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A Project Report on

"Society Managaement System"

Submitted by,

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Abstract

The purpose of the Society Management System is to automate the existing manual processes using computerized equipment and comprehensive software, ensuring that the community's valuable data and information can be stored securely and accessed easily for an extended period. The necessary software and hardware are readily available and user-friendly. The Society Management System, aims to provide an error-free, secure, reliable, and fast management solution. It enables users to focus on other important activities rather than record-keeping, thus assisting the organization in better resource utilization. With this system, the society can maintain computerized records without redundant entries, ensuring that only relevant information is accessible when needed. The primary goal is to transition from a manual to a computerized system, meeting all requirements for long-term data storage and easy data manipulation. This project aims to enhance performance and improve services for residents, ensuring efficient management and better service delivery within the society.

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Chapter 1

Introduction

The "Society Management System" has been developed to overcome the challenges associated with the existing manual processes in managing residential communities. This software aims to eliminate or reduce the difficulties faced by the current system, providing a tailored solution to ensure smooth and effective operations within the society. The application minimizes errors during data entry and provides error messages for invalid inputs, ensuring user-friendliness without requiring formal training for users.

The Society Management System, offers a secure, reliable, and efficient management solution. It allows users to focus on other important activities rather than being bogged down by record-keeping, thus facilitating better utilization of resources. Every residential society, regardless of its size, faces challenges in managing information related to residents, amenities, maintenance requests, payments, event scheduling, notices, complaints, maintenance payments, and photo galleries.

One of the key features of the Society Management System is a comprehensive dashboard that displays important information at a glance. This includes notices, complaint statuses, maintenance payment updates, and access to the photo gallery. Ultimately, this system will enable more efficient resource management and improve the overall living experience for residents.

Chapter 2

Problem Definition:

Design & Implementation of Society Management System.

The problem addressed by the Society Management System arises from the inefficiencies and challenges associated with manual processes in managing residential communities. Manual systems often result in errors, delays, and inconsistencies, leading to resident dissatisfaction and administrative burdens for society management.

Scope:

The scope of the Society Management System encompasses the development and implementation of a comprehensive online platform designed to streamline various aspects of residential community management. The system aims to automate manual processes, improve communication and transparency, enhance resource utilization, and ultimately improve the overall living experience for residents. Key features and functionalities within the scope of the system include:

1. **Notice Dissemination:** Residents and administrators will be able to create, distribute, and view notices and announcements through the platform, ensuring timely communication of important information.

2. **Complaint Handling:** Residents can submit maintenance requests and complaints through the system, which will be routed to the appropriate authorities for resolution. Administrators can track and manage complaints efficiently and resolutions.

3. **Maintenance Payment Processing:** The system will enable residents to make maintenance payments online, streamlining the payment process and ensuring accurate record-keeping.

4. **Photo Gallery:** A centralized photo gallery will be available for residents and administrators to upload and view images of community events, amenities, and important documents.

5. **Security and Access Control:** Robust security measures will be implemented to protect resident data and ensure secure access to the platform. Role-based access controls will be employed to manage user permissions and restrict unauthorized access to sensitive information.

Chapter 3
Functional Requirements

Functional requirements describe what the system should do. They define the specific behavior or functions of the system. For a society management system, these might include:

1. **Member Management:**

- Registration: Allow new members to register.
- Profile Management: Enable members to update their profiles.
- Membership Renewal: Facilitate the renewal of memberships.

2. **Communication:**

- Notifications: Send announcements or alerts to members via email or SMS.
- Discussion Forums: Provide a platform for members to discuss various topics.

3. **Event Management:**

- Event Scheduling: Allow the creation and management of events.
- RSVP: Enable members to RSVP for events.
- Event Reminders: Send reminders to members about upcoming events.

4. **Payment Handling:**

- Fee Collection: Allow members to pay membership fees and other dues.
- Invoice Generation: Generate invoices for payments made.
- Payment History: Maintain a history of all payments made by members.

5. **Facility Booking:**

- Resource Management: Manage the booking of facilities like halls, sports grounds, etc.
- Booking Calendar: Provide a calendar view for available slots.
- Booking Confirmation: Confirm bookings and send notifications.

6. **Complaint Management:**

- Complaint Submission: Allow members to submit complaints or requests.
- Tracking: Track the status of submitted complaints.
- Resolution: Manage the resolution process and notify members.

7. **Document Management:**

- Storage: Store important documents like meeting minutes, rules, and regulations.
- Access Control: Allow members to access specific documents based on their roles.

Non-Functional Requirements

Non-functional requirements define the quality attributes, performance metrics, and constraints of the system. For a society management system, these might include:

1. **Performance:**

- Response Time: The system should respond to user actions within 2 seconds.
- Scalability: The system should support up to 10,000 members without performance degradation

2. **Usability:**

- User Interface: The interface should be intuitive and easy to navigate.
- Accessibility: The system should comply with accessibility standards to support users with disabilities.

3. **Reliability:**

- Uptime: The system should have an uptime of 99.9%.
- Data Backup: Regular data backups should be performed daily to prevent data loss.

4. **Security:**

- Data Encryption: All sensitive data should be encrypted.
- Authentication: Implement multi-factor authentication for member login.
- Authorization: Role-based access control to restrict access to certain features based on user roles.

5. **Maintainability:**

- Modularity: The system should be modular to facilitate easy updates and maintenance.

- Documentation: Provide comprehensive documentation for both users and administrators.

