



Project Name: NextHome
Branch DAC Aug-2025

Documentation On “*NextHome*”
DAC AUG-2025

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1. Introduction:

1.1 Document Purpose:

This document describes the complete Software Requirement Specification (SRS) for the project “Nexthome – PG & Hostel Rental System.”

The purpose of this document is to clearly define the business requirements, system scope, functional requirements, non-functional requirements, database structure, and overall system architecture of the application.

1.2 Project Background:

In today’s fast-moving environment, students and working professionals frequently migrate to different cities for education and employment opportunities. One of the biggest challenges they face is finding safe, affordable, and suitable PG (Paying Guest) or hostel accommodation.

Currently, most PG accommodations are managed manually. Owners maintain records in notebooks or spreadsheets, and booking requests are handled through phone calls or physical visits.

1.3 Aim & Objectives:

The main aim of Nexthome is to develop a secure, user-friendly, and centralized web application that connects PG Owners and Tenants through an efficient digital platform.

Objectives:

1. To provide an easy and secure registration system for tenants and PG owners.
2. To allow PG owners to digitally manage:
 - PG listings
 - Room availability
 - Pricing
 - Facilities
 - Booking requests
3. To enable tenants to:
 - Search PGs based on location, rent, and facilities
 - View detailed room information
 - Send booking requests
 - Make online payments
 - Submit complaints
 - Give ratings and feedback
4. To provide an Admin panel for:
 - Approving PG owner registrations
 - Monitoring bookings
 - Viewing complaints
5. To improve transparency and reduce manual paperwork in PG management.

2. Business Requirements Overview:

Nexthome is a web-based rental management system that connects tenants and PG owners across multiple cities through a centralized platform. It supports three types of users: Admin, PG Owner, and Tenant, with secure authentication and role-based access control.

PG Owners can register, manage PG details, update rooms and facilities, and handle booking requests. Tenants can search PGs based on location and rent, send booking requests, make secure payments, and provide ratings and feedback.

The Admin supervises the system by approving owner registrations, monitoring bookings, and handling complaints. The platform ensures real-time room availability, maintains booking and payment records, and acts as a mediator for smooth communication between tenants and owners.

3. Functional Requirements Overview:

The Nexthome system consists of three major modules:

1. Admin Module
2. PG Owner Module
3. Tenant Module

3.1 Admin Module

The Admin is the supervisory authority of the system and is responsible for managing and monitoring the overall platform.

Functionalities:

1. Login Process
2. Admin must enter valid credentials to access the system.
3. Approve / Reject Owner Registration
4. Admin verifies the details submitted by PG Owners and approves or rejects the request.
5. View Feedback
6. Admin can analyze ratings.
7. Admin can monitor room availability across the platform.

3.2 Owner Module

PG Owner is responsible for listing and managing PG properties.

Functionalities:

- 1.Registration Request
- 2.Login
3. After approval, owner can log in using credentials.
- 4.Add / Update PG Details
- 5.Add Rooms and Facilities
6. Owner can specify:
 - Room type (Single/Double/Triple)
 - Number of rooms
 - Price per room
 - Facilities (WiFi, AC, Food, Parking, etc.)
- 7.View Booking Requests
8. Owner can check tenant details and booking requests.
9. Owner can monitor reviews and ratings to improve service quality.

3.3 Tenants Module

- Registration & Login – Tenant creates an account using personal details and logs in to access the dashboard.
- Search PG/Room – Tenant can search PGs based on location, rent range, room type, and available facilities.
- View Room Details – Tenant can check PG information, rent, room type, facilities, photos, and rules before booking.
- Send Booking Request – Tenant can send a booking request to the PG owner for a selected room.

4. Non-Functional Requirement:

Non-functional requirements define the quality standards and operational constraints of the Nexthome system. The platform must deliver high performance by supporting multiple concurrent users and ensuring fast search results and real-time booking confirmations. Strong security measures such as encrypted passwords, role-based access control, secure payment integration, and protection against common web attacks must be implemented. The system should use HTTPS and proper session management for safe data transmission. The application must provide a user-friendly, responsive, and mobile-compatible interface with simple navigation and clear validation messages.

