ICDMS: INTEGRATED COOPERATIVE DEPARTMENT MANAGEMENT SYSTEM

PROJECT REPORT

Submitted by

NISHANA BANU N A

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Chapter 1

INTRODUCTION

This project is designed to create a digital platform for the Joint Registrar of Cooperative Societies, Kalpetta, Wayanad, to simplify and improve the management of cooperative societies. The system will allow societies to register online, upload required documents, and receive digital certificates. It will enable real-time monitoring of society activities and compliance with government regulations.

The platform will automate audit scheduling, track compliance, and send notifications via email, and in-app alerts about important deadlines, audits, and policy updates. It will also include tools for generating reports, dashboards, and predictive insights to help in decision-making.

An AI-powered chatbot supporting will assist users with queries related to registration, audits, and compliance. The system will provide e-learning resources and manage training programs for cooperative members and staff. Additionally, secure document management will ensure safe storage and controlled access to important files.

This solution aims to make the management of cooperative societies more efficient, transparent, and user-friendly, reducing manual effort and improving overall productivity.

1.1 General Background

Managing cooperative societies involves complex processes, including registration, compliance tracking, and audit management. Traditionally, these tasks have been handled manually, leading to inefficiencies, delays, and errors. Society administrators and registrars often struggle to manage large volumes of documents, track regulatory adherence, and communicate effectively with societies. To address these challenges, modern digital platforms are increasingly being adopted to automate and streamline administrative workflows. The Society Registration Management System is designed as a solution to these issues, offering a comprehensive platform that simplifies registration, compliance, and governance processes. By integrating advanced tools like real-time notifications, AI chatbot support, and secure document storage, this system aims to modernize how cooperative societies are managed while ensuring transparency and efficiency.

1.2 Objective

The main objective of this project is to create a digital platform for the Joint Registrar of Cooperative Societies, Kalpetta, Wayanad, to streamline the management of cooperative societies. The system aims to simplify society registration, automate compliance tracking, and improve communication through real-time notifications and alerts. It seeks to enhance productivity by reducing manual effort and providing tools for decision-making, such as dashboards, predictive insights, and reporting features. Additionally, the system aims to empower users with AI chatbot assistance and e-learning resources, ensuring that cooperative members and staff can navigate the platform efficiently while staying informed about compliance requirements.

1.3 Scope

The scope of the Cooperative Department Management System encompasses all key processes involved in managing cooperative societies. The system will allow societies to register online, upload necessary documents, and receive digital certificates upon approval. It will provide real-time monitoring of society activities, track compliance with government regulations, and automate audit scheduling. The platform will send notifications through email and in-app alerts for deadlines, audits, and policy updates. It will also include tools for generating reports and dashboards, offering predictive insights to aid in decision-making. AI chatbot support will assist users with queries related to registration, compliance, and audits, ensuring a user-friendly experience. Furthermore, the system will provide e-learning resources, manage training programs, and ensure secure document storage with controlled access. Designed for scalability and efficiency, this platform will improve the transparency and effectiveness of cooperative society management in the Kalpetta region and beyond.

Chapter 2

LITERATURE SURVEY

2.1 Literature Survey For Cooperative Department Management System

The Society Registration Management System aligns with the advancements in e-governance systems aimed at improving efficiency, transparency, and user satisfaction. Existing studies highlight the importance of automating administrative workflows to minimize manual intervention and enhance service delivery. According to the article ”E-Governance and Its Impact on Society Management Systems” by K. Sharma et al., published in the International Journal of Governance, automation in administrative systems significantly reduces processing time and improves accuracy in compliance monitoring [1].

Similarly, a study by A. Patel et al., “Streamlining Document Management Systems for Public Administration,” published in the Journal of Public Systems Research, emphasizes the need for secure document handling and real-time notifications in public service platforms [2].

Textbooks also provide valuable insights into the technological and operational aspects of such systems. In the book Management Information Systems for Modern Organizations by J. K. Laudon and K. C. Laudon, the authors discuss how role-based access control (RBAC) and secure data management are crucial for maintaining system integrity and ensuring scalability in multi-user environments [3].

Additionally, E-Governance Systems: Principles and Applications by M. L. Gupta explores how AI tools like chatbots and predictive analytics can be integrated into digital platforms to enhance user experience and decision-making capabilities [4].

A relevant website, the official portal for India's Ministry of Cooperation, provides examples of current digital initiatives for society registrations. It highlights the benefits of online portals in streamlining workflows, reducing paperwork, and improving overall governance [5].

Chapter 3

SYSTEM ANALYSIS

3.1 Existing System

The Joint Registrar of Cooperative Societies, Kalpetta, Wayanad, uses the Integrated Co-operative Department Management System to manage the registration, monitoring, and compliance of cooperative societies. While the system provides a framework for digital operations, certain key features like audit scheduling and notification systems are currently inactive or underutilized. This report outlines the current system's operations, identifies its limitations, and suggests enhancements. Existing System Overview: Integrated Cooperative Department Management System The ICDMS is a digital platform used for managing various functions of cooperative societies.

- Society Registration : Societies apply for registration through the ICDMS, submitting required documents digitally. The system facilitates verification and approval, issuing digital certificates upon completion.
- Monitoring and Compliance : The system tracks the activities of cooperative societies and ensures they adhere to the Kerala Cooperative Societies Act. Periodic inspections and compliance reviews are documented within the platform.

- Audit Management : Although the ICDMS includes a feature for audit scheduling and tracking, this functionality is currently inactive. Audit reports and schedules are still managed manually, creating inefficiencies.

- Communication and Notifications : While the system has provisions for email and in-app notifications about deadlines, audits, and policy updates, these features are not actively implemented. Societies rely on traditional methods like physical notices for communication.

- Document Management : The ICDMS provides secure document storage and access control, ensuring important records are stored electronically and accessible only to authorized users.

- Training and Support : The system tracks training programs and allows cooperative members and staff to access resources. However, the delivery and accessibility of e-learning resources remain limited.

3.2 Proposed System

The proposed system introduces a comprehensive, web-based application designed to address the inefficiencies of the current setup in managing cooperative societies. It enables society users to register online, upload documents securely, and track their application status in real-time. Automated workflows streamline the verification and approval process for Assistant Registrars (AR), Deputy Registrars (DR), and Joint Registrars (JR), reducing delays and improving accuracy. Once approved, digital certificates are issued directly, eliminating the need for physical paperwork. A robust notification system ensures users receive timely alerts about deadlines, approvals, and compliance requirements through email or in-app notifications. Additionally, the system integrates an AI-powered chatbot that offers real-time assistance for a wide range of queries, from registration to audits and compliance-related concerns, ensuring users receive immediate support, reducing wait times, and improving user satisfaction.

The system also includes advanced tools to enhance compliance tracking, allowing users to schedule audits, monitor regulatory adherence in real-time, and receive proactive reminders about important deadlines and requirements. Societies can file complaints directly within the platform and easily track their resolution, fostering greater transparency and accountability. Admins benefit from a comprehensive management interface, enabling them to efficiently oversee user roles, monitor activities, and enforce system security protocols. The inclusion of e-learning resources and certification programs further empowers cooperative society members, enhancing their knowledge base and ensuring they remain up-to-date with the latest regulations. This holistic approach transforms cooperative society management into a streamlined, efficient, transparent, and user-friendly experience for both members and administrators.

3.2.1 Society Registration Process

Submission of Application

- An application for the registration of a cooperative society must be submitted to the Registrar in the prescribed form.

Required Documents

- **Proposed Bye-laws:** Three copies of the proposed bye-laws of the society.
- **Minutes of the Promoting Committee:** Documentation of the initial meeting where the decision to form the society was made.
- **Project Report:** A detailed report outlining the objectives, functions, and financial projections of the proposed society.

3.2.2 Co-operative Society Registration Fees

Fee Structure

- Additional Limit in District: 10,000
- District Limit Group: 5,000
- Additional in Taluk (but within district): 4,000
- Taluk Limit Group: 4,000
- Women, Scheduled Castes/Scheduled Tribes: 2,000
- School, College Co-operatives: 500
- Gangs: 500

Payment Details

The registration fee can be paid through the Treasury Online Payment Gateway, which is integrated with the Integrated Co-operative Department Management System (ICDMS). This allows for a seamless online payment process during the application submission.

Calculation of Payment

The registration fee is fixed and does not require any calculation. Applicants need to pay the specified amount corresponding to their registration area and the act under which they are registering.

Submission Platform

Applications for the registration of cooperative societies can be submitted online through the Integrated Co-operative Department Management System (ICDMS). This platform facilitates the submission of applications, uploading of necessary documents, and payment of fees.

3.2.3 By-law Amendment Process

Submission of Application

An application for the amendment of the bye-laws of an existing cooperative society must be submitted to the Registrar in the prescribed form.

Required Documents

- **Proposed Amendments:** A copy of the proposed amendments to the bye-laws, clearly stating the changes.
- **Resolution of the General Body:** A resolution passed by the general body of the society approving the proposed amendments.
- **Minutes of the Meeting:** Documentation of the meeting where the decision for the amendment was made, including a list of attendees.

- **Additional Information:** Any other information or clarifications required by the Registrar.

Fee Structure

- For All Groups: 500
- For SC/ST, Women, and School Groups: 50

Submission Platform

The application for by-law amendment can be submitted online through the Integrated Co-operative Department Management System (ICDMS).The platform allows for the easy submission of applications, uploading of required documents, and payment of fees.

