

SEAMLESS COMMUNITY INTERACTION AND MANAGEMENT

INFOSYS SPRINGBOARD 5.0



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About Us

The aim of the Seamless Community Interaction and Management Platform is to create an efficient, user-friendly solution that enhances communication and simplifies the management of residential societies.

This platform is designed to:

- Facilitate seamless interaction between residents and administrators.
- Streamline administrative tasks like event management, complaint handling, and payment processing.
- Provide real-time updates for events, notices, and service requests.
- Ensure secure, role-based access for admins and residents.

Our Team

Our team consists of four dedicated members, each contributing their expertise to ensure the success of the project.

NAGASPOORTHI P
TALANKI

PALAK
CHOUDHARY

RAMKRISHNA
MAHATO

MRIDUL KUMAR
GOUR

Vision



Our vision is to revolutionize community living by creating a smart, connected, and efficient platform that enhances communication, transparency, and management within residential societies.

We aim to:

- Empower residents and administrators with tools for seamless interaction and efficient management.
- Foster stronger community bonds through real-time updates, easy service requests, and event management.
- Promote digital transformation in community management for a more organized, secure, and stress-free living environment.

Our Services

At Seamless Community Interaction and Management Platform, we offer a range of services designed to enhance communication, streamline management, and improve the quality of life within residential societies



Services 01

Facilitates seamless communication within communities

Services 02

Features real-time updates, announcements, and discussions

Services 03

Delivers an intuitive, user-friendly interface

TECHNOLOGY STACK

1 Frontend (React)

- Role-based UI
- API calls to the backend

2 Backend (Spring Boot)

- Authentication (JWT)
- Business logic (society, events, payments)
- REST API (connected to frontend)

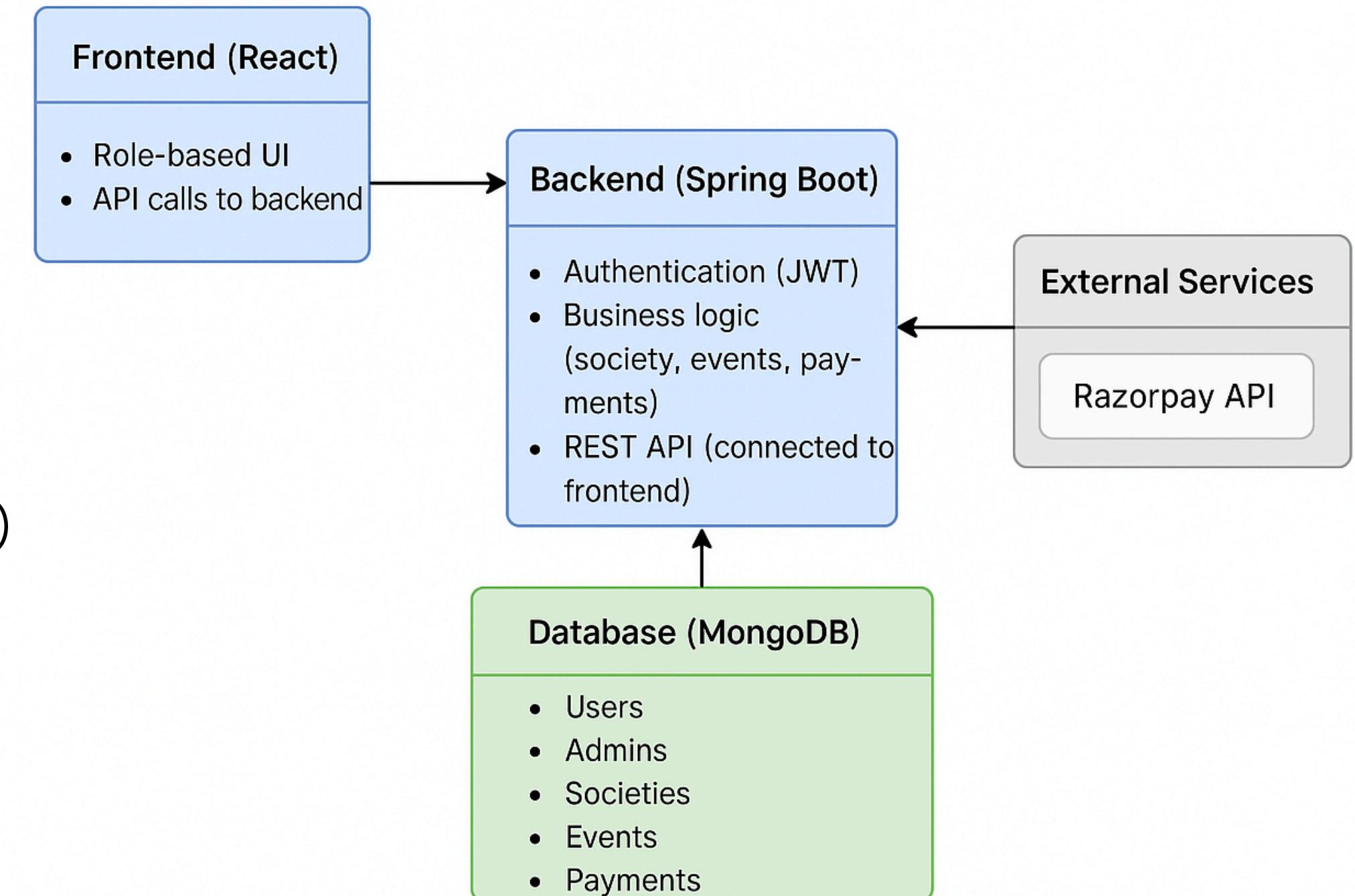
3 Database (MongoDB)

