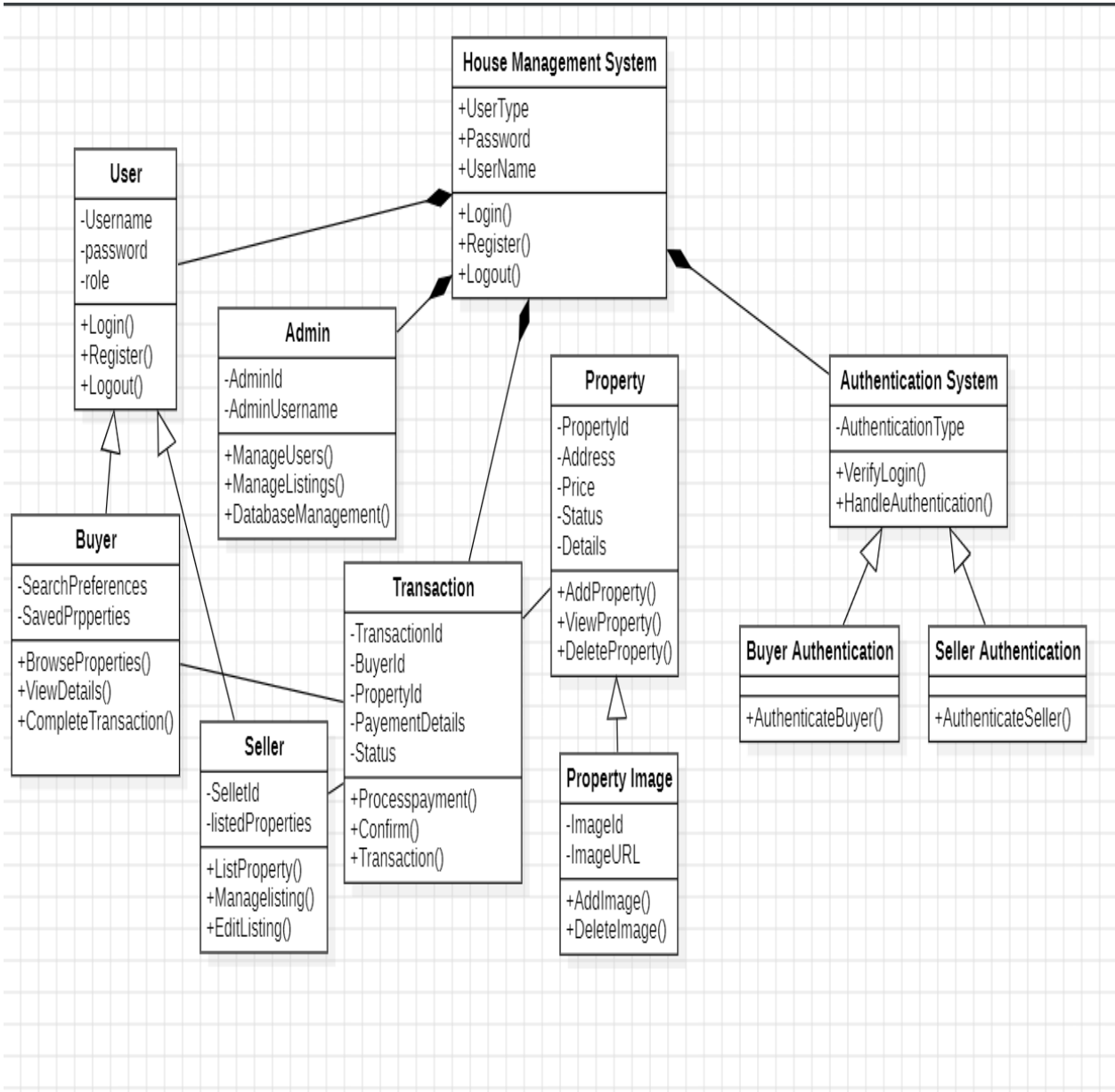
2.1 Glossary

- **Fraud Detection:** Identifying and preventing fraudulent activities.
- **Anomaly Detection:** Finding unusual patterns that may indicate fraud.
- **Data Integrity:** Ensuring data accuracy and consistency.
- **Transaction Monitoring:** Observing transactions to detect and prevent fraud.