6. **Compliance:**

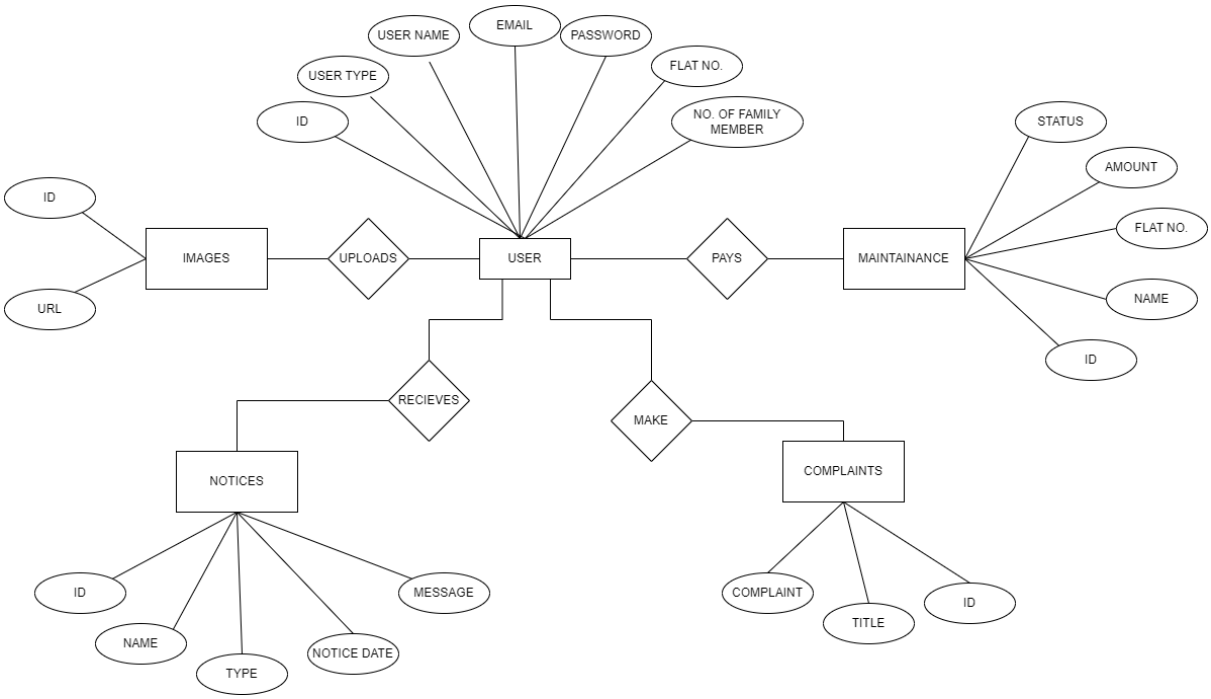
- Legal Requirements: Ensure compliance with local laws and regulations regarding data protection and privacy.
- Industry Standards: Adhere to relevant industry standards for software development and data management.

7. **Interoperability:**

- Integration: The system should be able to integrate with other systems like accounting software or community portals.
- API: Provide APIs for third-party applications to interact with the system.

Chapter 4

ER/EER Diagram



Chapter 5

Reduction of ER Schema to Tables

1)Registration Table

Field	Type	Null	Key
Id	int(11)	NO	PRI
Username	varchar(50)	NO	
Email	varchar(50)	NO	
Flatno	int(10)	NO	
MobileNo	bigint(10)	NO	
nno of family members	int(10)	NO	
Password	varchar(20)	NO	
Usertype	varchar(10)	NO	

2)Payrecords Table

Field	Type	Null	Key
ID	int(11)	NO	PRI
Name	varchar(100)	NO	
Flatno	int(11)	NO	
Amount	int(11)	NO	
Status	varchar(100)	NO	

3)Images Table

Field	Type	Null	Key
id	int(11)	NO	PRI
image_url	text	NO	

4)Notices Table

Field	Type	Null	Key
ID	int(11)	NO	PRI
Name	varchar(100)	NO	
Type	varchar(20)	NO	
Noticedate	date	NO	
Message	varchar(500)	NO	

5) Compbox Table

Field	Type	Null	Key
ID	int(11)	NO	PRI
Title	varchar(100)	NO	
complaint	varchar(500)	NO	

Description of Each Table

1)Registration Table

The table stores information about users, with "Id" as the primary key.
It includes the following columns: "Username" (the user's name), "Email" (the user's email address), "Flatno" (the user's flat number), "MobileNo" (the user's mobile number), "nno of family members" (the number of family members), "Password" (the user's password), and "Usertype" (the type of user).

2)Pay records Table

The table stores payment records, with "ID" as the primary key to uniquely identify each record.
It includes the following columns: "Name" for the name of the payer, "Flatno" for the flat number associated with the payment, "Amount" for the payment amount, and "Status" for the payment status.

3)Images Table

The table stores information about images, with "id" as the primary key to uniquely identify each record.
It includes the following columns: "id" (an integer that serves as the primary key) and "image_url" (a text field that stores the URL of the image).

4)Notices Table

The table is designed to store payment records, with each record uniquely identified by an "ID" which serves as the primary key.
It comprises four mandatory fields: "Name" captures the name of the payer, "Flatno" stores the flat number associated with the payment, "Amount" records the payment amount, and "Status" indicates the status of the payment.

Chapter 6

Outcome

1. **Increased Efficiency**

- Streamlined Operations: The system automates various management tasks such as notice dissemination, complaint handling, and event scheduling, significantly reducing the time and effort required for these processes.
- Faster Response Times: Automated workflows ensure that tasks are completed more quickly, allowing for timely communication and resolution of issues.

2. **Improved Accuracy**

- Reduction in Human Errors: Automation minimizes manual data entry, reducing the likelihood of errors in maintaining records and processing payments.
- Consistent Data Handling: Ensures that all data is processed uniformly, enhancing the reliability and accuracy of information.