3.2.4 Workflows

Society Registration Workflow

- Society submits an application with required documents.
- AR reviews the application and documents.
- AR forwards the approved application to DR.
- DR performs additional verifications and forwards it to JR.
- JR approves and issues the digital registration certificate.
- Notification of registration is sent to the society.

By-law Amendment Workflow

- Society submits an amendment proposal with supporting documents.
- AR reviews the proposal for completeness and validity.
- DR reviews and checks compliance with regulations.
- JR approves or rejects the amendment proposal.
- Notification of the amendment status is sent to the society.

Complaint Management Workflow

- Society submits a complaint through the system.
- AR reviews and assigns the complaint to the appropriate department or officer.
- DR investigates unresolved or escalated complaints.
- JR makes the final decision on unresolved or critical issues.
- The system notifies the society of the resolution status.

3.3 Module Description

3.3.1 Registration and Document Management Module

The Registration and Document Management Module allows societies to submit registration applications through an online portal, ensuring a streamlined and efficient process. Required documents can be uploaded and securely stored within the system. The applications are then reviewed by the Assistant Registrar (AR), who forwards them to the Deputy Registrar (DR), with final approval granted by the Joint Registrar (JR). Upon approval, digital certificates are issued to the societies, confirming their registration.

3.3.2 Audit, Compliance, and Notification Module

The Audit, Compliance, and Notification Module enables Assistant Registrars (AR) to schedule audits, while the system tracks compliance with relevant government regulations. Automated notifications are sent to users to remind them of upcoming audits, deadlines, and any updates to policies. The module offers real-time monitoring of compliance statuses, ensuring societies stay on track with regulatory requirements. Additionally, registrars and administrators can generate compliance reports and dashboards to gain insights into the overall status of audits and regulations.

3.3.3 AI Chatbot and E-learning Module

The AI Chatbot and E-learning Module provides users with real-time assistance through an AI-powered chatbot, available in both English and Malayalam. This service addresses queries related to registration, audits, and compliance, offering quick support. The module also includes an E-learning platform where admins can manage online training programs and resources for cooperative members and staff. Upon completing training modules, users receive certifications, helping improve their knowledge and skills in the field of registration and compliance.

3.3.4 Complaint Management and User Management Module

The Complaint Management and User Management Module allows society users to submit complaints, which are tracked and addressed by the relevant authorities, including the Assistant Registrar (AR), Deputy Registrar (DR), or Joint Registrar (JR). Admins are responsible for managing user roles, permissions, and profiles, ensuring appropriate access to the system. The module also includes a system for monitoring user activity, providing logs that track system access and user actions for security and compliance purposes.

3.4 Feasibility Study

The Society Registration Management System is a well-planned initiative aimed at modernizing the process of society registration and compliance management. The feasibility study evaluates its practicality by examining operational, technical, and economic aspects. This system is designed to streamline workflows, reduce manual effort, and enhance transparency for both society users and administrative authorities. It leverages modern technology to automate tasks like document management, compliance tracking, notifications, and complaint resolution. By replacing outdated manual processes with a user-friendly, web-based platform, the system ensures scalability, adaptability, and long-term efficiency. The study confirms that the project is both viable and beneficial for all stakeholders involved.

3.4.1 Operational Feasibility

The operational feasibility highlights how the system aligns with user needs and improves current processes. The system simplifies tasks like registration, document uploads, and compliance tracking for society users, while enabling administrators and registrars to manage applications, audits, and complaints efficiently. With real-time notifications and AI chatbot support, communication gaps are minimized, and user satisfaction is enhanced. The intuitive interface ensures that users of all technical skill levels can navigate the system with ease.

3.4.2 Technical Feasibility

The technical feasibility evaluates the project's compatibility with existing technology and its potential for development. The system uses robust web technologies, ensuring compatibility with modern devices and browsers. A secure database infrastructure is employed for managing sensitive data, such as user details and uploaded documents. The system's scalability enables it to handle an increasing number of users and transactions without performance issues. Integration with notification systems and AI chatbot services enhances the system's functionality. Additionally, the availability of experienced developers and affordable technical resources makes the system's development and maintenance highly feasible.

3.4.3 Economic Feasibility

The economic feasibility focuses on the cost-effectiveness of the system. Although there are initial development and setup costs, the system's long-term benefits outweigh the investment. Automating tasks like application review, compliance monitoring, and notifications reduces administrative overhead and minimizes errors, saving both time and money. The scalability of the system ensures it can support future growth without significant additional expenses. By reducing manual effort, improving accuracy, and enhancing communication, the system ensures value for money and delivers financial benefits over time.

3.5 System Environment

The Society Registration Management System is designed to operate in a secure, scalable, and efficient environment.

3.5.1 Developer Requirement

3.5.1.1 Hardware Requirement

- Processor: i3 or above
- System Bus: 32 Bit or 64 Bit
- Ram : 4 GB or above
- Hard Disk: 500 GB or Above

3.5.1.2 Software Requirement

- Operating system : Windows 7 or above
- Front end : Handlebars
- Back end : nodejs, express
- Database : mongodb
- IDE : Microsoft Visual Studio Code
- Web browser :Chrome, Explorer, Edge. . . etc.

3.5.2 User Requirement

- Any smartphone/ Computer/ Laptop
- Stable internet Access

3.6 Actors and their Roles

3.6.1 Admin

The Admin is responsible for the overall management and configuration of the system.

- Login
- Configure and Maintain AI Chatbot
- Upload and Manage Training Materials
- Monitor User Activities and System Usage

3.6.2 Society User

The Society User interacts with the system to handle registration and compliance processes.

- Login
- Register for a System Account
- Submit Society Registration Applications
- Upload Required Documents
- Receive Notifications
- Download Digital Certificates
- Manage Bylaw Amendments
- Use AI Chatbot
- Complete Training Modules
- Submit and Track Complaints

3.6.3 Assistant Registrar (AR)

The Assistant Registrar is responsible for reviewing applications and ensuring compliance at the preliminary level.

- Login
- Review Registration Applications
- Approve Bylaw Amendments
- Send Notifications
- Schedule and Manage Audits
- Generate Compliance Reports
- Review and Assign Complaints

3.6.4 Deputy Registrar (DR)

The Deputy Registrar oversees compliance and investigates escalated issues.

- Login
- Review Forwarded Applications
- Access Compliance Dashboards
- Investigate Complaints

3.6.5 Joint Registrar (JR)

The Joint Registrar is responsible for final approvals and ensuring compliance at the highest level.

- Login
- Approve or Reject Applications
- Sign and issue digital certificates

Chapter 4

SYSTEM DESIGN

4.1 Methodology

This project follows Agile methodology. Agile software development comprises various approaches to software development under which requirements and solutions evolve through the collaborative effort of self organizing and cross-sectional teams and their customers/ end users. It advocates adaptive planning, evolutionary development, early delivery and continuous improvement and it encourage rapid and flexible response to change. it's a process for managing a project that involves constant collaboration and working in iterations. Today, the word Agile can refer to these values and the frameworks for implementing them, including scrum. One thing that seperates Agile from other approaches to software development is the focus on the people doing thenwork and how they work together. Solutions evolve through collaboration between self-organizing cross-functional teams utilizing the appropriate practices for their context.