5. Use-Case Diagram

5.1 Admin:

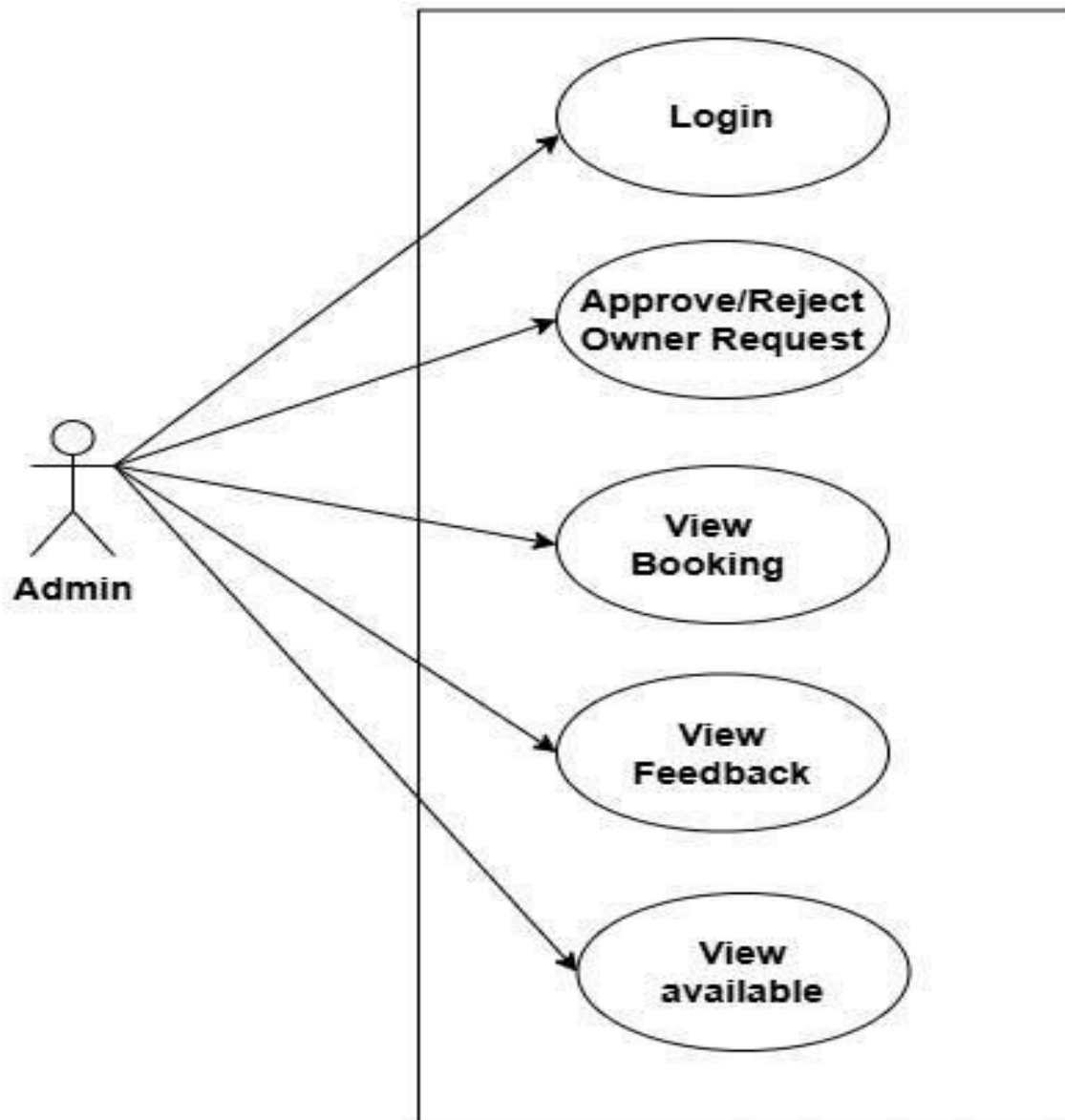


Fig. Use-Case Diagram for Admin

5.2 Owner:

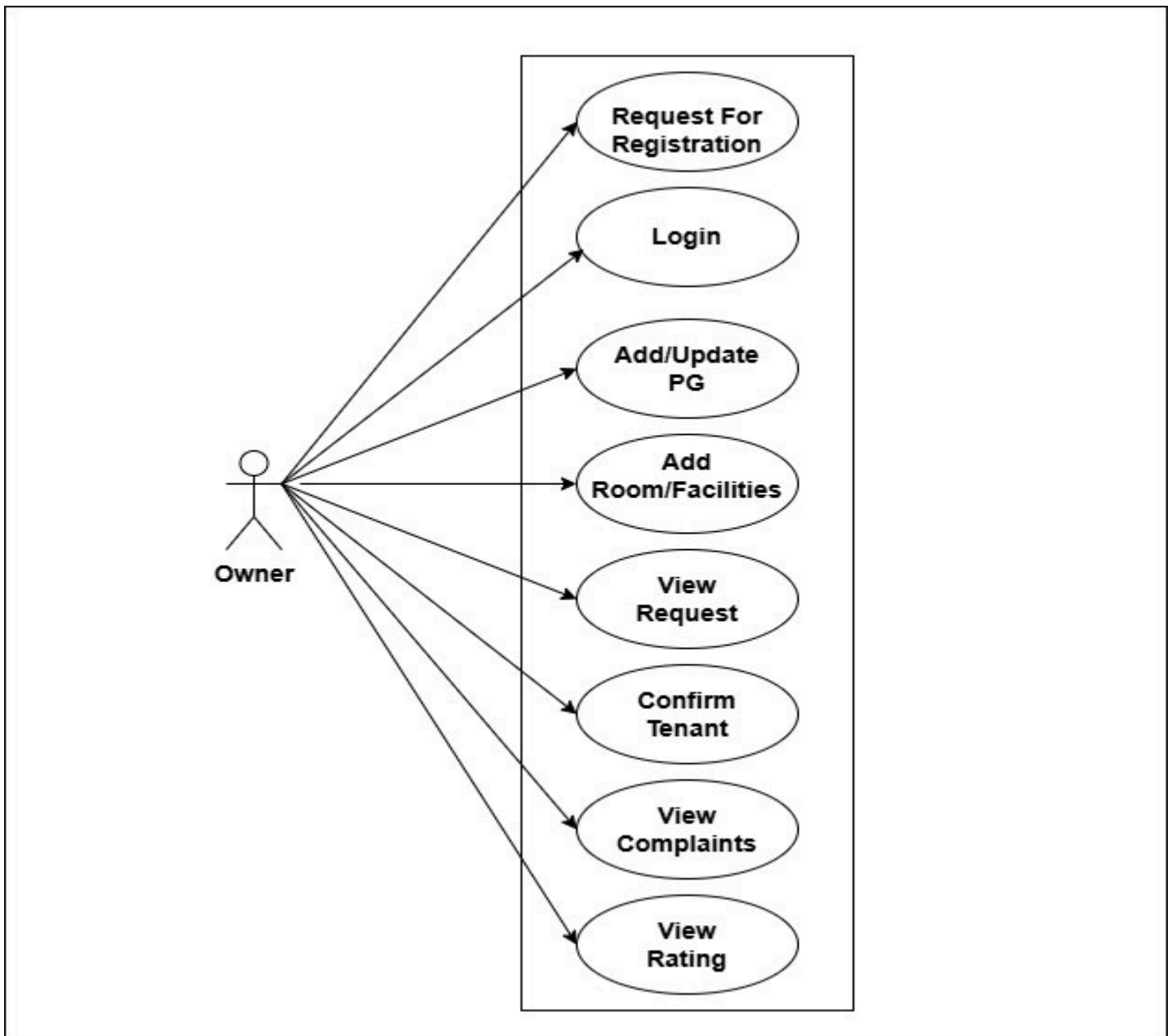


Fig. Use-Case Diagram for Owner

5.3 : Tenant :

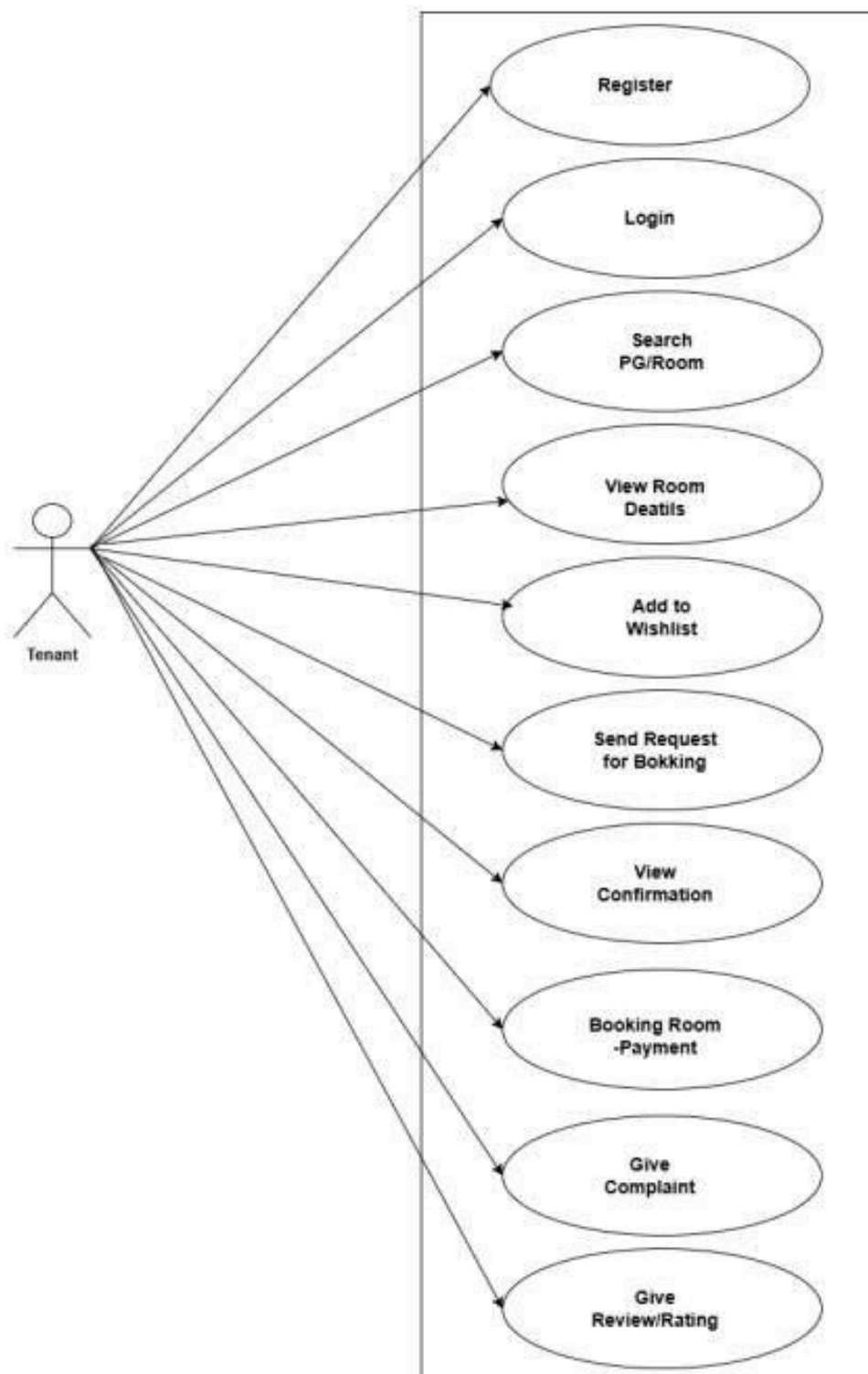


Fig. Use-Case Diagram for Tenant

6. Database Design:

1. Users Table:

| Field Name | Type | Key | Description |
|------------|--------------|-------------|----------------------------------|
| user_id | INT | Primary Key | Unique user ID |
| role_id | INT | Foreign Key | (Admin/Owner/Tenant) |
| name | VARCHAR(255) | - | User full name |
| email | VARCHAR(255) | Unique | Email address |
| phone | VARCHAR(15) | - | Contact number |
| password | VARCHAR(255) | - | Encrypted password |
| gender | VARCHAR(25) | - | Gender of user |
| created_at | DATE | - | Account creation date |
| status | VARCHAR(255) | - | Account status (Active/Inactive) |