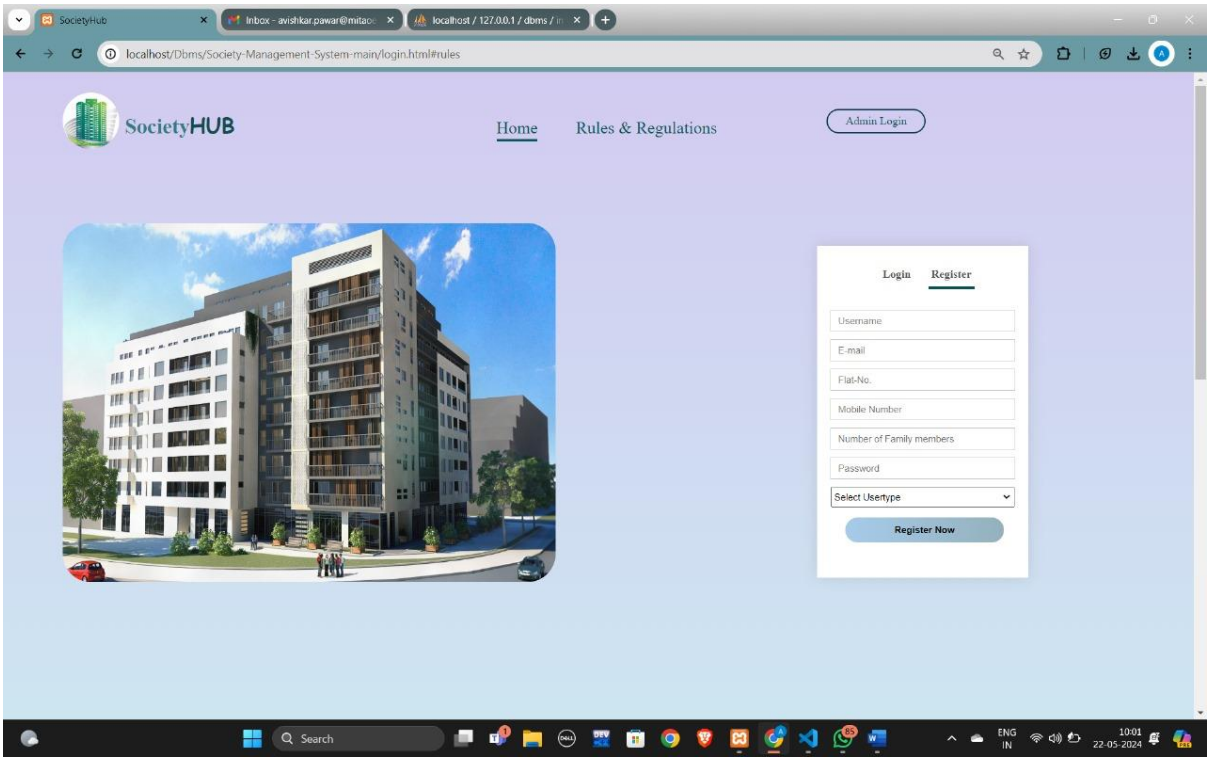
3. **Increased Security**

- Data Protection: The system incorporates robust security measures such as data encryption and secure authentication to protect resident data.
- Access Control: Role-based access controls ensure that sensitive information is only accessible to authorized users, safeguarding against unauthorized access.

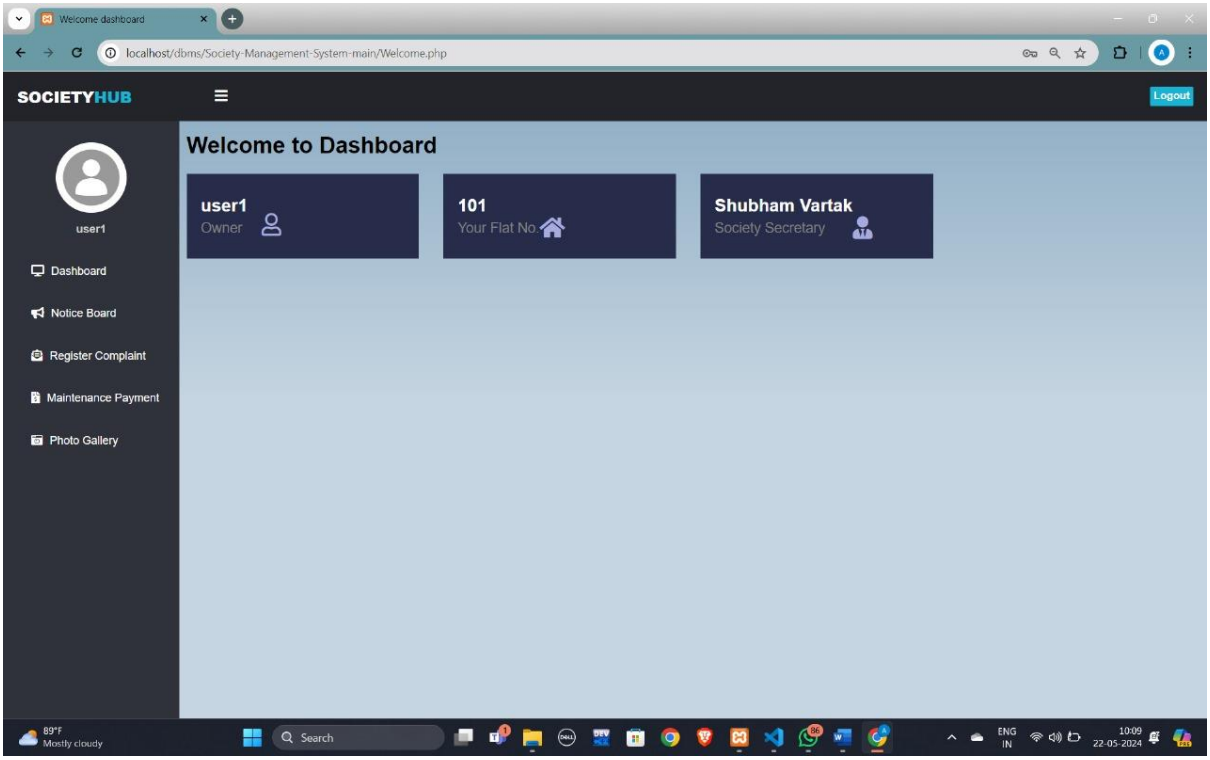
4. **Enhanced Financial Management**

- Automated Billing and Invoicing: The system automates the generation and distribution of invoices for maintenance fees and other dues, ensuring timely and accurate billing.
- Payment Tracking: Real-time tracking of payments and dues helps administrators manage finances more effectively, reducing the risk of missed or late payments.