4.2 UML Diagrams

4.2.1 Use Case Diagram

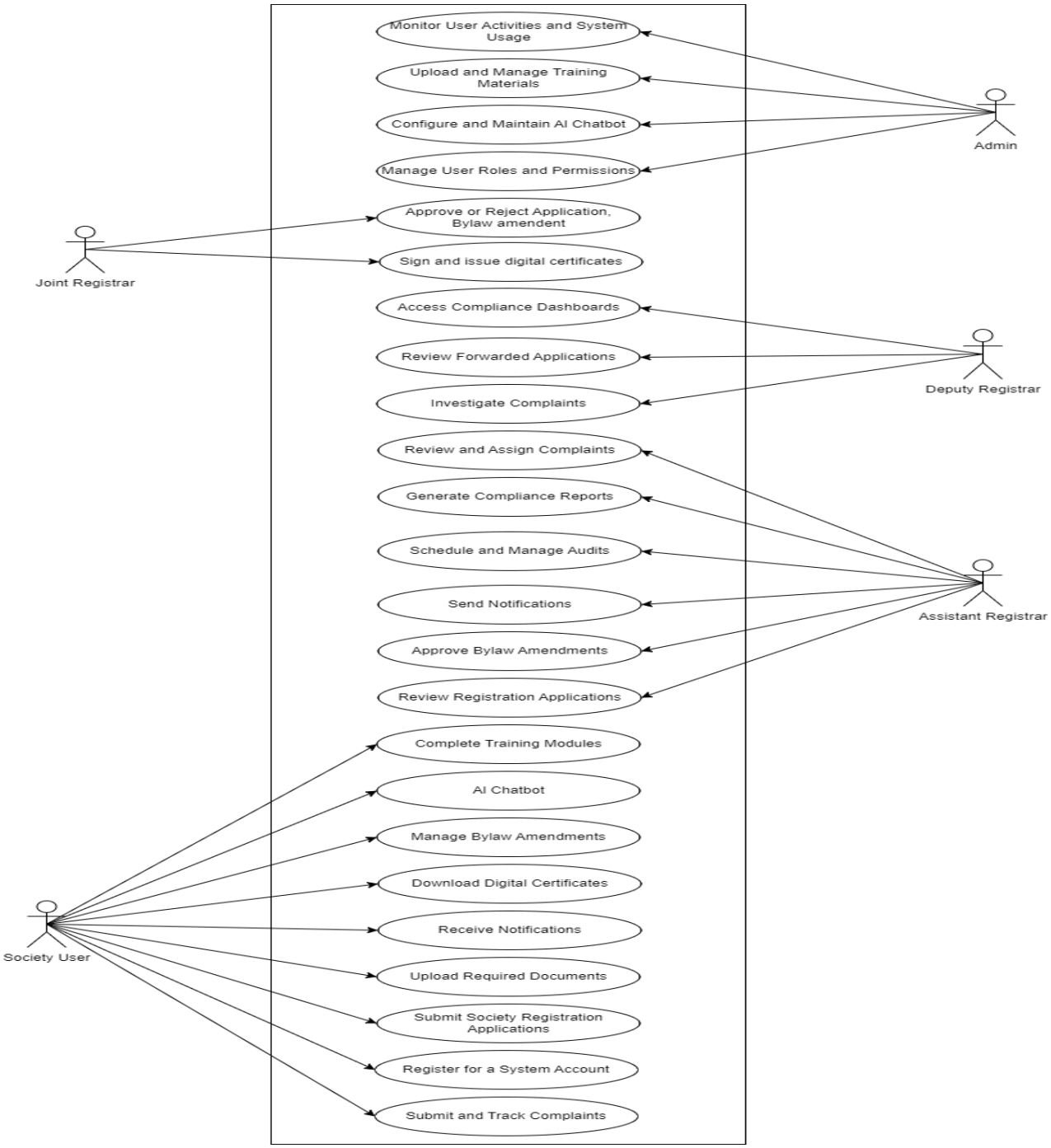

Figure 4.1: Use Case Diagram

4.2.2 Activity Diagram

Figure 4.2: Activity Diagram

4.2.3 Class Diagram

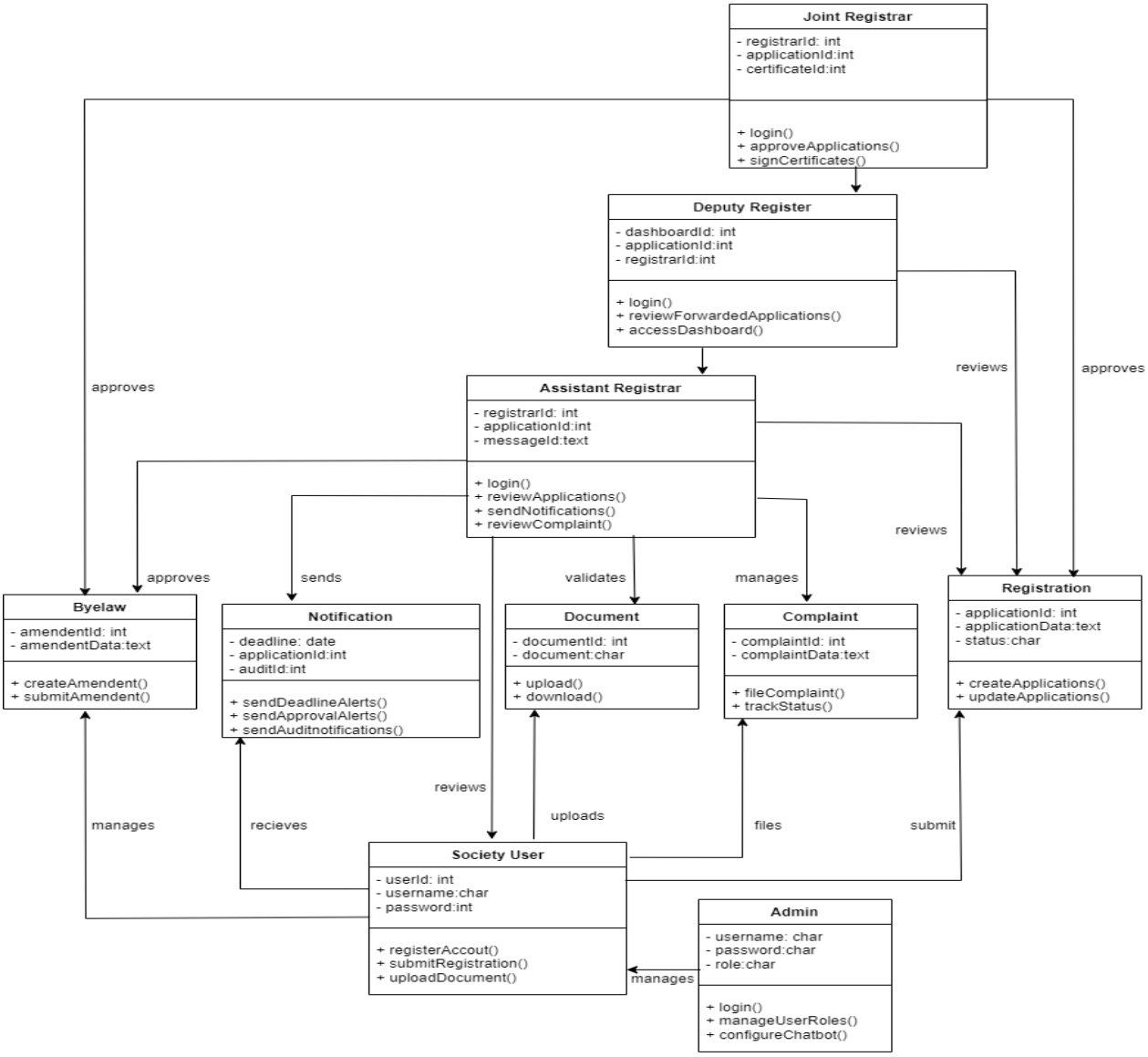

Figure 4.3: Class Diagram

4.3 User Story

User story ID	**As a <Type of Users >**	**I want to <Perform some task >**	**So that I can <Achieve some goal >**
01	Admin, Society User, AR, DR, JR	Access the home page	Navigate to the system and view relevant information
02	Society User	Register for a system account	Access authorized features
03	Admin, Society User, AR, DR, JR	Log into the system	Access my personalized dashboard
04	Admin	Manage user roles and permissions	Control system access
05	Society User	Create and submit a registration application	Register my society with the department
06	Society User	Upload and manage required documents	Complete the registration process
07	Assistant Registrar	Review and verify registration applications	Ensure completeness and forward for approval
08	Deputy Registrar	Review forwarded applications	Verify compliance and move to final approval
09	Joint Registrar	Approve or reject applications and make sign digital certificate	Make final decisions on society registrations and ensure digital certificates are signed appropriately
10	Society User	Download digital certificates	Have official proof of registration
11	Society User	Create, edit, and manage bylaw amendments	Ensure our organization's rules and policies remain up-to-date and compliant
12	Assistant Registrar	Review and approve bylaw amendments	Ensure that changes align with strategic objectives and are in the best interest of members

User story ID	**As a <Type of Users >**	**I want to <Perform some task >**	**So that I can <Achieve some goal >**
13	Assistant Registrar	Send notifications and manage audits	Notify society users about deadlines to ensure compliance
14	Society User	Receive notifications about audits and deadlines	Prepare and ensure compliance
15	Assistant Registrar	Generate compliance reports	Track regulatory adherence
16	Deputy Registrar	Access compliance dashboards	Monitor overall compliance status
17	Society User	Use AI chatbot	Get quick answers to queries about the system
18	Admin	Configure and maintain AI chatbot	Ensure users receive accurate and helpful responses
19	Admin	Upload and manage training materials	Provide educational resources
20	Society User	Complete training modules and certifications	Learn about compliance requirements
21	Society User	Submit and track complaints	Report and monitor issues
22	Assistant Registrar	Review and assign complaints	Ensure proper handling
23	Deputy Registrar	Investigate assigned complaints	Resolve escalated issues

4.4 Product Backlog

User Story ID	Priority (Low,High, Medium)	Size	Sprint	Status (Planned, Progressed, Completed)	Release Date	Release Goal
1	LOW	4	1	Planned	16-01-2025	Navigate to the system and view relevant information
2	MEDIUM	6		Planned	17-01-2025	Access authorized features
3	MEDIUM	6		Planned	18-01-2025	Access my personalized dashboard
4	HIGH	10		Planned	21-01-2025	Control system access
5	HIGH	10		Planned	22-01-2025	Register my society with the department
6	MEDIUM	6	2	Planned	23-01-2025	Complete the registration process
7	HIGH	10		Planned	25-01-2025	Ensure completeness and forward for approval
8	MEDIUM	6		Planned	26-01-2025	Verify compliance and move to final approval

User Story ID	Priority (Low,High, Medium)	Size	Sprint	Status (Planned, Progressed, Completed)	Release Date	Release Goal
9	HIGH	10		Planned	28-01-2025	Make final decisions on society registrations and ensure digital certificates are signed appropriately
10	MEDIUM	6		Planned	30-01-2025	Have official proof of registration
11	HIGH	10	3	Planned	03-02-2025	Ensure our organization's rules and policies remain up-to-date and compliant
12	HIGH	10		Planned	07-02-2025	Ensure that changes align with strategic objectives and are in the best interest of members
13	HIGH	10		Planned	12-02-2025	Notify society users about deadlines to ensure compliance