- Collections: Users, Admins, Societies, Events, Payments

4 External Services

- Razorpay API for payments

Society Architecture Diagram

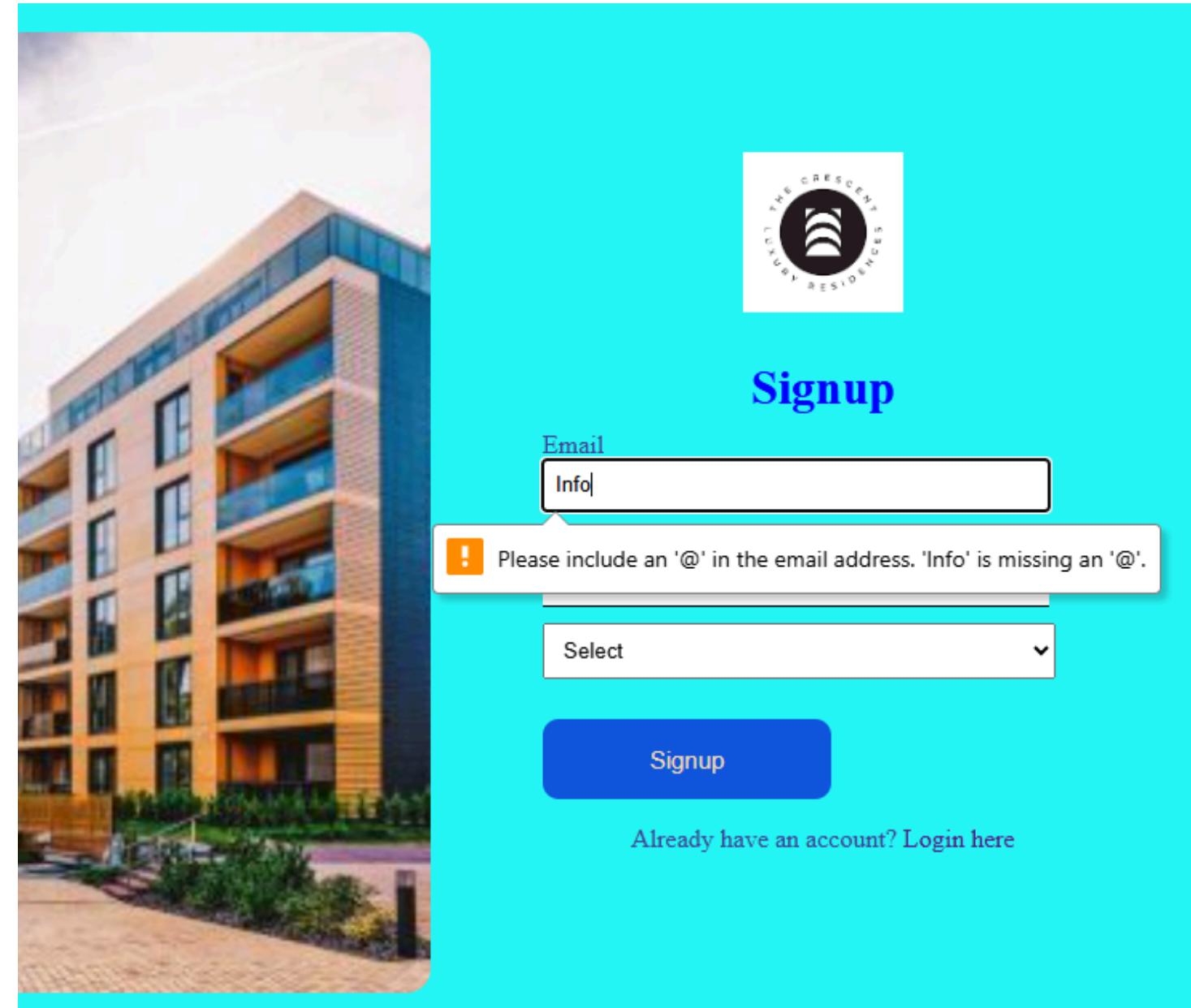


MODULE 01

USER AUTHENTICATION AND REGISTRATION

OBJECTIVES

- Secure User Registration: Enable sign-up and login for both admins and residents
- Role-Based Authentication: Ensure users can log in based on their role (admin/resident)
- JWT-Based Login: Secure login with token management
- Data Security: Validate email, password, and role for robust security



MODULE 01

USER AUTHENTICATION AND REGISTRATION

KEY FEATURES

- Registration Form: Captures email, password, and role (admin or resident)
- Role-Based Login: Differentiates access for admins and residents
- Validation Mechanisms:
 - Email: Must contain the "@" symbol for a valid format
 - Password: Requires a minimum of 6 characters for security
 - Role: Must be either Admin or Resident for proper access control