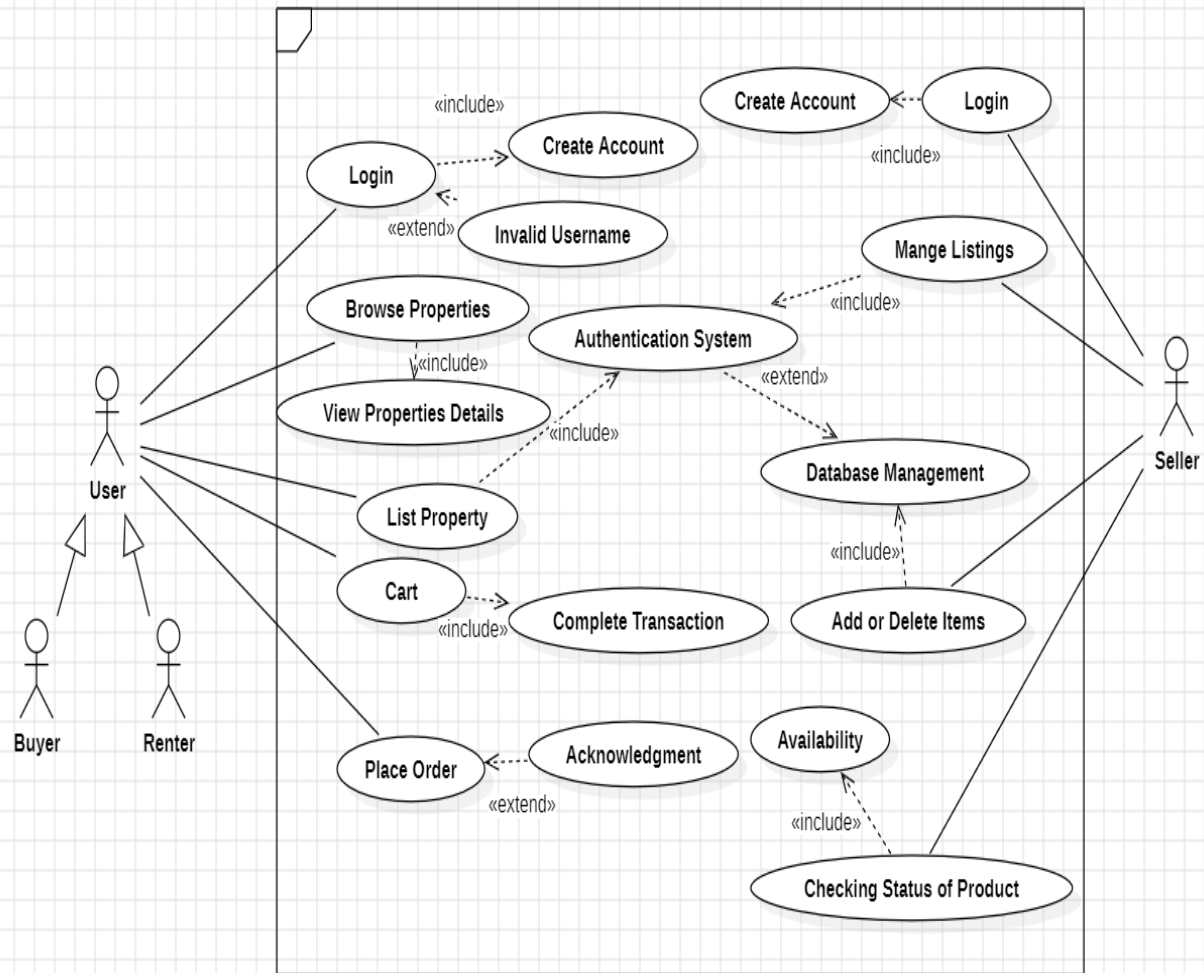
2.2 References

- Mozilla Developer Network Web Docs: <https://developer.mozilla.org/>
- Stack Overflow: <https://stackoverflow.com/>
- W3Schools: <https://www.w3schools.com/>