User Story ID	Priority (Low,High, Medium)	Size	Sprint	Status (Planned, Progressed, Completed)	Release Date	Release Goal
14	MEDIUM	6		Planned	15-02-2025	Prepare and ensure compliance
15	MEDIUM	6		Planned	19-02-2025	Track regulatory adherence
16	MEDIUM	6	4	Planned	23-02-2025	Monitor overall compliance status
17	HIGH	10		Planned	27-02-2025	Get quick answers to queries about the system
18	HIGH	4		Planned	02-03-2025	Ensure users receive accurate and helpful responses
19	LOW	6		Planned	07-03-2025	Provide educational resources
20	MEDIUM	6	5	Planned	10-03-2025	Learn about compliance requirements
21	MEDIUM	6		Planned	14-03-2025	Report and monitor issues
22	HIGH	10		Planned	17-03-2025	Ensure proper handling
23	HIGH	10		Planned	19-03-2025	Resolve escalated issues

4.5 Project plan

User story ID	Task name	Start date	End date	Days
1	Access the home page	15-01-2025	16-01-2025	1
2	Register for a system account	16-01-2025	17-01-2025	1
3	Log into the system	17-01-2025	18-01-2025	1
4	Manage user roles and permissions	18-01-2025	21-01-2025	2
5	Create and submit a registration application	21-01-2025	22-01-2025	3
6	Upload and manage required documents	22-01-2025	23-01-2025	1
7	Review and verify registration applications	23-01-2025	25-01-2025	2
8	Review forwarded applications	25-01-2025	26-01-2025	1
9	Approve or reject applications and make sign digital certificate	26-01-2025	28-01-2025	2
10	Download digital certificates	28-01-2025	30-01-2025	2
11	Create, edit, and manage bylaw amendments	01-02-2025	03-02-2025	2
12	Review and approve bylaw amendments	03-02-2025	07-02-2025	3

User story ID	Task name	Start date	End date	Days
13	Send notifications and manage audits	08-02-2025	12-02-2025	4
14	Receive notifications about audits and deadlines	13-02-2025	15-02-2025	2
15	Generate compliance reports	16-02-2025	19-02-2025	3
16	Access compliance dashboards	21-02-2025	23-02-2025	2
17	Use AI chatbot	24-02-2025	27-02-2025	2
18	Configure and maintain AI chatbot	28-02-2025	02-03-2025	2
19	Upload and manage training materials	03-03-2025	07-03-2025	4
20	Complete training modules and certifications	08-03-2025	10-03-2025	2
21	Submit and track complaints	11-03-2025	14-03-2025	3
22	Review and assign complaints	15-03-2025	17-03-2025	2
23	Investigate assigned complaints	18-03-2025	19-03-2025	1

4.6 Schema Diagram

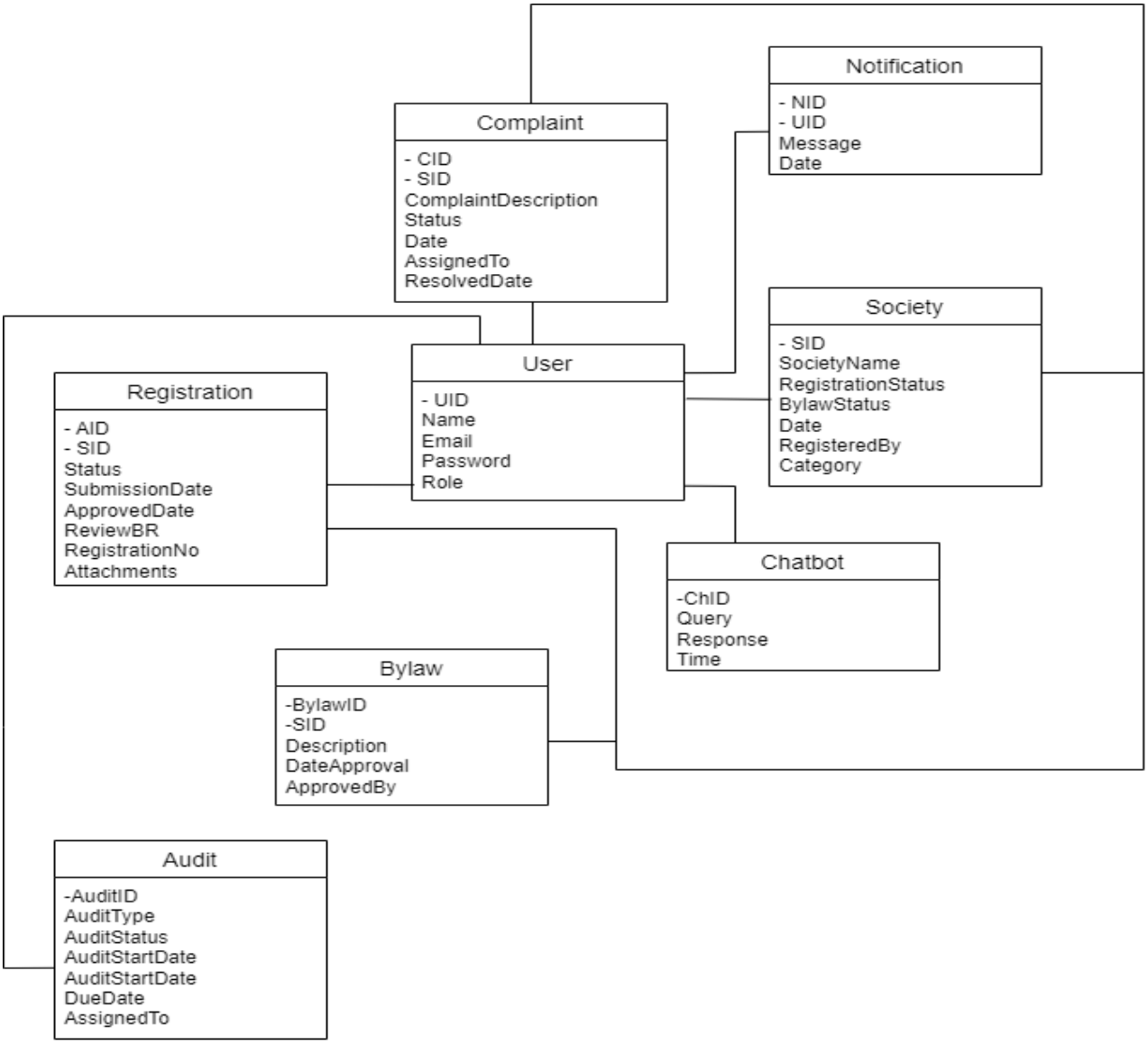

Figure 4.4: Schema Diagram

4.7 User Interface Design

4.7.1 Home Page

This is the home page of the Integrated Cooperative Department Management System . It features a clean layout with a navigation bar that provides quick access to the Home and Login pages. The page welcomes users with a brief introduction to the system and explains the importance of the Cooperative Department in promoting community development and ensuring transparency in cooperative societies. A carousel section is included to display images, enhancing the visual appeal of the page. The design is simple and responsive, ensuring easy navigation and a user-friendly experience.

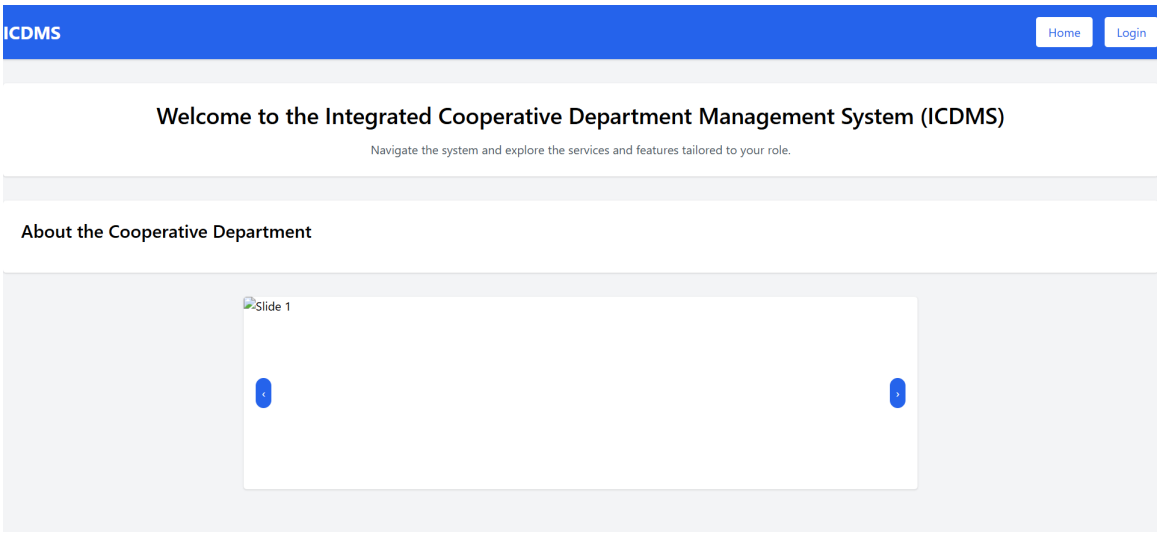

Figure 4.5: Home page.

4.7.2 Login Page

This is the login page for the Integrated Cooperative Department Management System . It features a clean and responsive design with a simple form for users to enter their email address and password to access their accounts. The page includes links for password recovery and new user registration, making it user-friendly and functional.The layout ensures clarity and ease of use, providing a smooth login experience.