- Dashboard Customization: Create separate dashboards for admins and residents based on their roles.

MODULE 01

USER AUTHENTICATION AND REGISTRATION

User Registration Form

- Purpose: Collect essential information to register as a resident or admin
- Fields Required:
- Name: Full name of the user
- Phone Number: Contact number for communication
- Society Name: Name of the residential society
- Society Address: Complete address of the society
- City: City of residence
- District: District where the society is located
- Postal Code: Postal/ZIP code for location identification

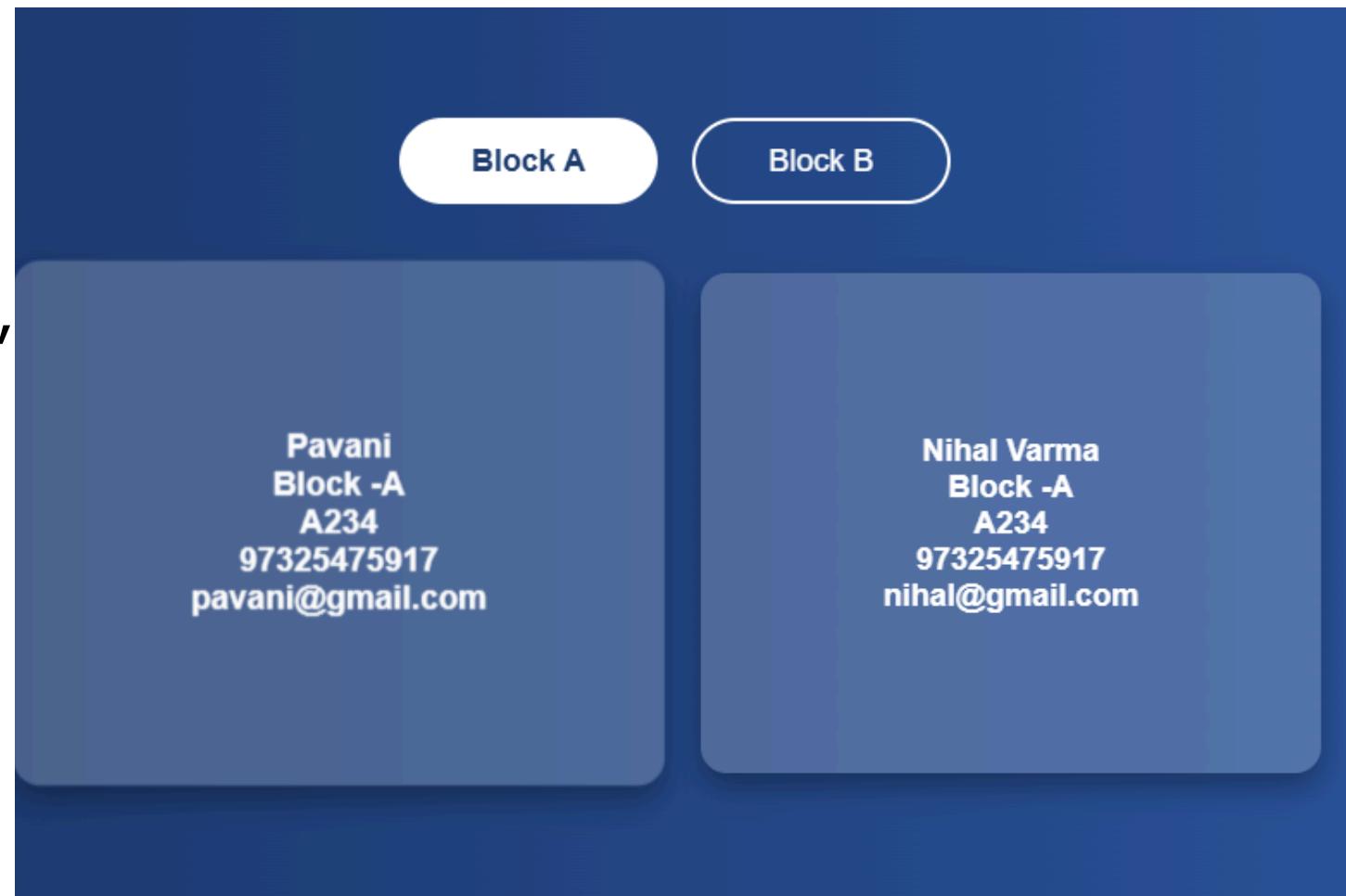
The screenshot shows a registration form titled "Fill Your Details !!". It features a teal header with the title and a circular logo containing a stylized building icon. Below the title are six input fields: "Name", "Phone No", "Society Name", "Role", "Flat No", and "Postal". A blue "Add Details" button is positioned at the bottom right. To the left of the form is a vertical image of a modern residential building.