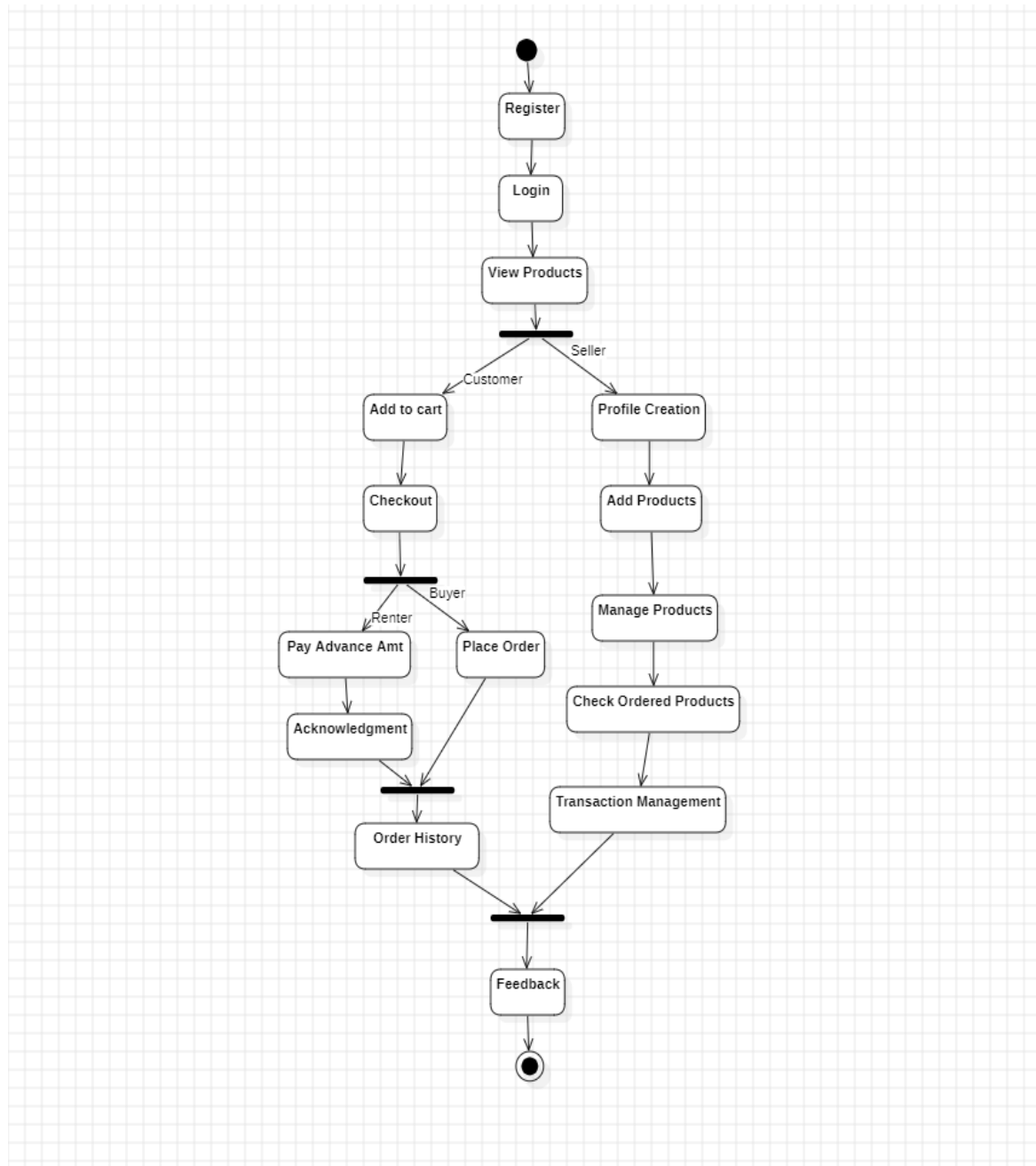
CLASS DIAGRAM



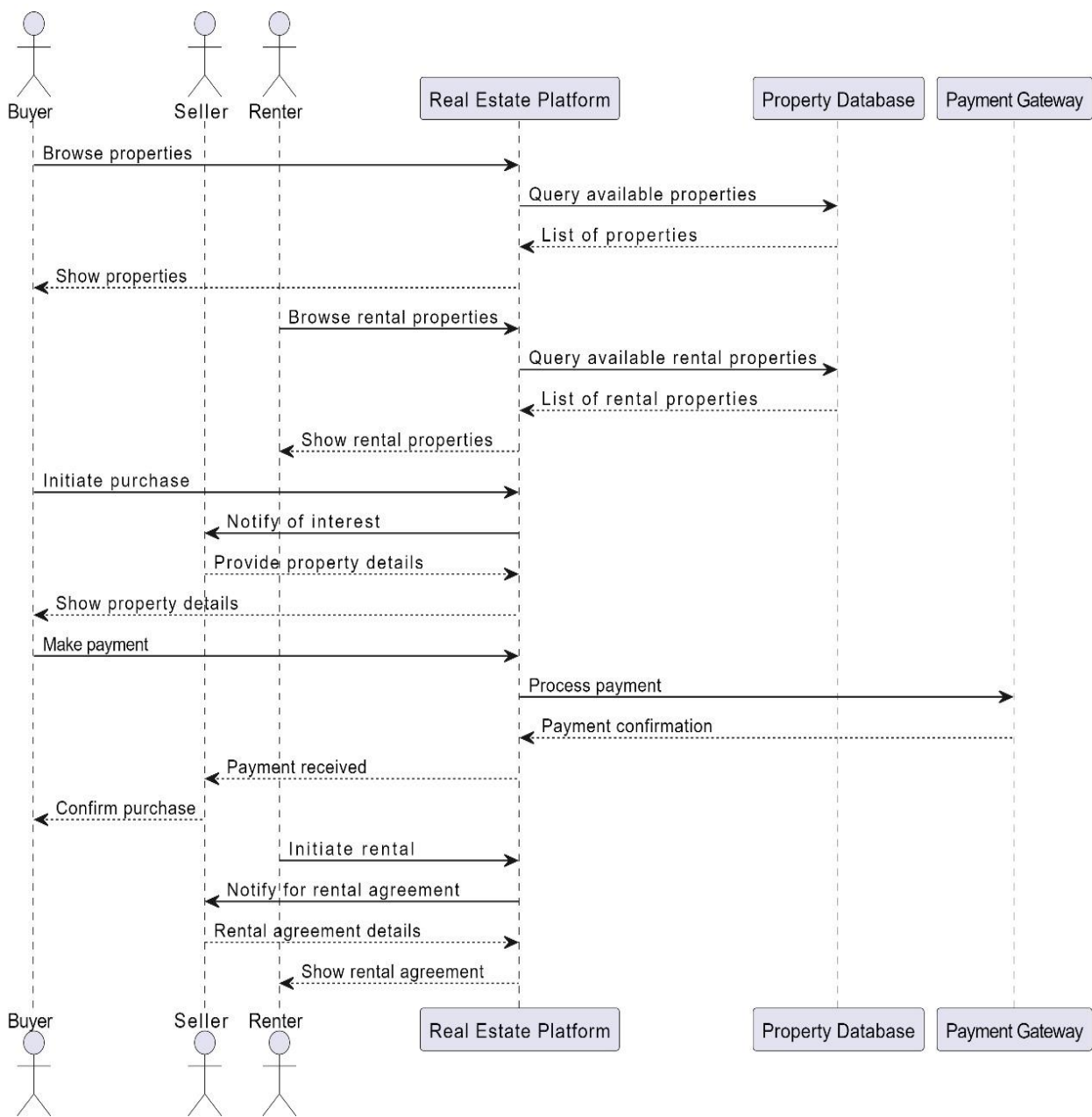
USE CASE DIAGRAM



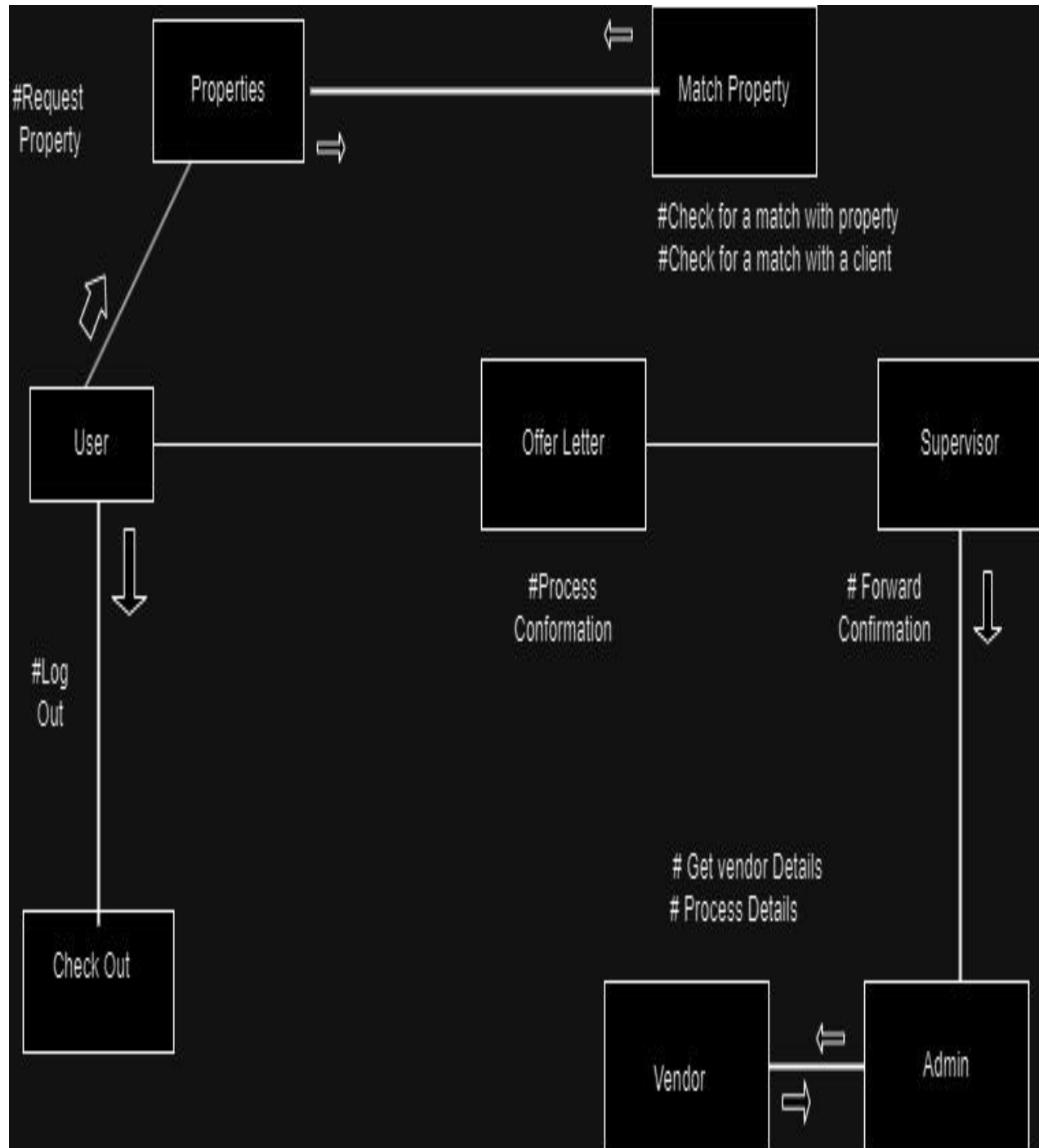
STATE CHART DIAGRAM



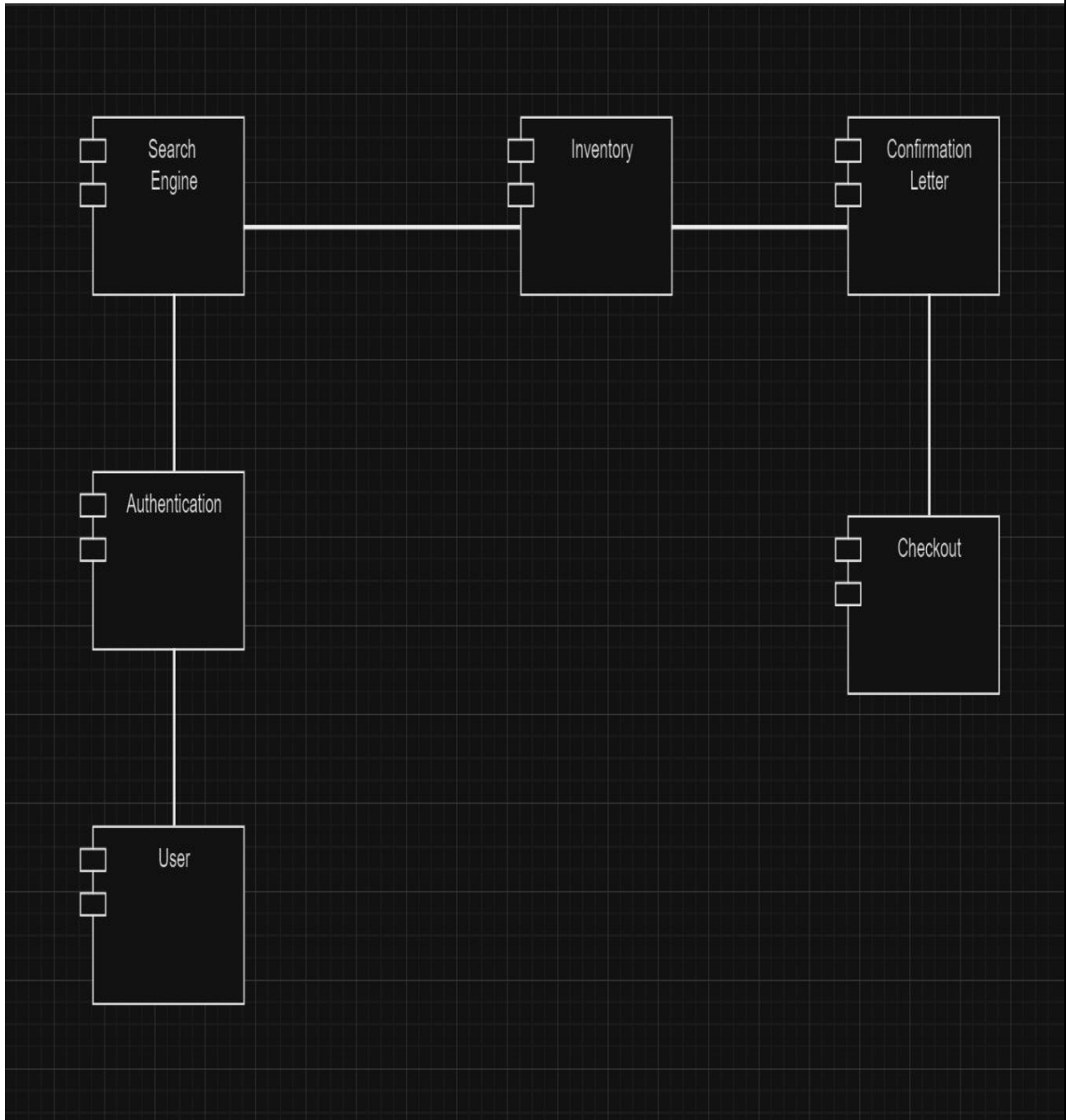
SEQUENCE DIAGRAM



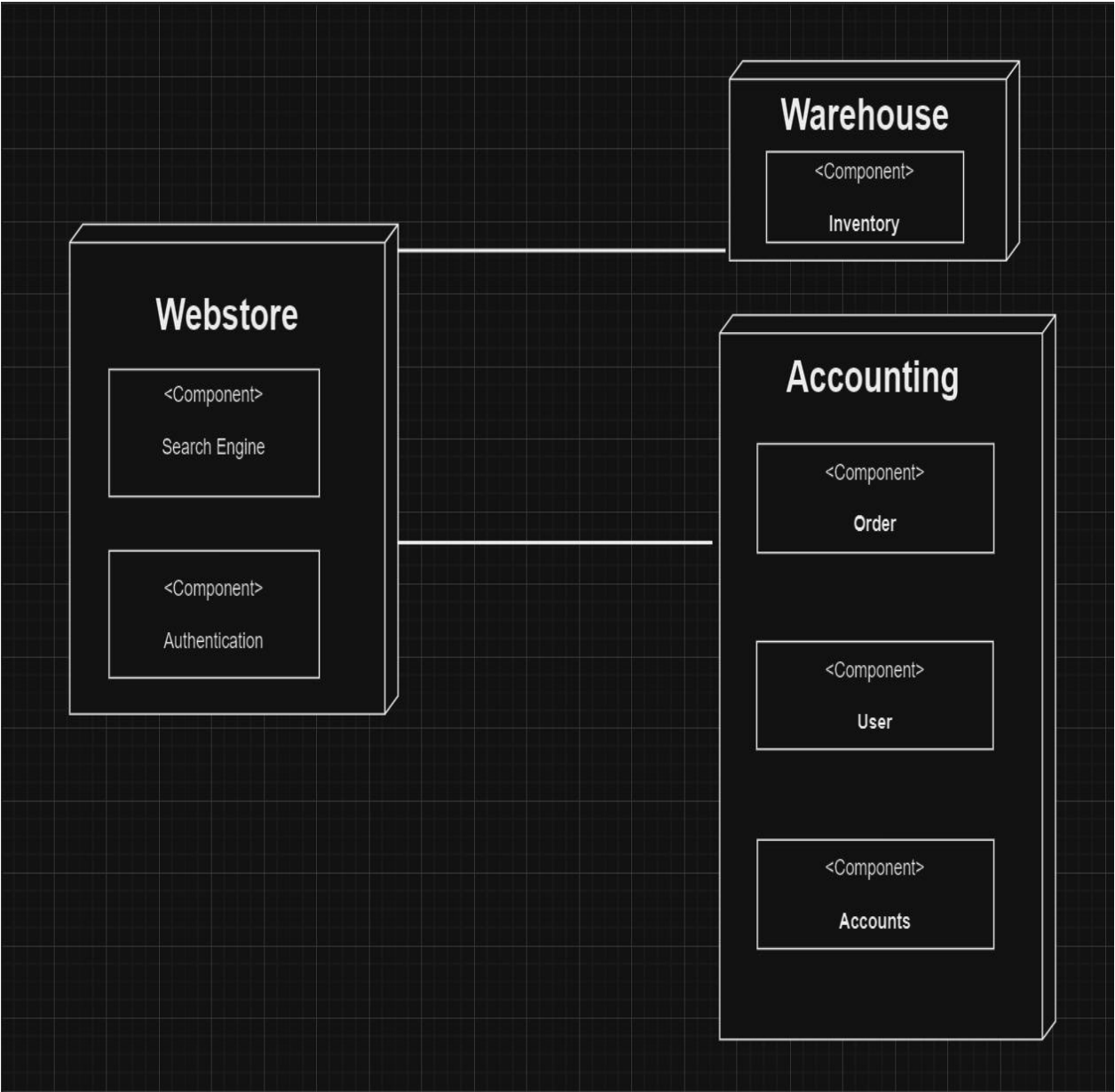
COLLABORATION DIAGRAM