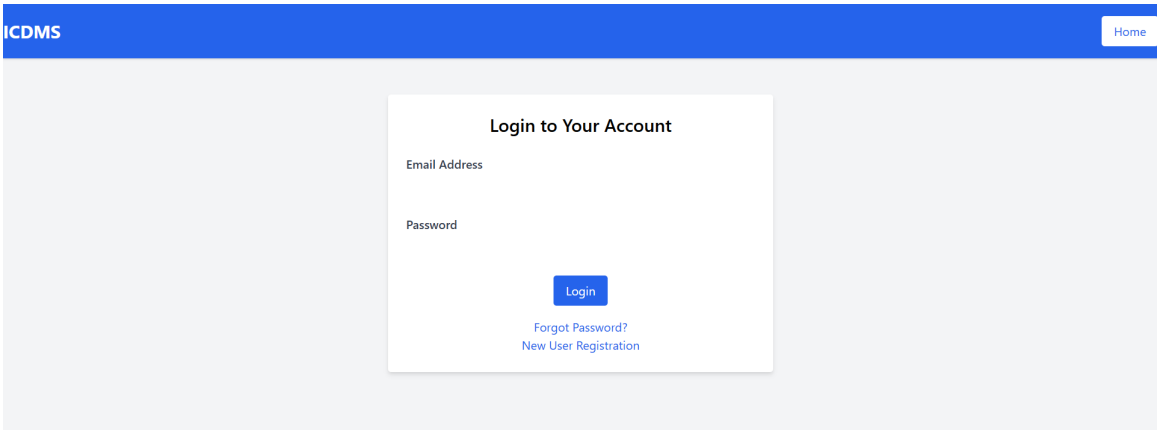

Figure 4.6: Login page.

4.7.3 Admin Dashboard

The ICDMS Dashboard provides an organized and user-friendly interface for managing various aspects of the system. It features a sidebar for easy navigation to sections like user management, AI chatbot configuration, and e-learning module management. The main content area highlights key metrics such as the total number of users, chatbot queries, and available e-learning modules, presented as widgets for quick reference.

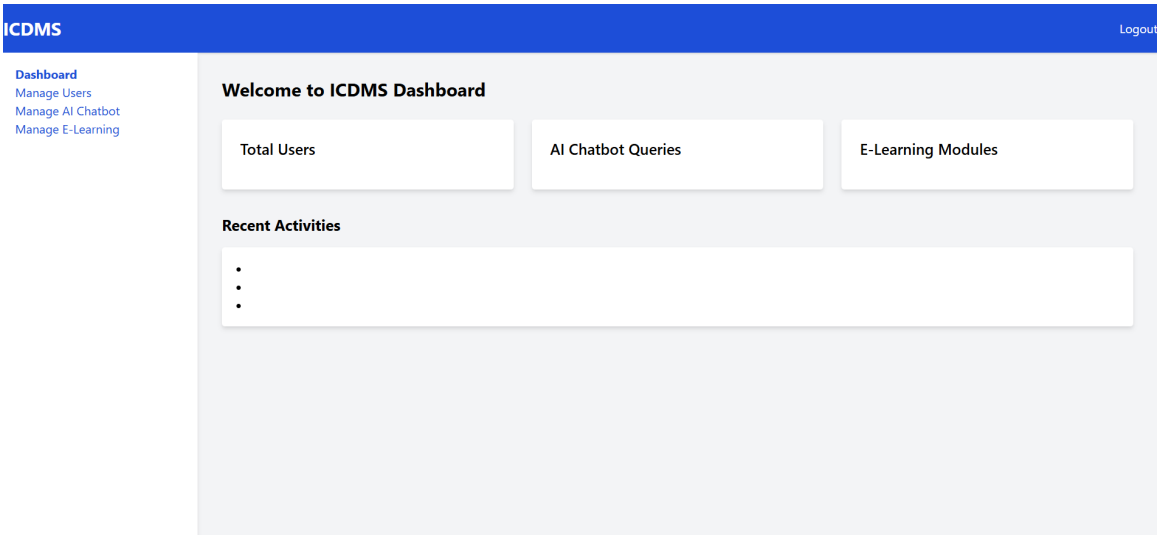

Figure 4.7: Admin Dashboard

4.7.4 Admin Manage Users

The ”Manage Users” page provides a streamlined interface for adding and managing users within the ICDMS system. It includes a form to add new users by specifying their username, email, and role, with options for Admin or User roles. A user list section displays all registered users in a table format, showing details like ID, username, email, and role. Each user entry has action buttons for editing or deleting, enabling quick and efficient user management. The page is designed with a clean layout, intuitive navigation, and responsive styling for ease of use.

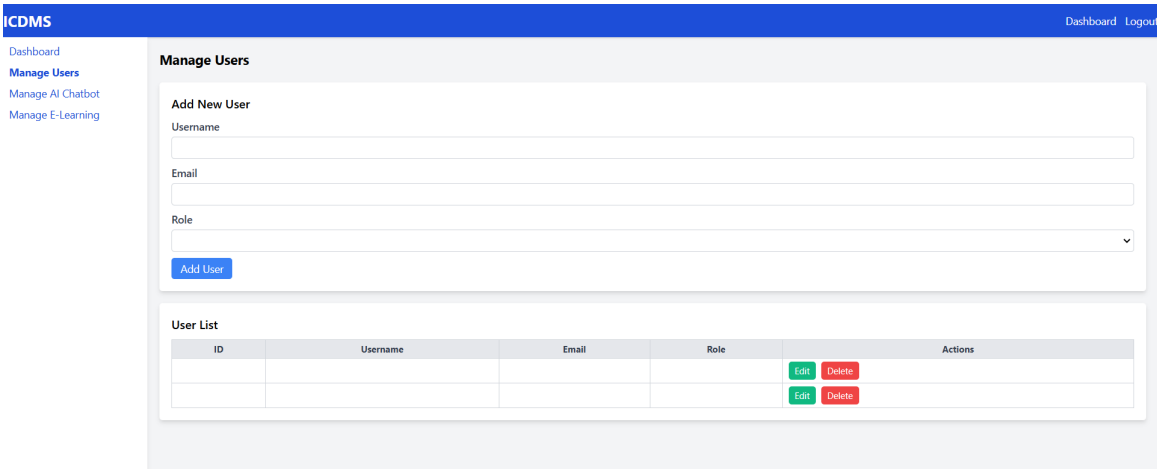

Figure 4.8: Admin Manage Users

4.7.5 Admin Manage AI Chatbot

The ”Manage AI Chatbot” page is designed to help administrators monitor and manage the performance of the AI chatbot. It provides an overview of key metrics such as the total queries handled, the number of active users, and the chatbot’s response accuracy. Administrators can perform actions like training the chatbot with new datasets, analyzing its performance, and resetting it when needed. The page also includes a detailed table displaying recent user queries and the chatbot’s responses, making it easy to track interactions and ensure the chatbot is performing effectively.

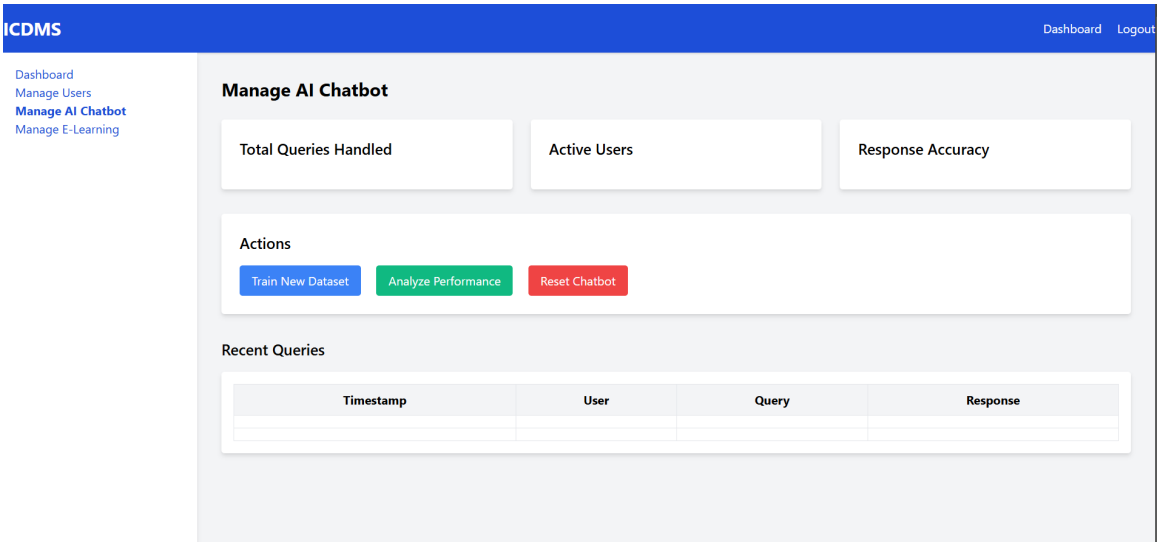

Figure 4.9: Admin Manage AI Chatbot

4.7.6 Admin Manage E-learning

The ”Manage E-Learning” page provides an intuitive interface for administrators to manage e-learning courses efficiently. It allows users to add new courses by entering the course name, description, and uploading relevant materials. The page also displays a list of existing courses with options to edit or delete them as needed. This organized layout ensures smooth management of course content, fostering a seamless learning experience for users.