2. State Table:

| Field Name | Type | Key | Description |
|------------|--------------|-------------|-----------------|
| state_id | INT | Primary Key | Unique state ID |
| state_name | VARCHAR(255) | - | Name of state |

3.Pg_Property table:

| Field Name | Type | Key | Description |
|-------------|--------------|-------------|---------------------------|
| pg_id | INT | Primary Key | Unique PG ID |
| owner_id | INT | Foreign Key | Owner reference (user_id) |
| pg_name | VARCHAR(255) | - | Name of PG |
| description | VARCHAR(255) | - | PG description |
| address | INT | - | Address reference |
| type | VARCHAR(255) | - | PG type (Boys/Girls/Co- |
| rent | INT | - | Base rent |
| facility | VARCHAR(255) | - | Facilities available |
| status | VARCHAR(255) | - | PG availability status |
| city_id | INT | Foreign Key | City reference |

4. Rooms table:

| Field Name | Type | Key | Description |
|------------------|--------------|-------------|-------------------|
| room_id | INT | Primary Key | Unique Room ID |
| pg_id | INT | Foreign Key | PG reference |
| room_no | VARCHAR(25) | - | Room number |
| room_type | VARCHAR(25) | - | Room type |
| total_bed | INT | - | Total beds in |
| available_bed | INT | - | Available beds |
| sharing | INT | - | Sharing type |
| security_deposit | INT | - | Security deposit |
| status | VARCHAR(255) | - | Room availability |

5.Booking table:

| Field Name | Type | Key | Description |
|----------------|--------------|-------------|----------------------------|
| booking_id | INT | Primary Key | Unique booking ID |
| tenant_id | INT | Foreign Key | Tenant reference (user_id) |
| room_id | INT | Foreign Key | Room reference |
| book_date | DATE | - | Booking date |
| start_date | DATE | - | Stay start date |
| end_date | DATE | - | Stay end date |
| rent_amount | INT | - | Rent amount |
| booking_status | VARCHAR(255) | - | Pending/Approved/Rejected |
| pg_id | INT | Foreign Key | PG reference |

6.Payment table:

| Field Name | Type | Key | Description |
|----------------|--------------|-------------|-------------------|
| payment_id | INT | Primary Key | Unique payment ID |
| booking_id | INT | Foreign Key | Booking reference |
| amount | INT | - | Payment amount |
| payment_mode | VARCHAR(255) | - | Payment method |
| payment_status | VARCHAR(255) | - | Paid/Failed |

7. Complaint table:

| Field Name | Type | Key | Description |
|----------------|--------------|-------------|---------------------------|
| complaint_id | INT | Primary Key | Unique complaint ID |
| tenant_id | INT | Foreign Key | Tenant reference |
| pg_id | INT | Foreign Key | PG reference |
| message | VARCHAR(255) | - | Complaint details |
| status | VARCHAR(255) | - | Open/Resolved |
| complaint_date | DATE | - | Complaint submission date |

8. Feedback table:

| Field Name | Type | Key | Description |
|---------------|--------------|-------------|--------------------|
| feedback_id | INT | Primary Key | Unique feedback ID |
| tenant_id | INT | Foreign Key | Tenant reference |
| pg_id | INT | Foreign Key | PG reference |
| rating | INT | - | Star rating (1–5) |
| comment | VARCHAR(255) | - | Review message |
| feedback_date | DATE | - | Date of feedback |

9.Roles table:

| <i>Field</i> | <i>Type</i> | <i>Null</i> | <i>Key</i> | <i>Default</i> | <i>Description</i> |
|--------------|-------------|-------------|-------------|----------------|--|
| roleid | Integer | | Primary key | Null | Unique role ID |
| rolename | Varchar(45) | | | Null | Name of the role of person who is logging in |

10.City table:

| <i>Field</i> | <i>Type</i> | <i>Key</i> | <i>Default</i> | | <i>Description</i> |
|--------------|-------------|------------|----------------|--|--------------------|
| cityid | Integer | | Null | | City ID |
| cityname | Varchar(45) | | Null | | Name of the city |