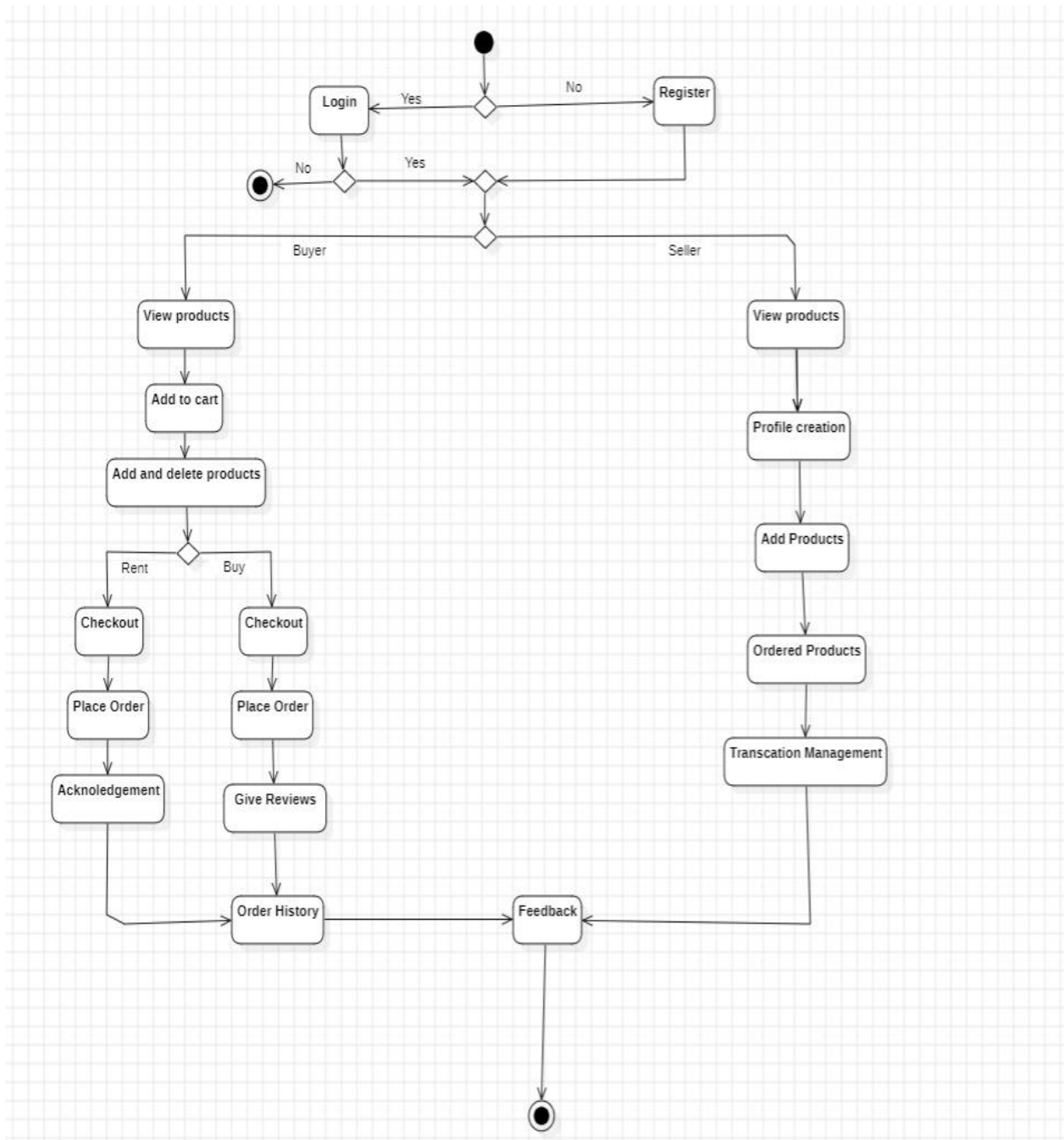
COMPONENT DIAGRAM



DEPLOYMENT DIAGRAM




ACTIVITY DIAGRAM



PROJECT CODING

1.TITLE PAGE:

House Hub



House-Hub aims to bridge this gap by creating a comprehensive web platform that provides a seamless interface between customers and sellers. It offers detailed listings of houses available for sale or rent, allowing customers to browse, compare, and complete transactions directly on the site. For sellers, House-Hub provides an easy-to-use account management system, enabling them to list their properties with all necessary details, ensuring they reach the right audience. The platform also incorporates distinct authentication mechanisms for users and sellers, ensuring that each group has access to the appropriate tools and features, with all login details securely stored in a database.

[Register](#)[Login](#)

2.REGISTRATION PAGE:

Registration Form

First Name

Last Name ⚠ Please fill out this field.