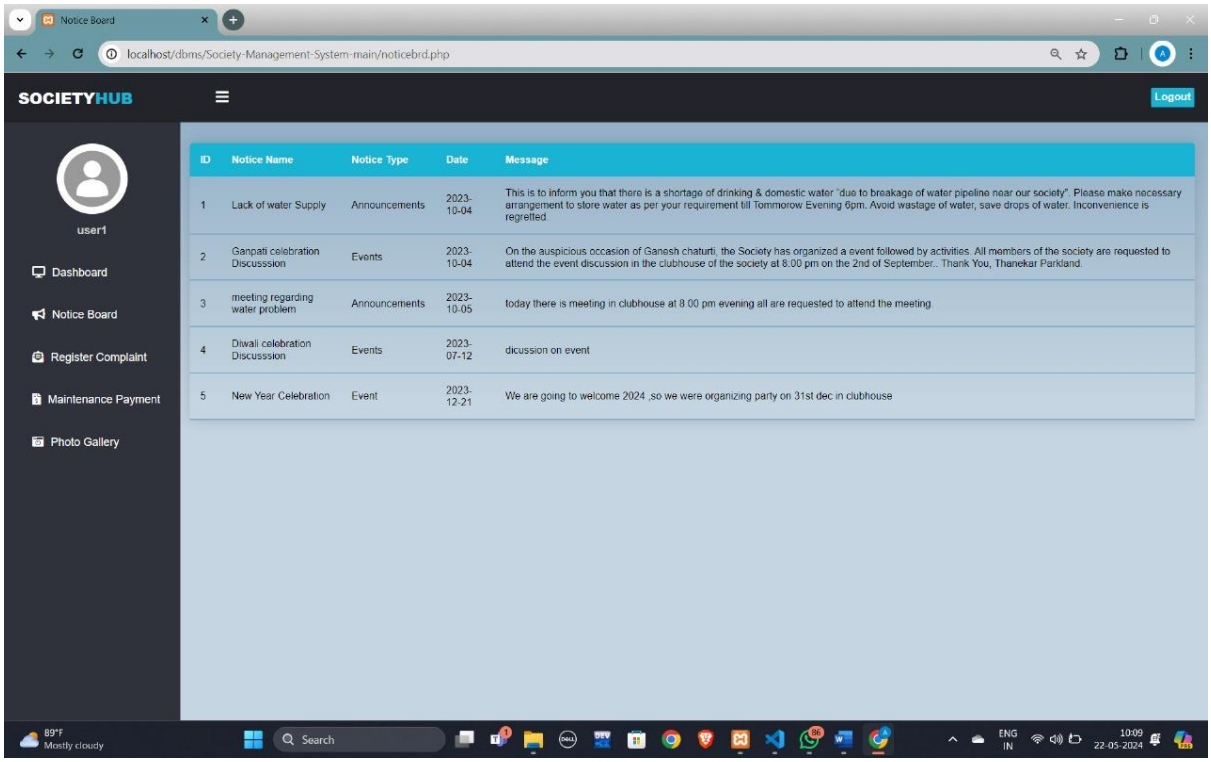
Login Page of user



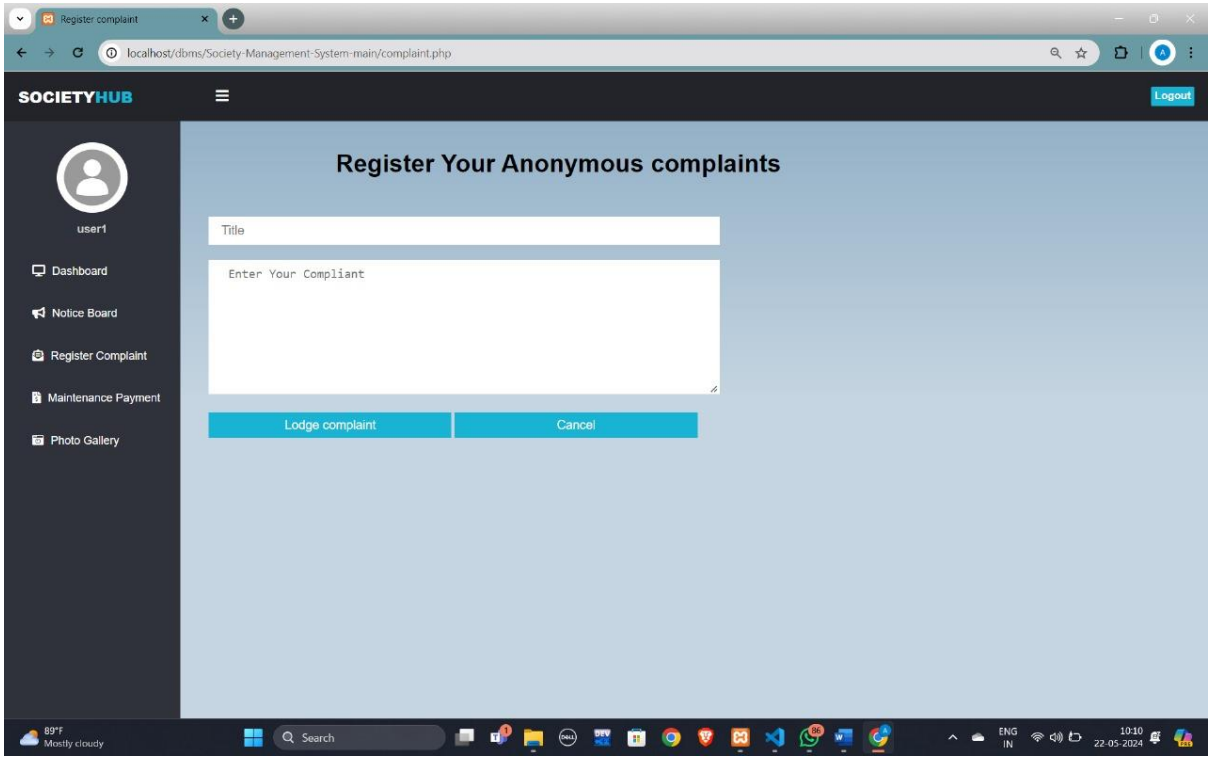
Dashboard of User



Notice Board for User



Register Complaint Page