MODULE 02

Manage societies, flats, and residents with block-wise visibility

OBJECTIVE

- Simplify the management of societies, flats, and residents
- Database Design: Efficient storage for society, flat, and resident data
- Resident Management: Add, update, and track residents easily
- Block-Based Resident View: Organize residents by their respective blocks (e.g., Block A, Block B)

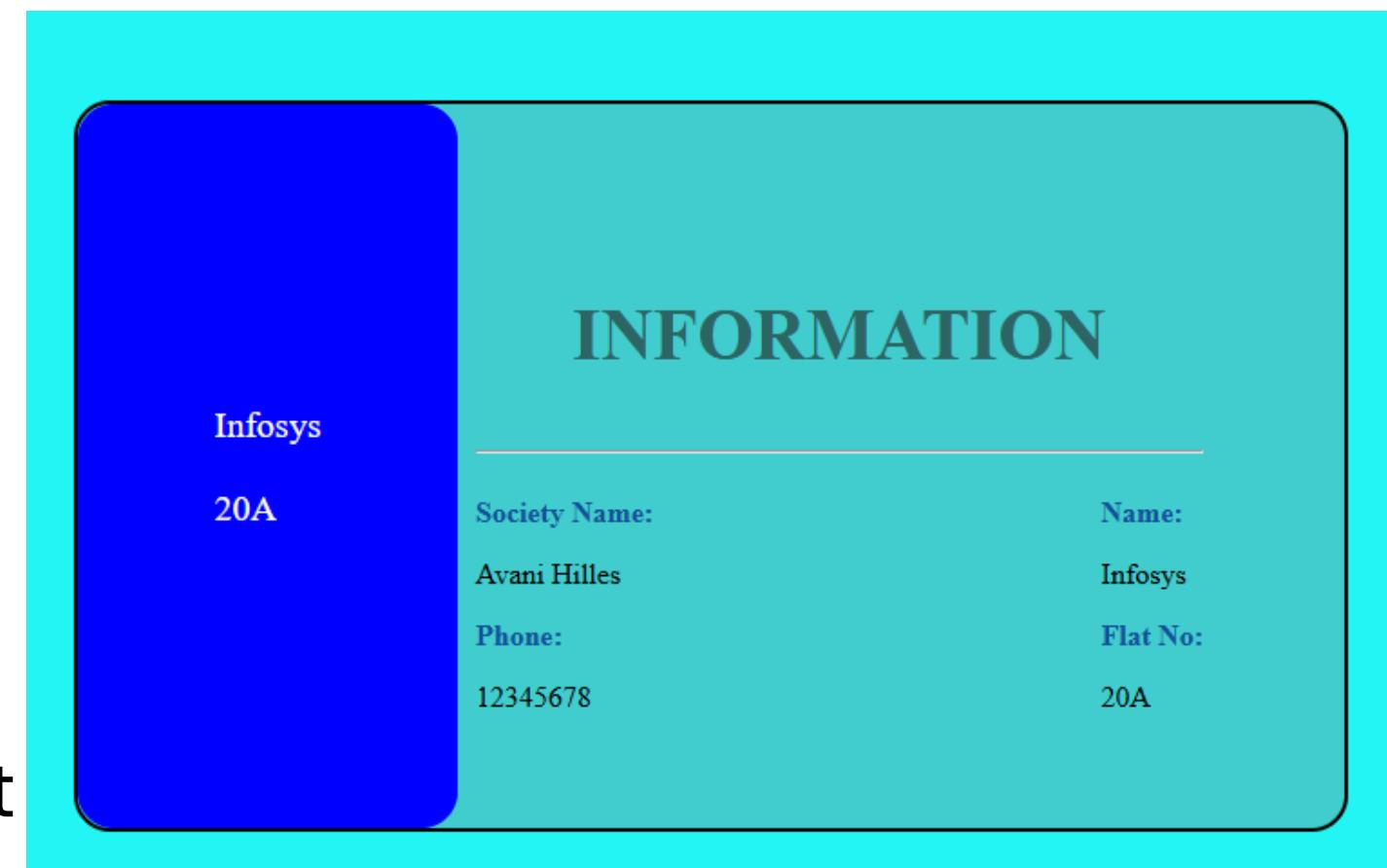


MODULE 02

Manage societies, flats, and residents with User Profile visibility

User Profile Management

- Purpose: Allow admins and residents to view detailed user profiles
- Profile Information Displayed:
- Name: Full name of the resident
- Society Name: The society to which the resident belongs
- Block: Block (e.g., A, B,) where the flat is located
- Flat Number: Specific flat associated with the resident
- Phone Number: Contact details for communication
- Email Address: For official correspondence



MODULE 03

Event and Notice Management

OBJECTIVES

- Facilitate effective communication within the community through events, notices, and feedback

Key Goals:

- Enable admins to manage events, notices, and circulars efficiently
- Allow residents to view, interact with, and provide feedback on events
- Foster a more engaged and informed community

The image shows a user interface for adding an event. At the top right, the text "Add Event" is displayed in green. Below it is a blue rectangular button with the word "Upload" in white. To the right of the upload button are two input fields: one for "Event Name" and one for "dd-mm-yyyy" (date). Below these fields is a large text area labeled "Event Description". At the bottom right of the form is a blue button with the text "Add Event" in white.

MODULE 03

Event and Notice Management

KEY FEATURES

Admin Features:

- Add Events: Input event details like title, date, time, description, and location
- Update/Delete Events: Edit or remove events as needed