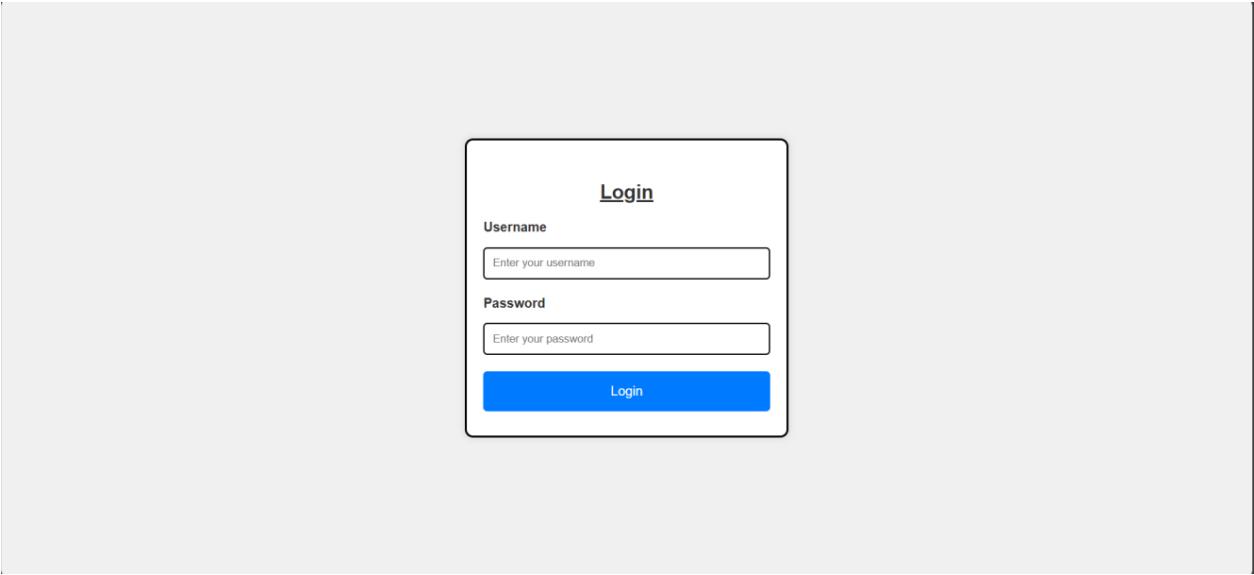
Email

Mobile Number

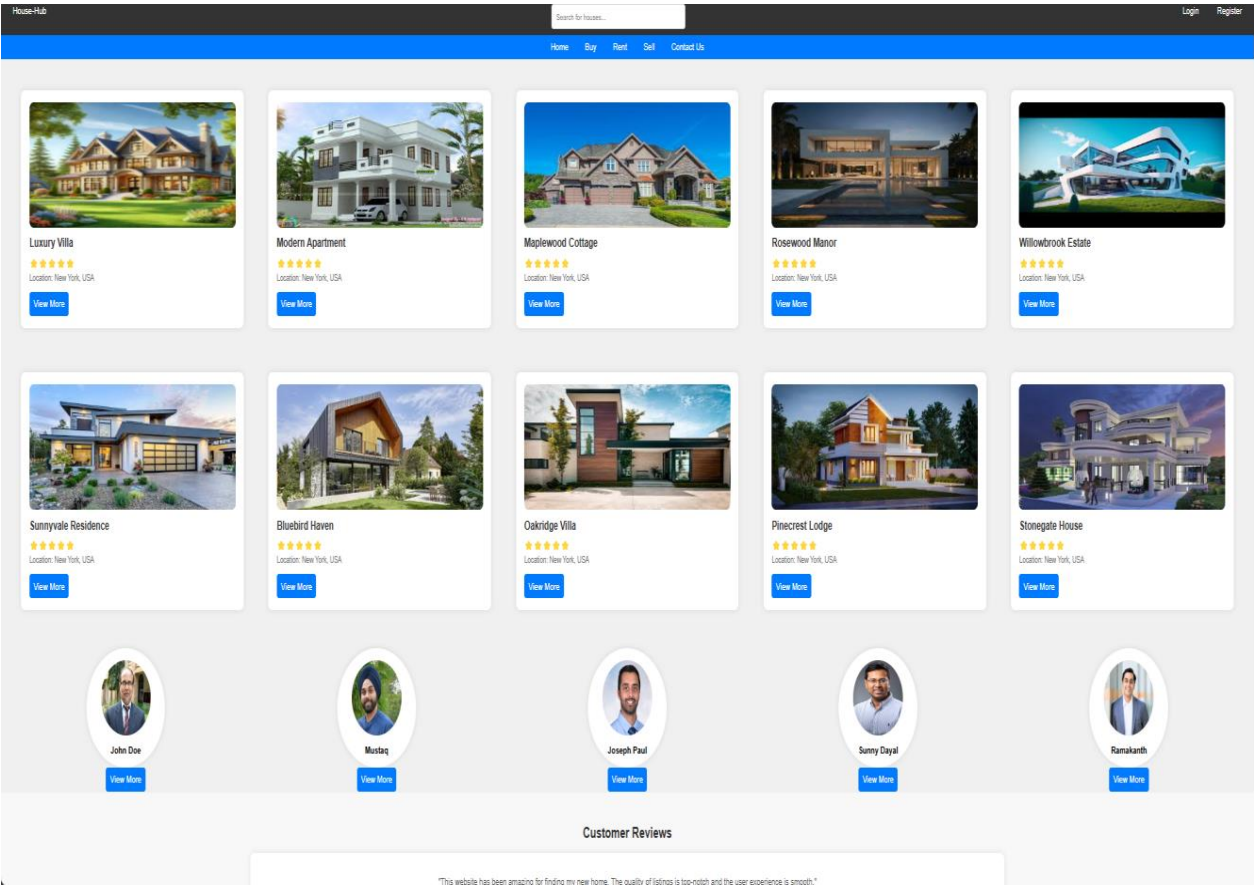
Address

[Register](#)