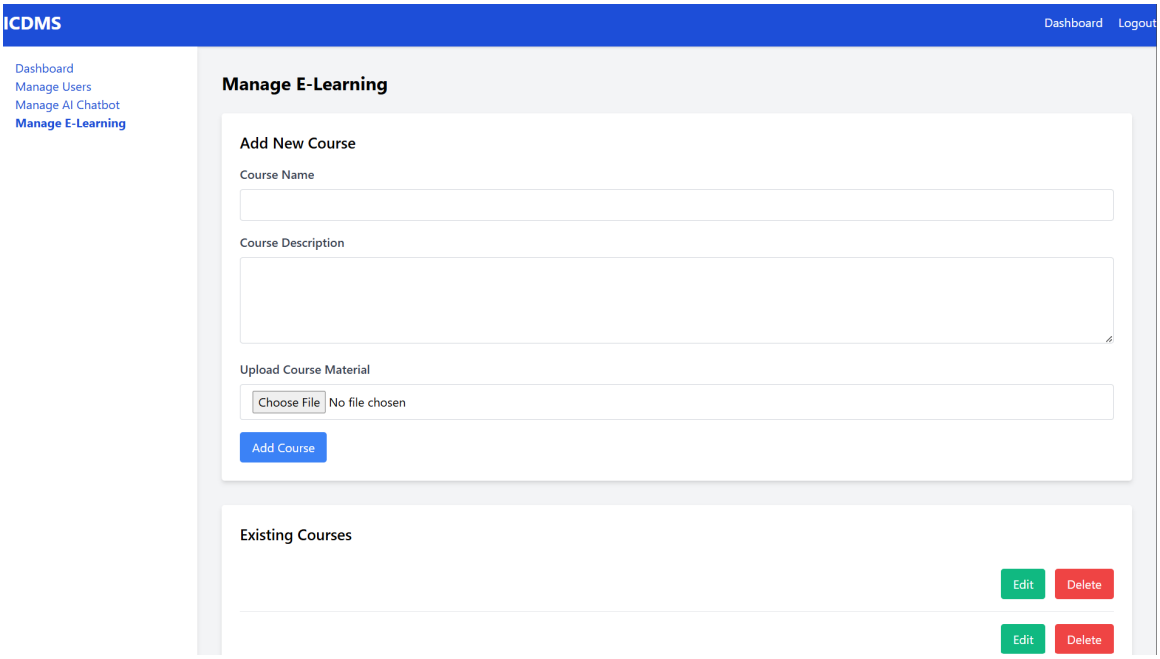

Figure 4.10: Admin Manage E-learning

4.7.7 Registration Page

This is the user registration page for the Integrated Cooperative Department Management System . It allows new users to create an account by filling out their full name, email address, phone number, and password, with an additional field to confirm the password for accuracy. The page is designed with a clean and responsive layout, ensuring an easy and smooth registration process. A header with navigation links to the homepage enhances usability, while the centralized form layout ensures clarity and accessibility for all users.

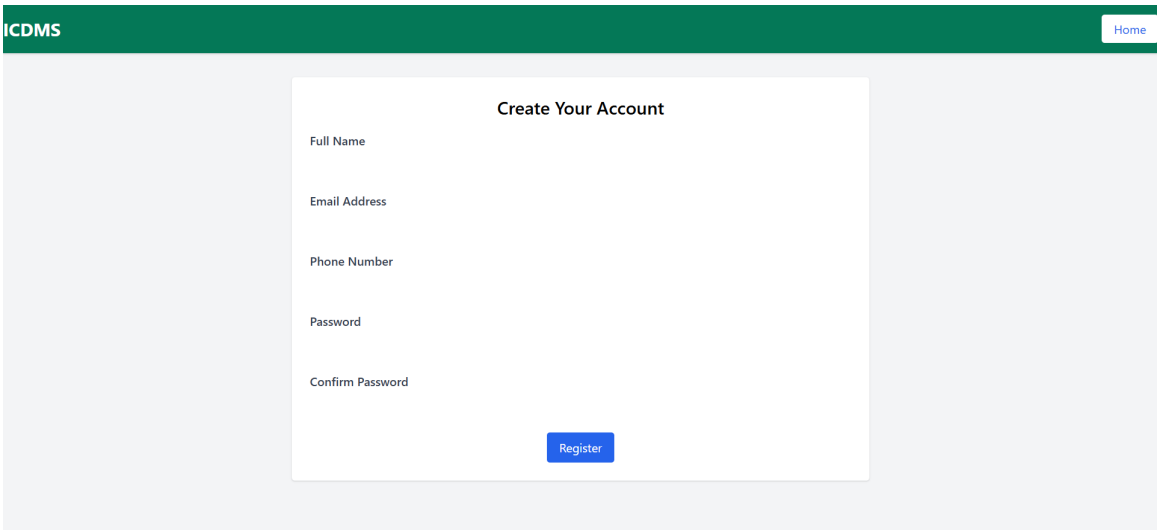

Figure 4.11: Registration Page

4.7.8 Society Home

The ”Society User Home” provides a user-friendly interface for managing society-related activities efficiently. It includes quick navigation options such as society registration, byelaw amendments, certificates, complaints, and e-learning resources. The dashboard displays key metrics, including total applications, approved applications, rejections, and applications in progress, offering a clear overview of the registration process. With an intuitive layout, users can seamlessly access features and stay updated with notifications for a smooth and organized experience.

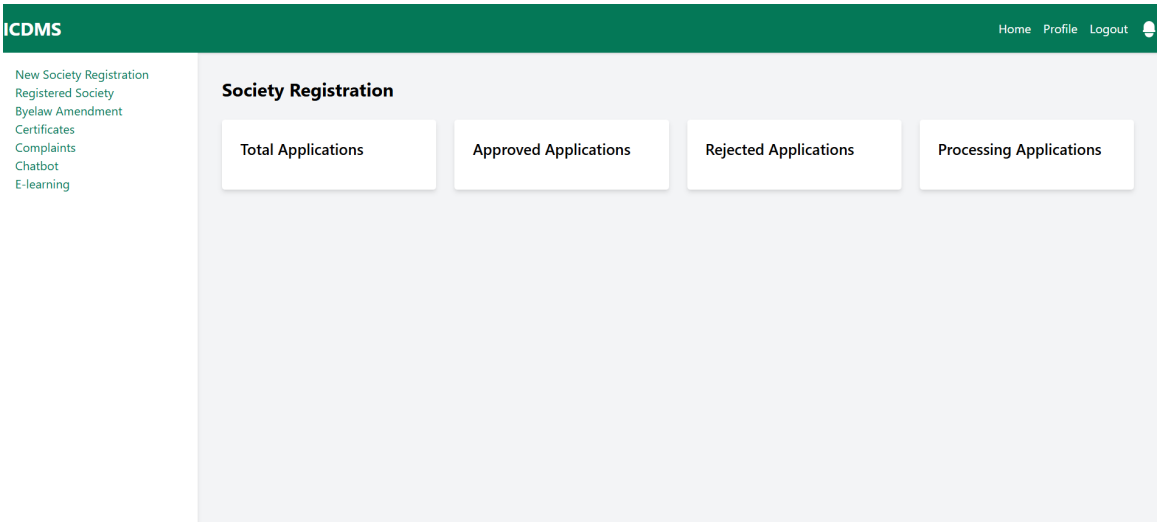

Figure 4.12: Society Home

4.7.9 New Society Registration

The New Society Registration page allows users to register a new society by providing essential details in a well-organized form. The page includes fields for the type and category of the society, a brief description, the society's name, postal address, post office, and pin code. Users can also enter the land phone, chief promoter's name, mobile number, email address, and specify if the applicants are from different families. The form features dropdowns for easy selection, text inputs for specific information, and a textarea for detailed descriptions. Additionally, options for resetting or submitting the form are provided, ensuring a user-friendly and efficient registration process.

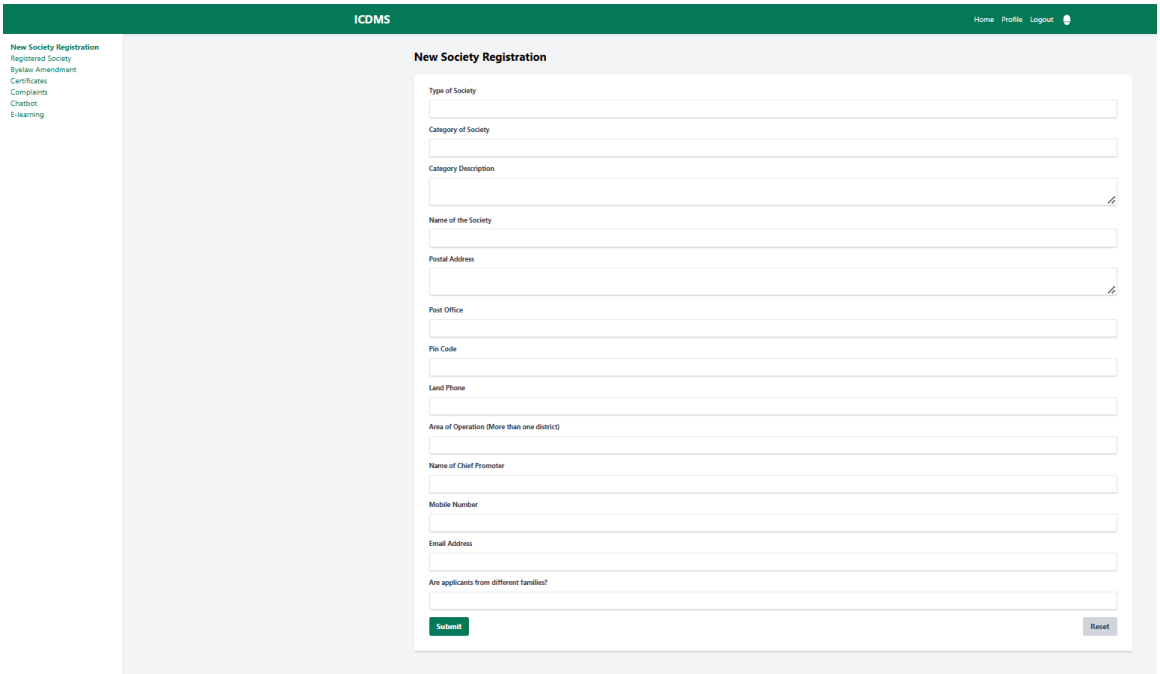

Figure 4.13: New Society Registration

4.7.10 Registered Society

The ”Registered Society” page is designed to manage and display a list of registered societies. It features a structured layout with a header for navigation and a sidebar menu for accessing various options like new registrations, byelaw amendments, certificates, complaints, and more. The main content area showcases a table listing the registered societies, including details such as the society name, category, registration number, date of registration, promoter, attachments, status, and available actions. Each entry provides options for viewing, editing, or deleting records, along with buttons to add promoters, upload attachments, or process payments. The page is clean and responsive interface.