Maintenance Payment page

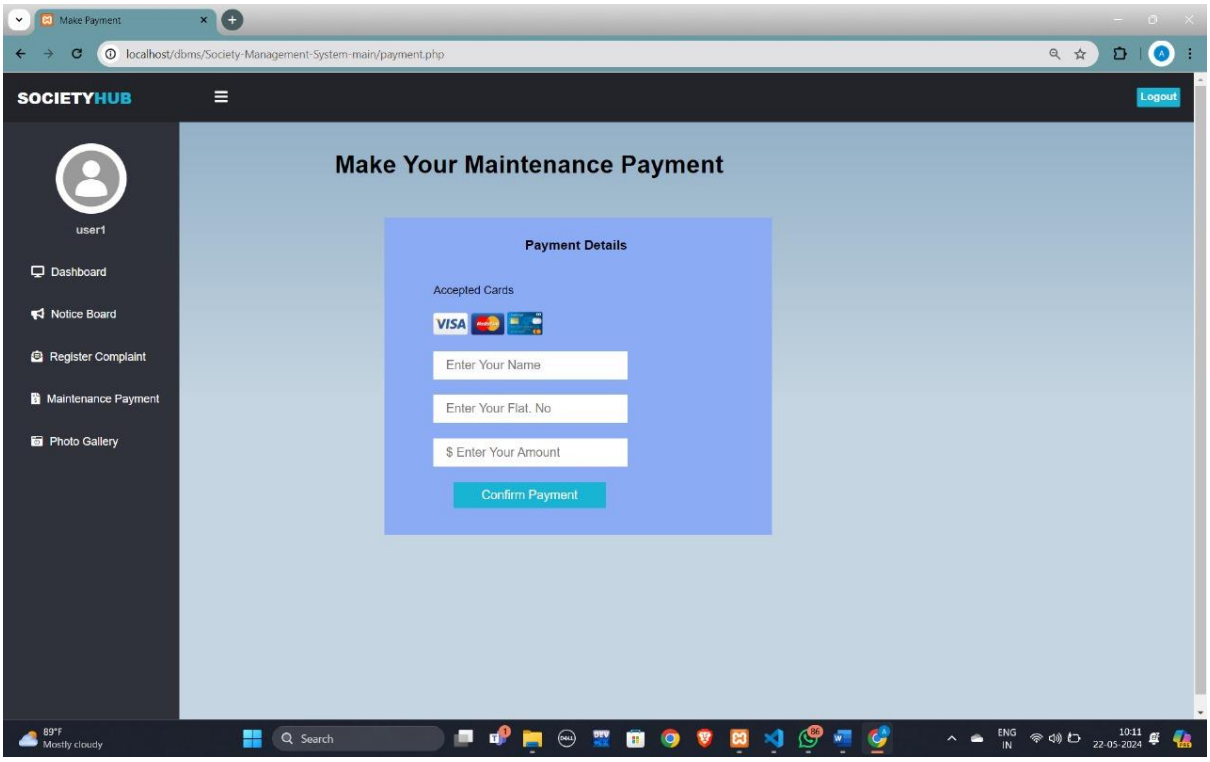
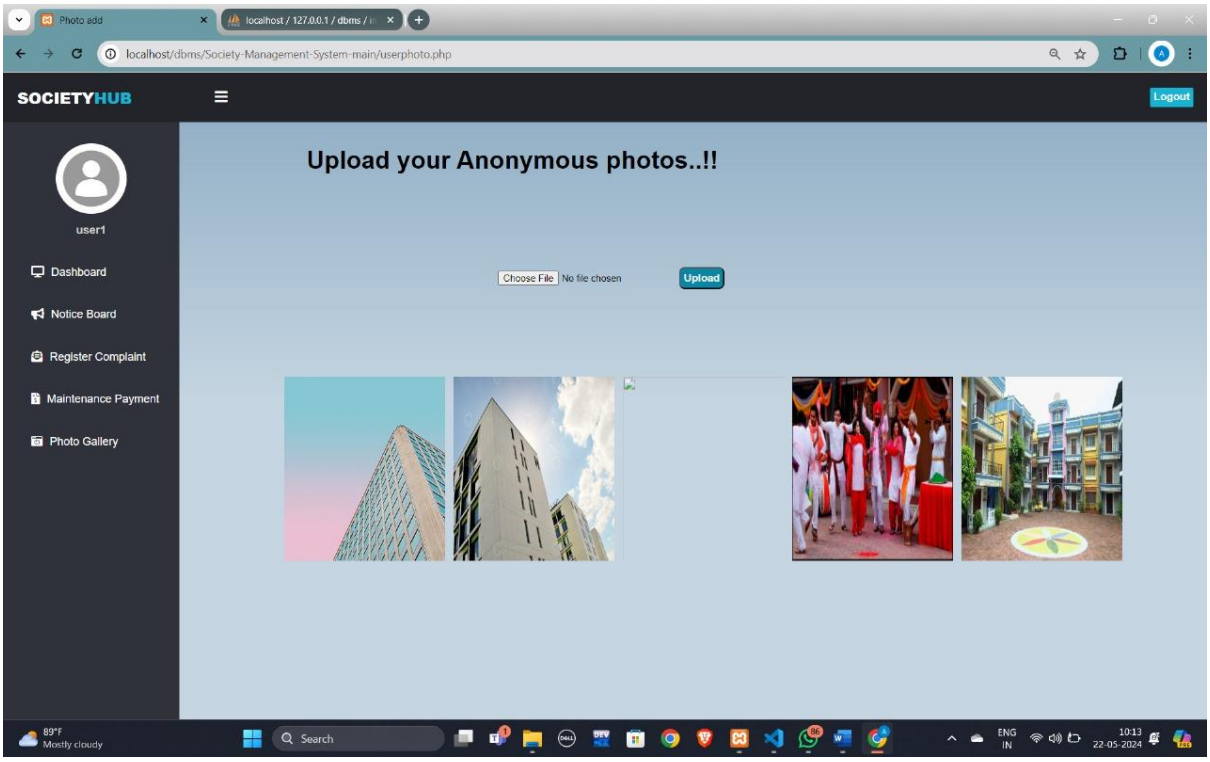
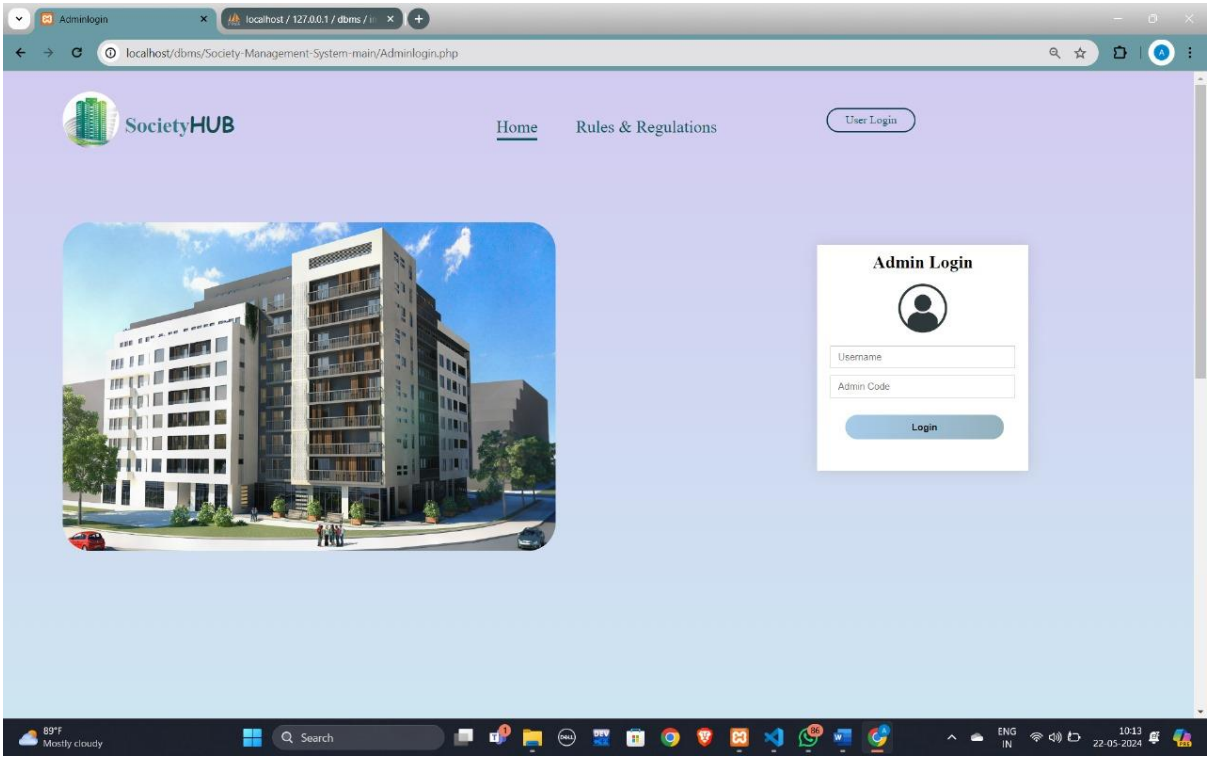