8. ER-Diagram:

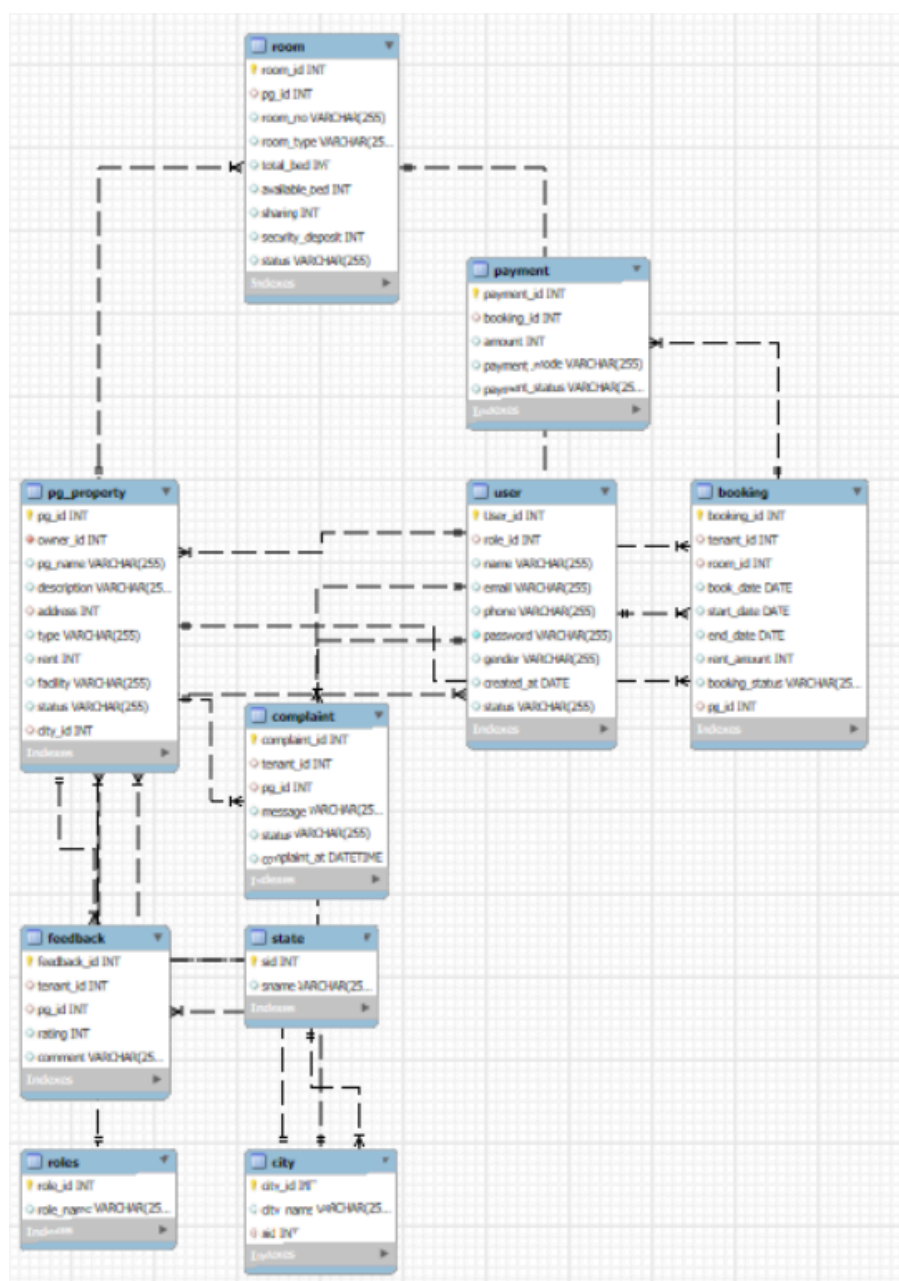
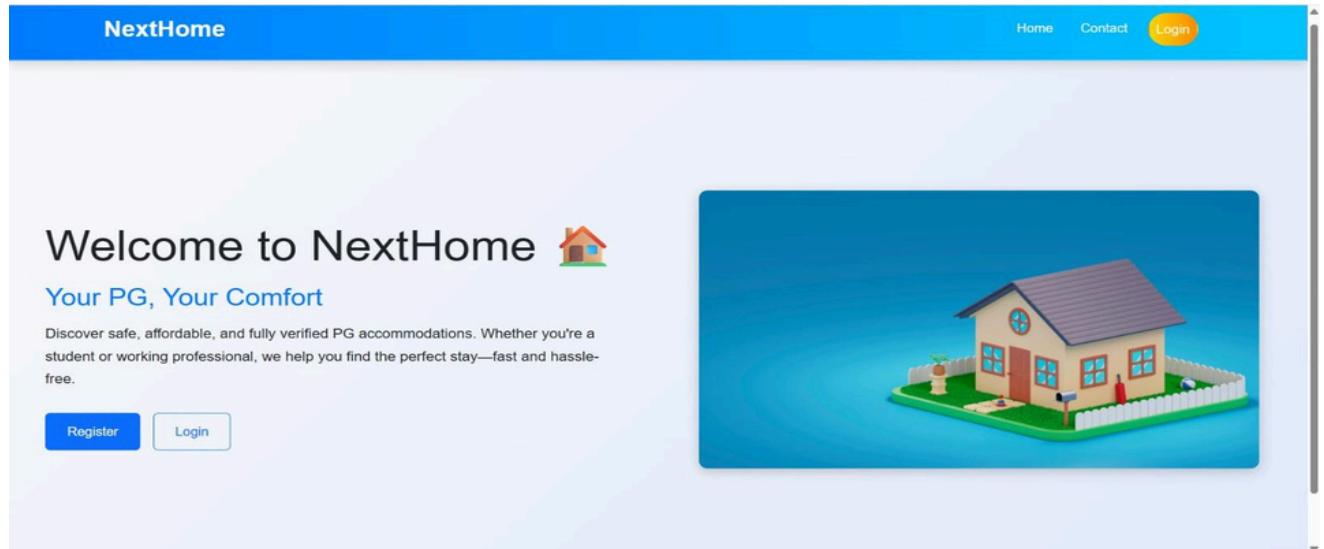