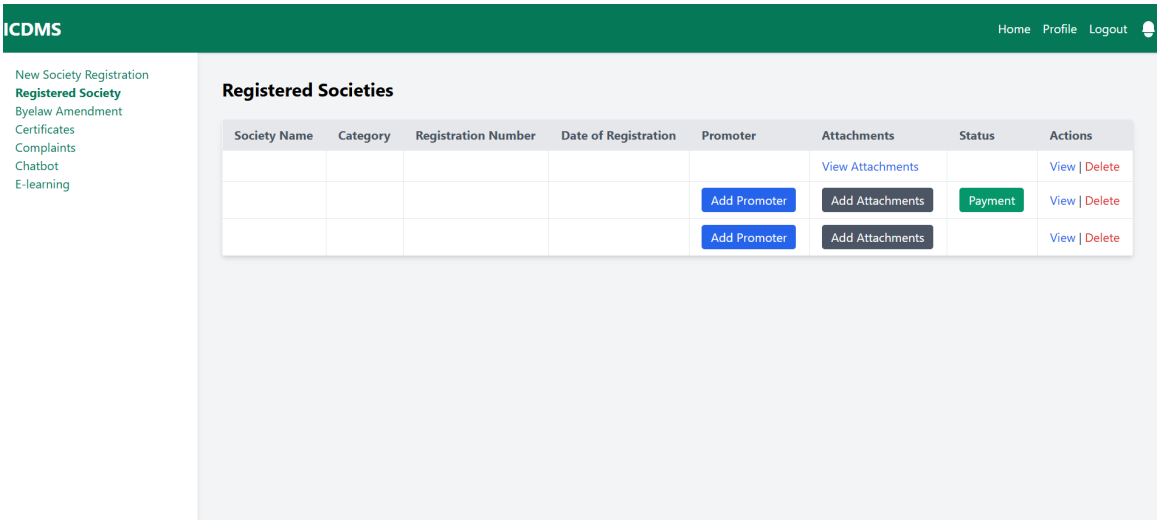

Figure 4.14: Registered Society.png

4.7.11 Add Byelaw Amendent

This page is designed for submitting applications related to byelaw amendments of registered societies. It features a structured form where users can provide essential details, such as the society's name, application number, file number, and meeting details regarding the amendment process. The form includes fields for specifying member attendance, voting details, and the relevant byelaw numbers. The layout is user-friendly, with clear labels and input fields to ensure accurate data entry. A submit button is prominently placed to finalize the application process. The page is clean and responsive design, ensuring accessibility and ease of use.

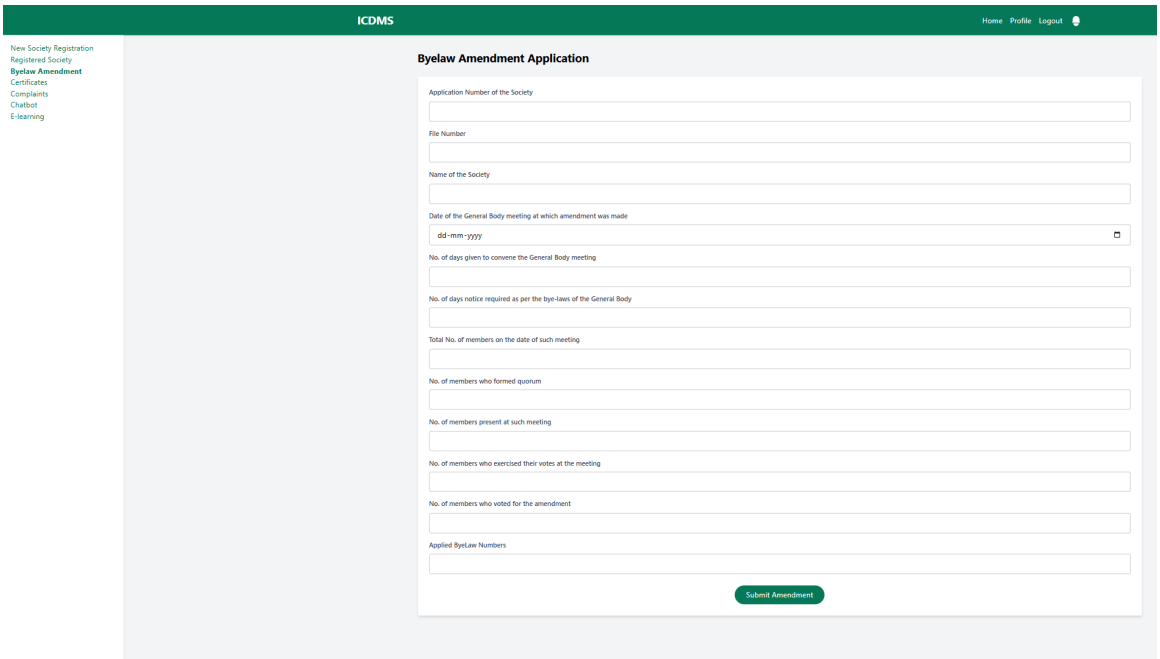

Figure 4.15: Add Byelaw Amendent

4.7.12 Society Certificate

This page provides an interface for viewing and downloading the digitally signed certificate for approved societies. It includes detailed information such as the society name, application number, file number, and approval date. Users can view the certificate online or download it in PDF format for their records. The layout features a sidebar for easy navigation to other related pages and a clean, responsive design to enhance usability.

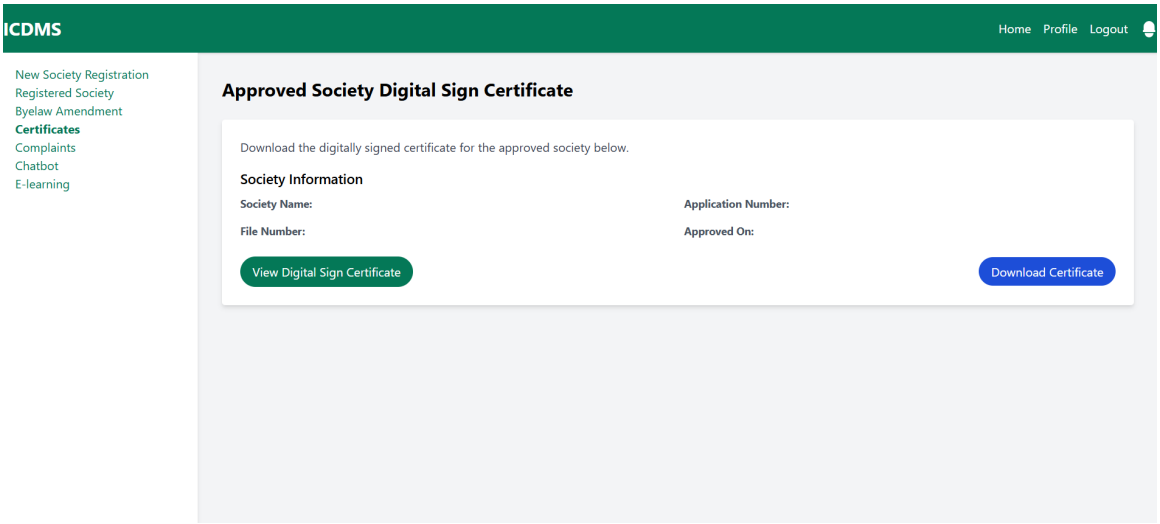

Figure 4.16: Society Certificate

4.7.13 Sent Complaints

This page allows users to submit complaints easily. It features a form where users can enter a complaint title, provide detailed descriptions, and select a category such as ”Service Issue,” ”Facility Issue,” or ”Other.” The page includes options to submit or reset the form, ensuring a user-friendly and responsive design for smooth complaint submission. A sidebar is also provided for navigation to other sections of the platform.