- Manage Notices: Post and manage community notices and circulars

Resident Features:

- View Events & Notices: Access a dedicated section for upcoming events and important notices
- Feedback Mechanism: Provide comments, suggestions, or feedback on events
- Event Notifications: Receive alerts for new events or important announcements

MODULE 04

Complaint & Service Request Management

Key Goals:

- Enable residents to easily log complaints and service requests
- Allow admins to monitor, track, and resolve issues efficiently
- Provide transparency by letting residents track the status of their requests

Resident Features:

- User-Friendly Interface: Simple form to log complaints or service requests
- Status Updates: Real-time tracking of request progress

Admin Features:

- Complaint Dashboard: Overview of all complaints with filters (pending, in-progress, resolved)

MODULE 04

Complaint & Service Request Management

The image shows a user interface for Complaint & Service Request Management. It is divided into two main sections: 'Request Services' on the left and 'Complaint Management' on the right.

Request Services Section:

- Section Header:** Request Services
- Section Title:** Select Service Type
- Service Options:** Water, House Keeping, Gas, Plumbing, Garbage Collection (each in a blue button)
- Section Header:** Service Request Details
- Address:** Enter your Address here (text input field)
- Phone No:** Enter your Phone No (text input field)
- Additional Notes:** Enter additional details (optional) (text input field)
- Send Request:** Send Request (blue button)

Complaint Management Section:

- Total Complaints:** 2 (Purple box)
- Solved:** 1 (Green box)
- Unsolved:** 2 (Red box)
- Section Header:** Submit a Complaint
- Name:** (Text input field)
- Title:** (Text input field)
- Description:** (Text input field)
- Submit Complaint:** Submit Complaint (Blue button)