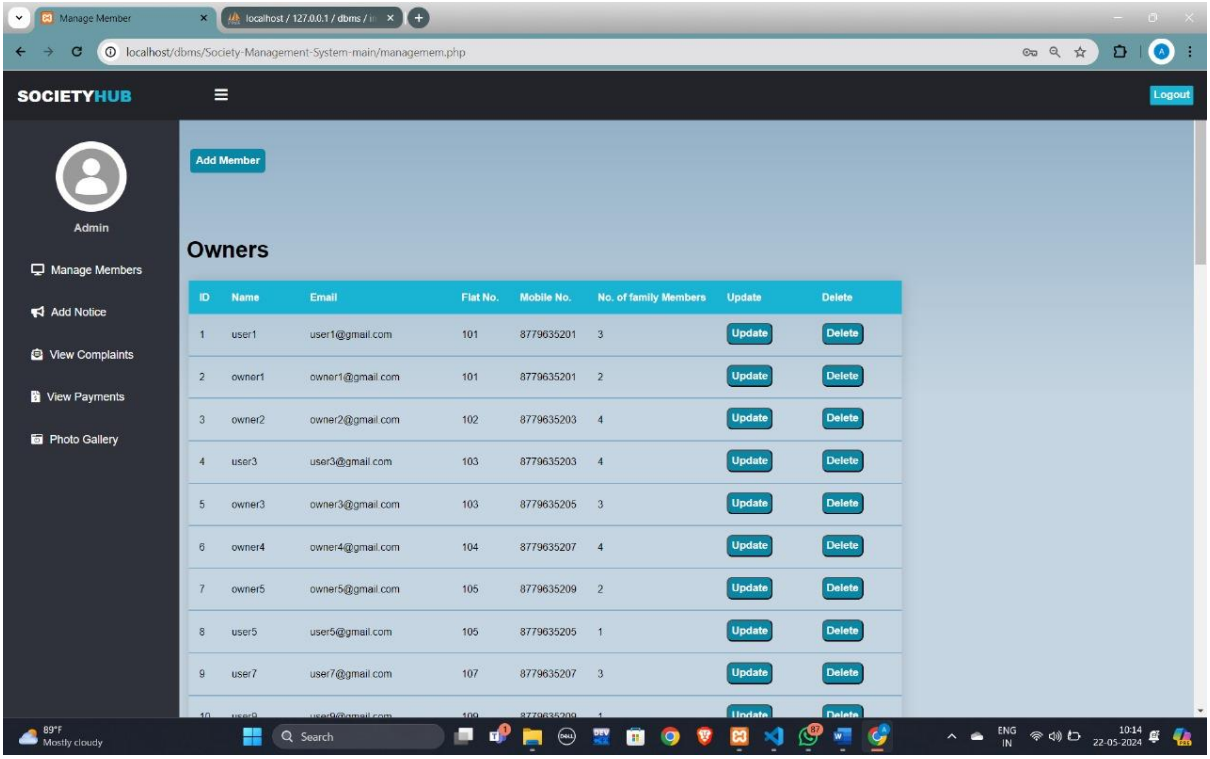
Photo Gallery



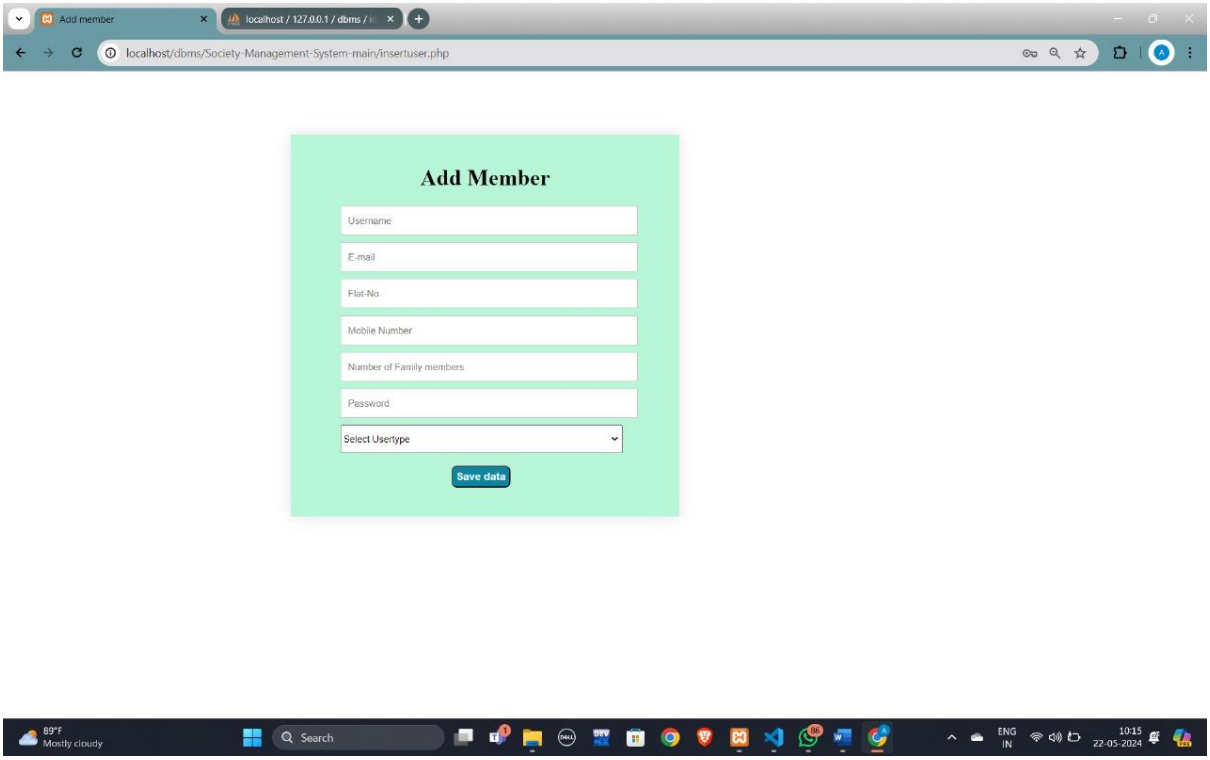
Admin Login Page



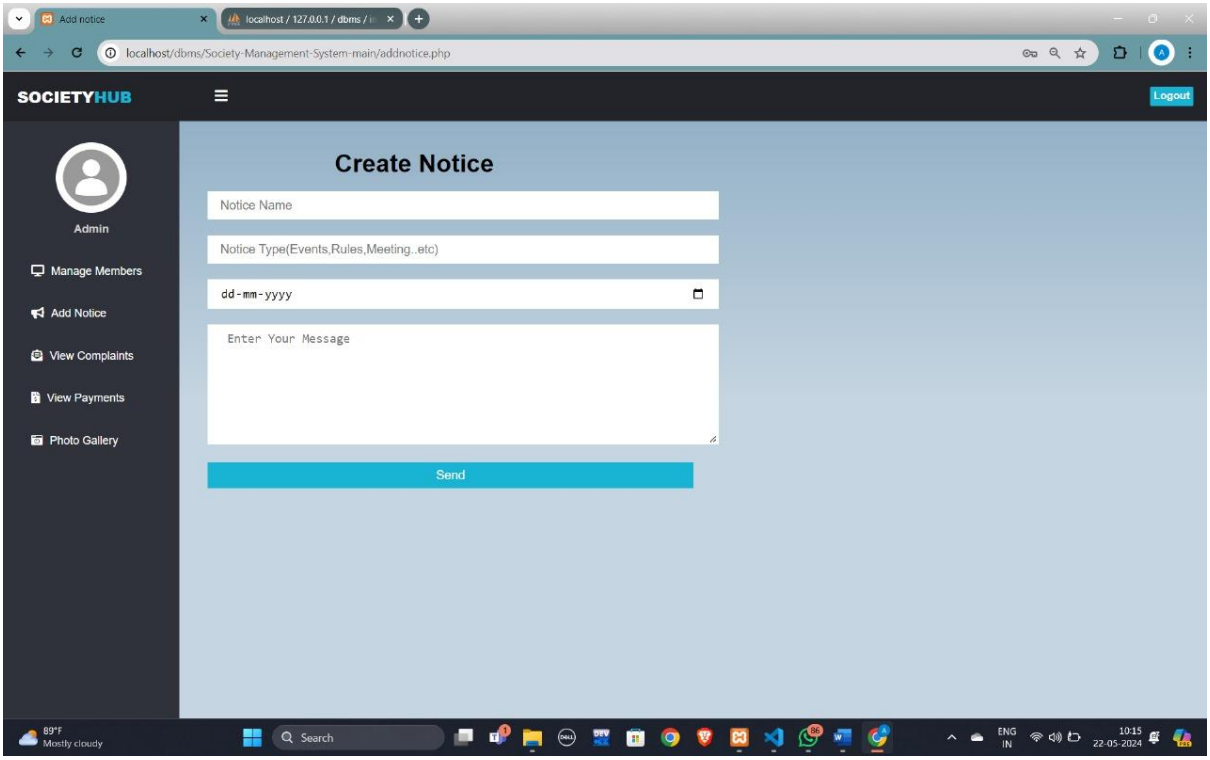
Manage Members Page



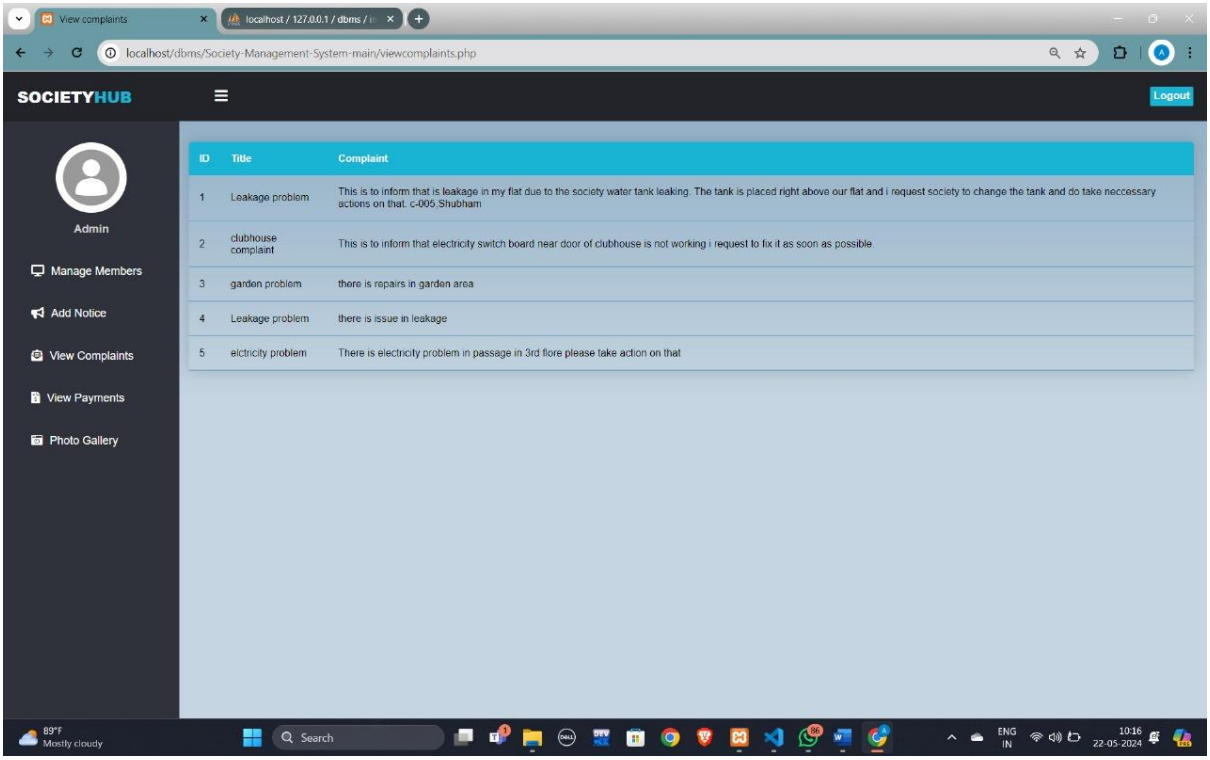
Add New Members Page



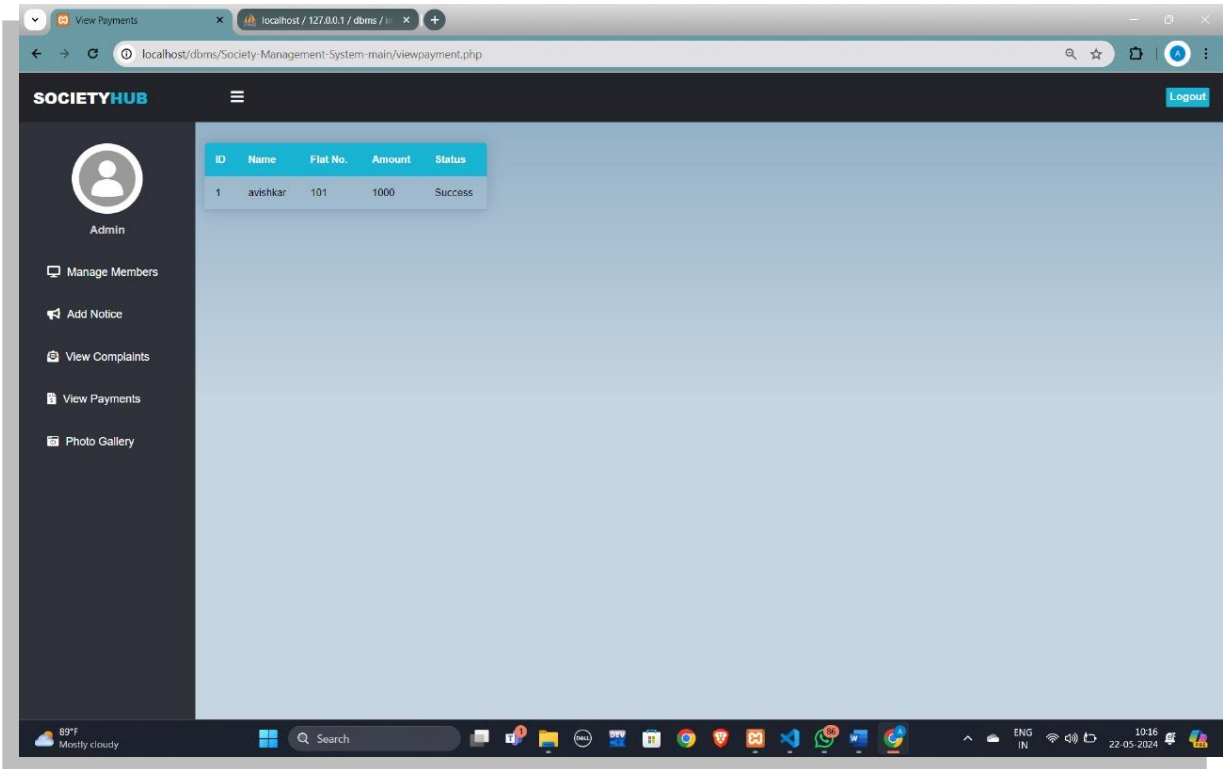
Send Notice to Residents (Admin)



View Complaints From Residents(admin)



View Recent Transactions(Admin)



Chapter 7

Application

1. **Member and Resident Management**
- Registration and Onboarding: Automate the process of registering new residents and members, collecting necessary documentation, and providing access credentials.
- Profile Management: Allow residents to update their personal information, contact details, and preferences through an online portal.

2. **Notice Management**
- Notice Dissemination: Send announcements, circulars, and notices to all residents via email, SMS, or through the system's portal.

3. **Financial and Pay2.ent Management**
- Maintenance Fee Collection: Automate the invoicing and collection of maintenance fees, utility bills, and other charges.
- Online Payments: Provide a secure online payment gateway for residents to pay their dues.
- Financial Reporting: Generate financial reports and statements for transparency and accountability in society finances.

4. **Compliance and Reporting**
- Regulatory Compliance: Ensure compliance with local laws and regulations regarding residential societies, data protection, and financial transactions.

Conclusion

A society management system is an essential tool for modern residential communities, providing a seamless and efficient approach to managing daily operations. It not only enhances the effectiveness of administrative tasks but also significantly improves the quality of life for residents by offering transparent, accurate, and secure management solutions. The adoption of such a system reflects a commitment to leveraging technology for better community management, ultimately leading to a well-organized, engaged, and satisfied residential community.