Fig.E-R diagram shows database of NextHome

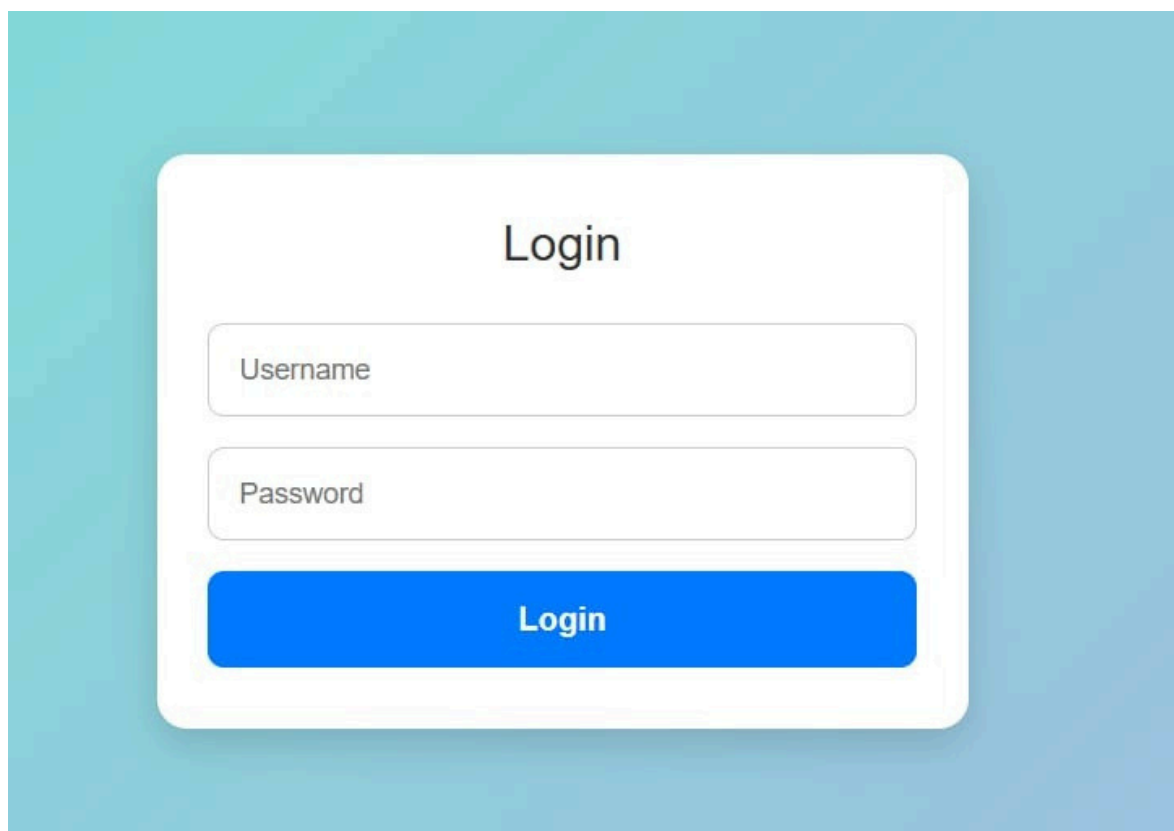
9. Snapshots:

Home Page:

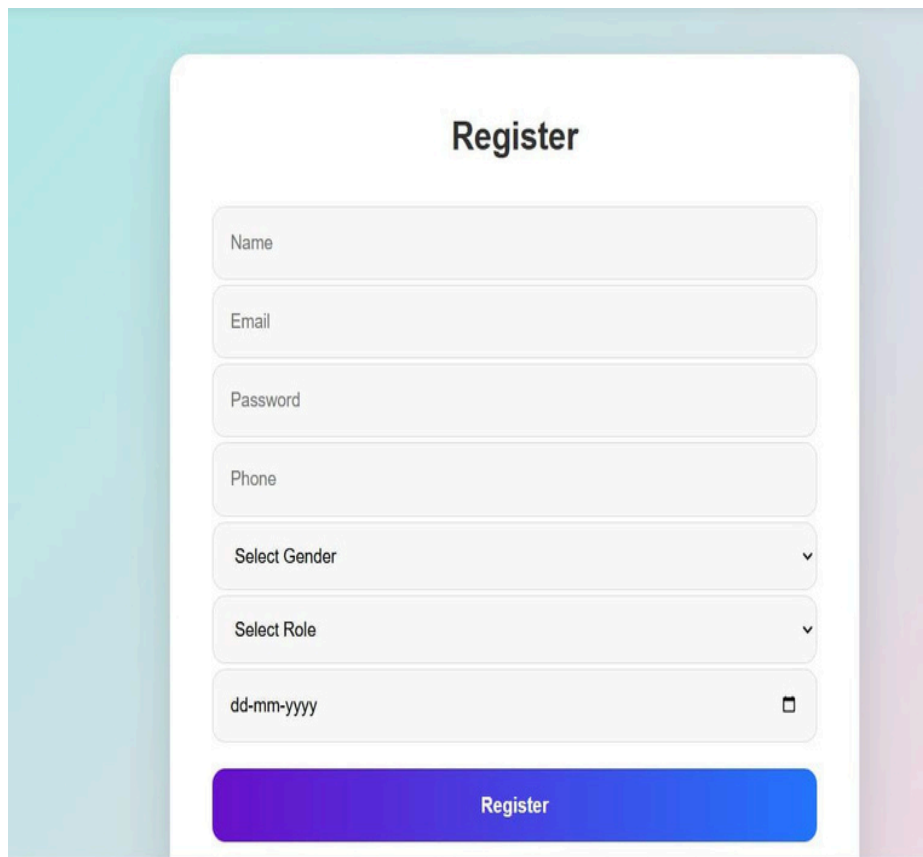


Login Page:

Following snapshot shows the Login page for NextHome



Register Page:



The Register form is centered on a light blue background. It features a white card with a blue gradient border. The form includes input fields for Name, Email, Password, and Phone. Below these are two dropdown menus for 'Select Gender' and 'Select Role', and a date picker for 'dd-mm-yyyy'. A large blue 'Register' button is at the bottom.