3.LOGIN PAGE:



4.HOME PAGE:




5.PRODUCT PAGE:

House-Hub

Search for houses

LoginRegister

HomeBuyRentSellContact Us



Beautiful Family House
Location: New York, USA
Features: Spacious living area, modern kitchen, garden, and parking space. The house is located in a peaceful neighborhood with easy access to schools, shopping centers, and public transportation.
Physical Details: 3500 sq.ft, 2 floors, modern architecture.
Rooms: 4 Bedrooms, 3 Bathrooms, 1 Kitchen, 1 Living Room.
Cost: 500,000/-

Owner Details: Experienced real estate owner with over 10 years in the business. Specialized in high-end properties across the USA.


Number of Houses Owned: 2

Rating: ★★★★★


Buy Now

Rent Now


Similar Houses You May Like




Luxury Villa
★★★★★
Location: Los Angeles, USA
[View More](#)




Modern Apartment
★★★★★
Location: Los Angeles, USA
[View More](#)



Maplewood Cottage
★★★★★
Location: Los Angeles, USA
[View More](#)



Rosewood Manor
★★★★★
Location: Los Angeles, USA
[View More](#)




Willowbrook Estate
★★★★★
Location: Los Angeles, USA
[View More](#)

6.BUY PAGE:

Payment Page

Payment Methods




Credit/Debit Card

Name on Card

Card Number


Expiry Date

CVV



Net Banking

Enter Bank Name



UPI

UPI ID

Delivery Address

Full Name

Address Line 1

Address Line 2

City

Zip Code

Order Summary

Product	Quantity	Price	Total
House 1	1	500,000/-	500,000/-
		Subtotal	500,000/-
		Shipping	0/-
		Total	500,000/-


Place Order

7.ACKNOWLEDGEMENT PAGE:

House-Hub

[Login](#) [Register](#)

[Home](#) [Buy](#) [Rent](#) [Sell](#) [Contact Us](#)

 **Your order is successfully Placed**

You will Recieve a Confirmation Email Soon!
Please provide your valuable feedback here!

8.FEEDBACK PAGE:

Feedback Form

Name


Email

Feedback

9.CONTACT PAGE:

House-Hub
[Login](#)
[Register](#)

[Home](#)
[Buy](#)
[Rent](#)
[Sell](#)
[Contact Us](#)



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10.SELLER PAGE:

House-Hub
[Login](#)
[Register](#)

[Home](#)
[Buy](#)
[Rent](#)
[Sell](#)
[Contact Us](#)




Mustaq

Number of Houses: 2

Mobile No: +917013596448

★★★★★

Houses Listed by Mustaq




Maplewood Cottage

★★★★★

Location: Beverly Hills, USA

[View More](#)



Rosewood Manor

★★★★★

Location: New York, USA


[View More](#)

Customer Reviews

Alice Smith: John is an amazing seller. His properties are top-notch, and he was very helpful throughout the process.

Michael Johnson: I had a great experience working with John. His attention to detail and professionalism is outstanding.

Similar Houses You May Like




Luxury Villa

★★★★★

Location: Los Angeles, USA

[View More](#)




Modern Apartment

★★★★★

Location: Los Angeles, USA

[View More](#)




Maplewood Cottage

★★★★★

Location: Los Angeles, USA

[View More](#)




Rosewood Manor

★★★★★

Location: Los Angeles, USA

[View More](#)



Willowbrook Estate

★★★★★

Location: Los Angeles, USA

[View More](#)

11.RENT PAGE:

Rent Payment Page

Renting Details

Delivery Address

Enter your full address

Advance Amount

Enter advance amount (e.g., 5000)

Select Payment Method

☒ Credit Card

☐ Debit Card

☐ UPI

Card Number / UPI ID

Name on Card

Expiry Date (MM/YY)

CVV

Confirm Renting Decision & Payment

By clicking on 'Pay & Confirm Rent', you agree to rent this property, pay the specified advance amount, and see the owner's details.

Pay & Confirm Rent

Rent Payment Page

Renting Details

Delivery Address

Enter your full address

Advance Amount

Enter advance amount (e.g., 5000)

Select Payment Method

☒ Credit Card

☐ Debit Card

☐ UPI

Card Number / UPI ID

Name on Card

Expiry Date (MM/YY)

CVV

Owner's Details

Name: John Doe

Contact Number: +917013596447

Email: john.doe@gmail.com

Address: 1234 Main Street, Anytown, USA

Note: From the next month onwards, you must contact the owner directly for all rent payments and property-related discussions. Further transactions will not be handled through this site.

Please provide your valuable feedback [here!](#)

12.THANKING PAGE:

House-Hub

Search for houses...

LoginRegister

HomeBuyRentSellContact Us

Thank you for your valuable feedback

Your submission is recorded

FOR CODE CLICK BELOW GITHUB LINK:

<https://github.com/md-afnan-2005/se-project>