MODULE 05

Online Payment Integration for Maintenance Bills

Key Goals

- Integrate Razorpay API for secure and seamless payments
- Enable residents to view and pay their maintenance bills online
- Allow admins to track payment statuses efficiently

Billing Management

Resident Name Amount + Add Billing

Flat No	Name	Amount (₹)	Status	Actions
A2304	John Doe	₹3500	Pending	<button>Pay Now</button> <button>trash</button>

MODULE 05

Online Payment Integration for Maintenance Bills

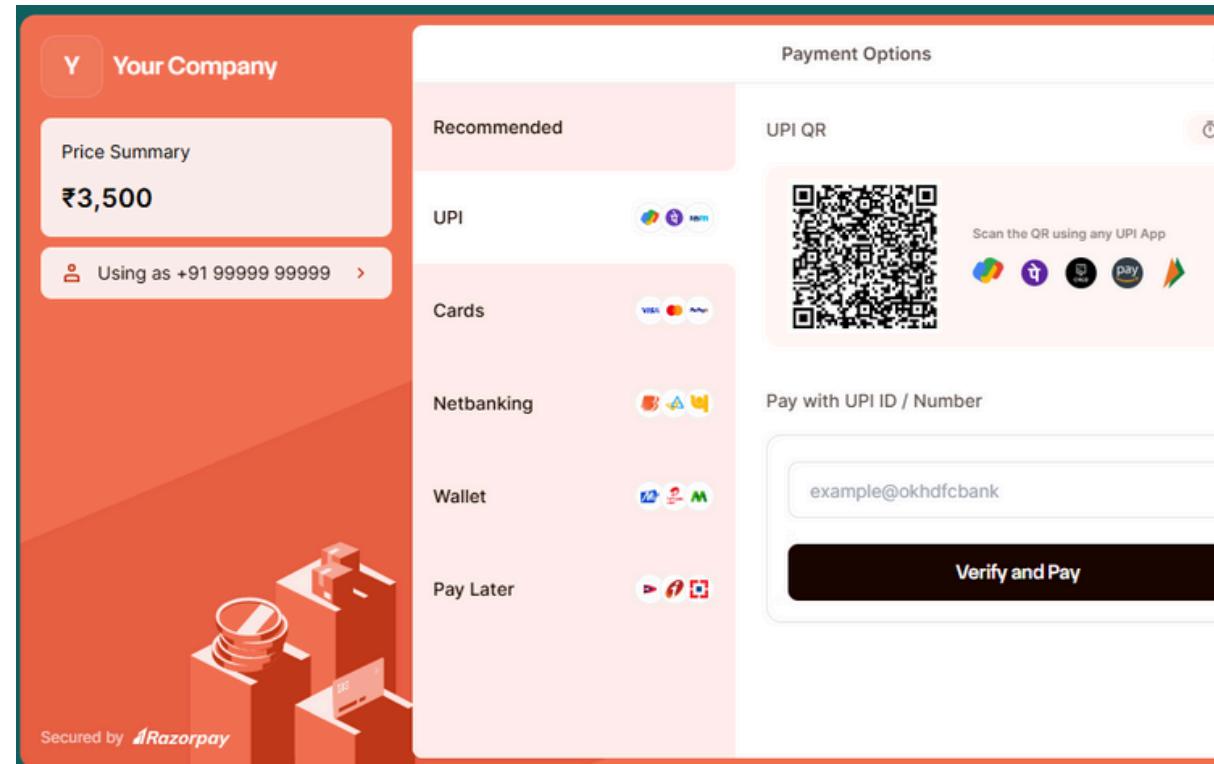
OBJECTIVES

For Residents:

- Secure Payments: Pay monthly maintenance bills through Razorpay
- Convenient Interface: Easy-to-use portal for bill payments

For Admins:

- Can add Billings and delete the billings
- Manage Billing: Generate monthly bills and update payment statuses
- Dashboard for Payments: Real-time tracking of received payments
- Status Updates: Mark payments as "Paid" or "Pending"



CONCLUSION

The Seamless Community Interaction and Management Platform enhances communication and administration within residential societies. It integrates features like user authentication, role-based access, event & notice management, complaint handling, and online payments for a more connected community.

Built with React, Vite, Spring Boot, and MongoDB, the platform is secure, scalable, and user-friendly. With real-time updates and features like Razorpay integration, it streamlines community management, making interactions more efficient and transparent.

Key Benefits:

- Improved communication and transparency
- Efficient management of events, complaints, and payments
- Secure, scalable, and easy to use



Thank You