Register

Name

Email

Password

Phone

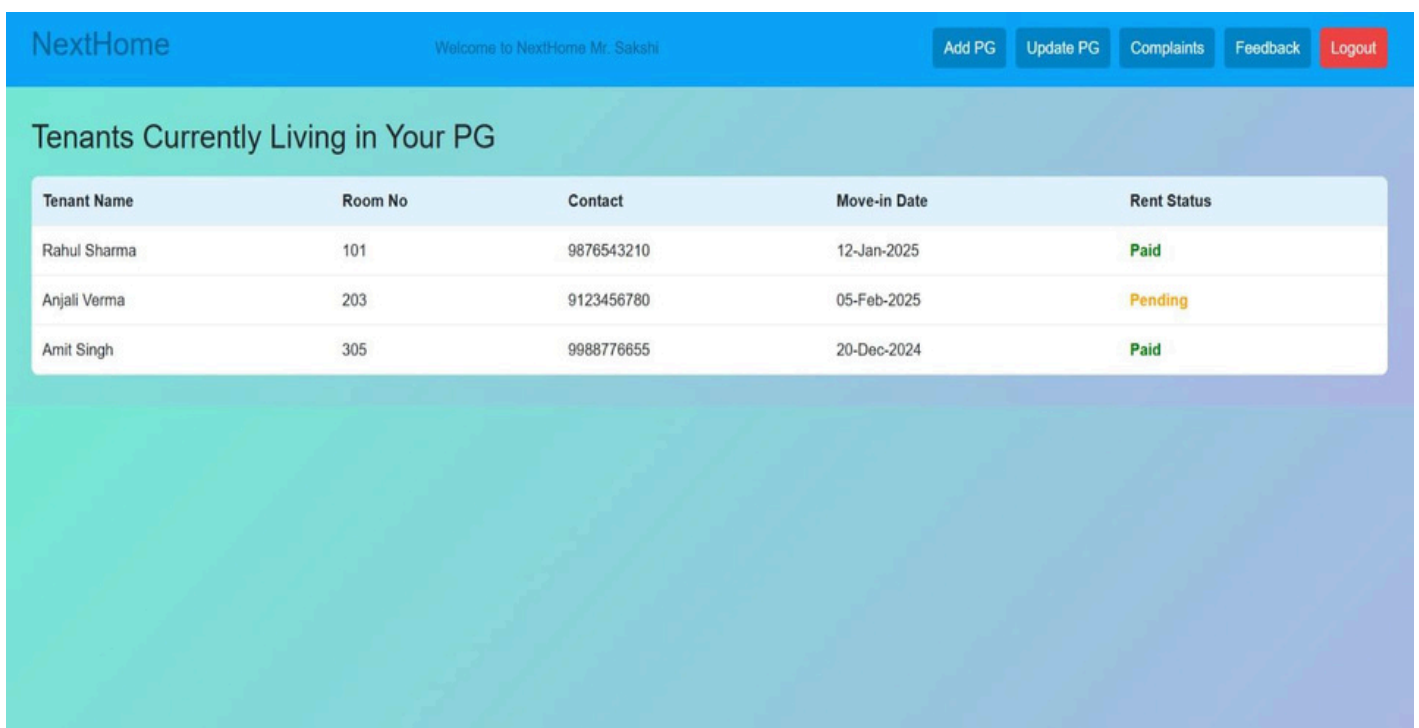
Select Gender

Select Role

dd-mm-yyyy

Register

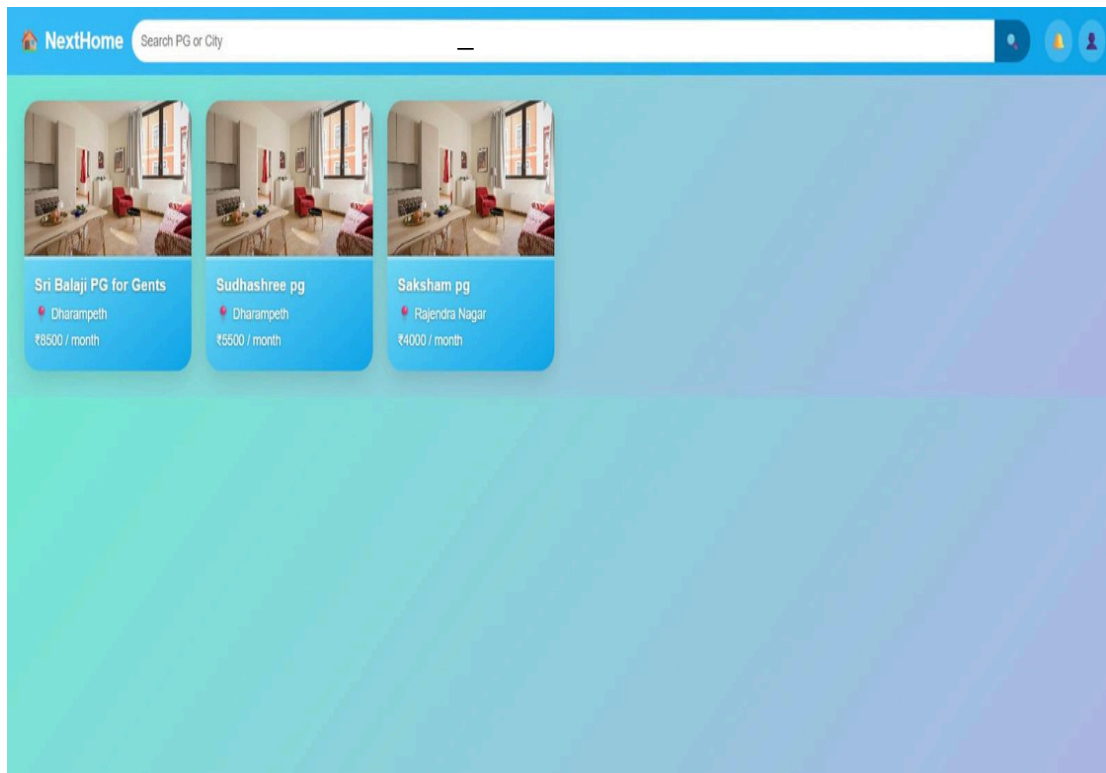
Tenant login Page:



The Tenant login page features a blue header with the NextHome logo, a welcome message, and navigation buttons. The main content area has a green gradient background with a table titled 'Tenants Currently Living in Your PG'. The table lists tenants with their names, room numbers, contact numbers, move-in dates, and rent status.

| Tenant Name | Room No | Contact | Move-in Date | Rent Status |
|--------------|---------|------------|--------------|-------------|
| Rahul Sharma | 101 | 9876543210 | 12-Jan-2025 | Paid |
| Anjali Verma | 203 | 9123456780 | 05-Feb-2025 | Pending |
| Amit Singh | 305 | 9988776655 | 20-Dec-2024 | Paid |

All PG Listing Page:



Add PG :

Add PG

State

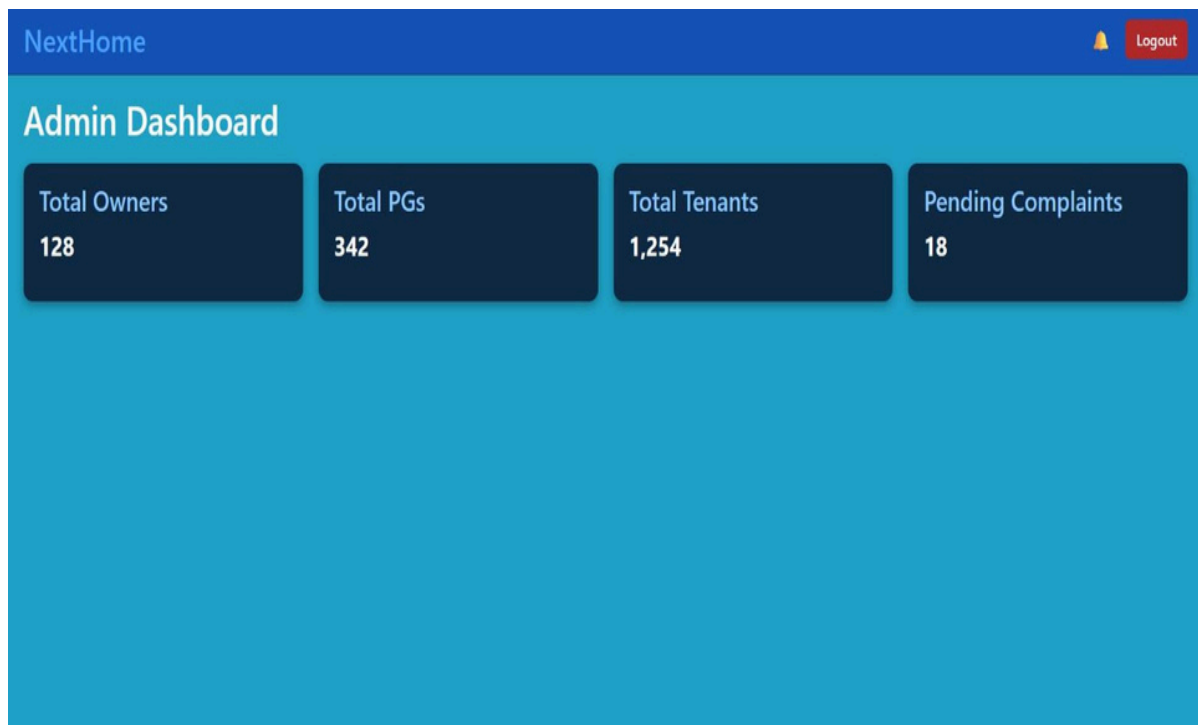
City

Area

Type

Rent

Add PG

Admin Page:

CONCLUSION :

Nexthome – PG & Hostel Rental System provides a centralized and digital solution for managing PG accommodations efficiently. The system successfully connects tenants and PG owners through a secure and user-friendly platform. It simplifies the process of searching, booking, and managing PG rooms while reducing manual work and paperwork.

Through role-based access control, secure authentication, real-time room availability, and online payment integration, the system ensures transparency and reliability. The Admin module supervises the platform, the Owner module manages PG listings and bookings, and the Tenant module provides convenient search and booking functionality.