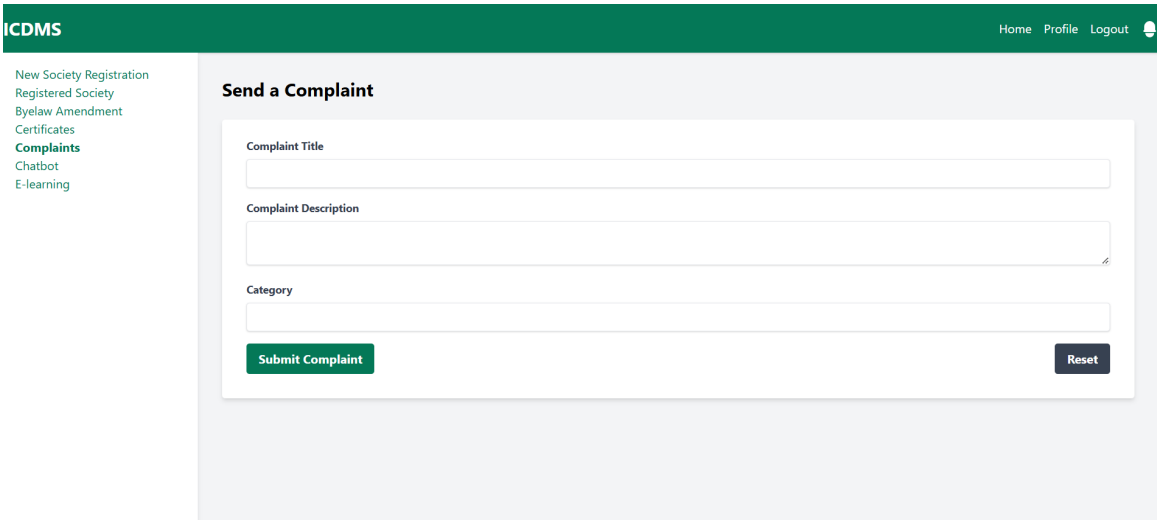

Figure 4.17: Sent Complaints

4.7.14 Society Ai Chatbot

This page features an AI-powered chatbot designed to assist users effectively. The chatbot interface includes a chatbox for viewing messages, styled chat bubbles for user and bot responses, and an input field with a send button for user queries. The chatbot provides instant replies, fostering a conversational experience. A structured layout with a sidebar for navigation and a responsive design ensures ease of use across devices.

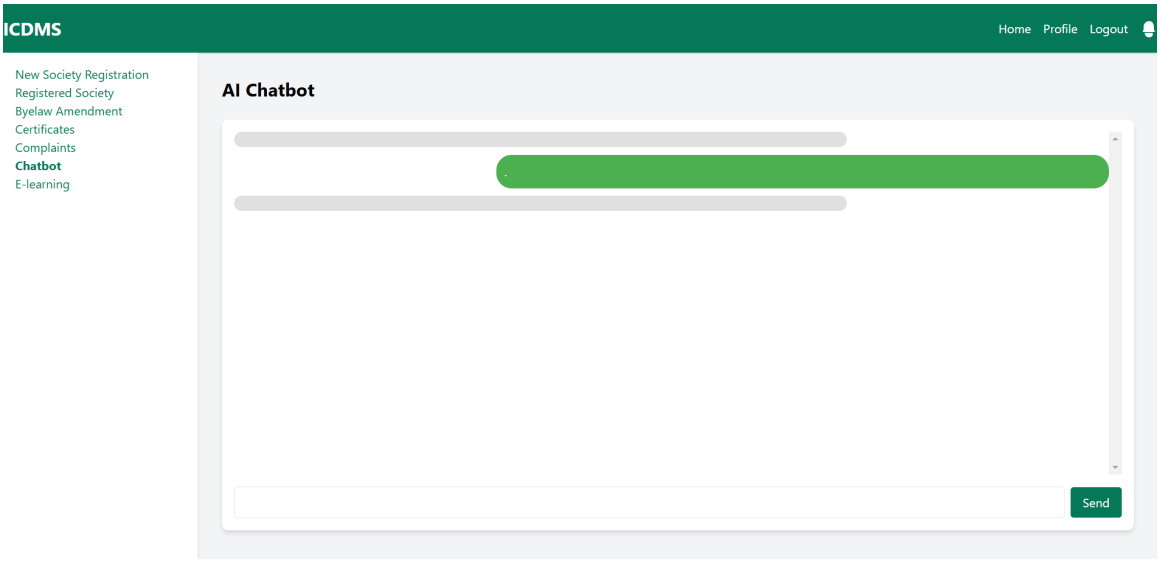

Figure 4.18: Society Ai Chatbot

4.7.15 E-learning

This page offers a collection of e-learning tutorials designed to help users navigate various aspects of society management. The tutorials cover topics such as society registration, by-law amendments, best practices in society management, complaint resolution, certificate issuance, and general body meeting procedures. Each tutorial is presented in an easy-to-access card format, with clear titles, descriptions, and links to view the tutorials. The layout is responsive and organized to provide a seamless learning experience across different devices.

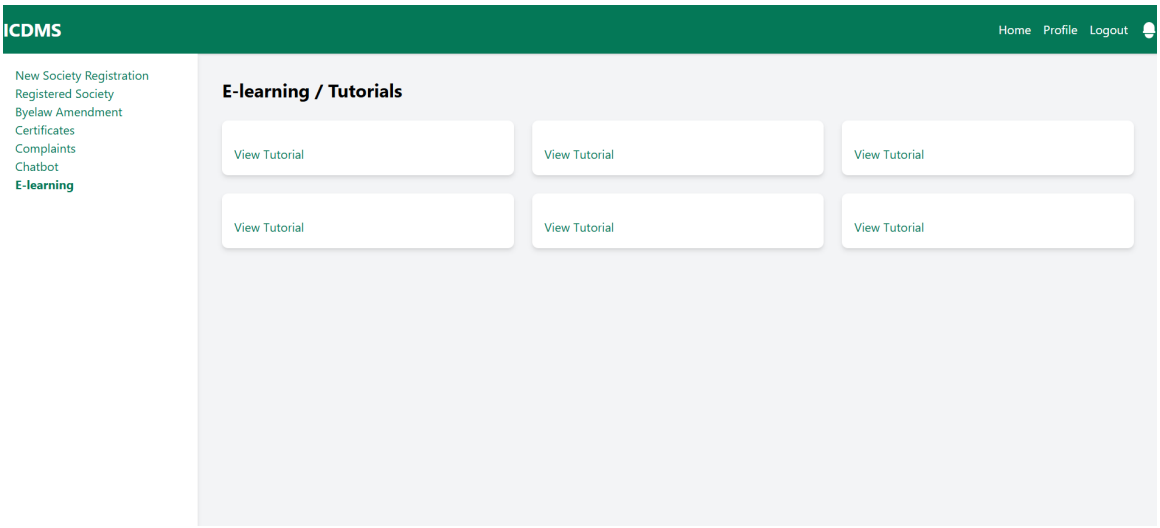

Figure 4.19: E-learning

4.7.16 AR Home

This dashboard provides a quick overview of key metrics for the ICDMS system. The interface features a sidebar for easy navigation between sections like reviewing applications, approving by-laws, managing audits, and more. The main content area displays widgets showing important information, such as the number of applications pending review, complaints assigned, and upcoming deadlines. With its clean layout and clear organization, the dashboard ensures that the user can efficiently manage tasks and stay on top of critical updates and actions.

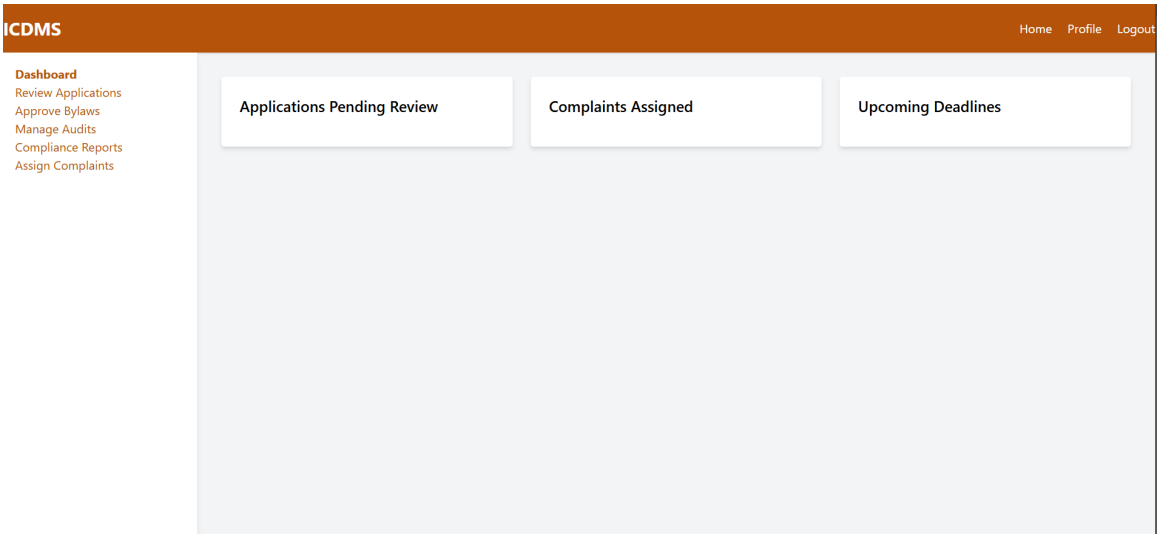

Figure 4.20: AR Home

4.7.17 Review Application

This page allows users to review applications within the ICDMS system. The sidebar provides quick navigation to different sections like the dashboard, bylaws approval, audits, and more. In the main content area, a table displays application details, including the application ID, applicant's name, submission date, status, and available actions. Users can approve, reject, or view the details of each application, streamlining the review process with simple, interactive buttons for each action. The layout is clean, making it easy for users to manage and respond to applications.

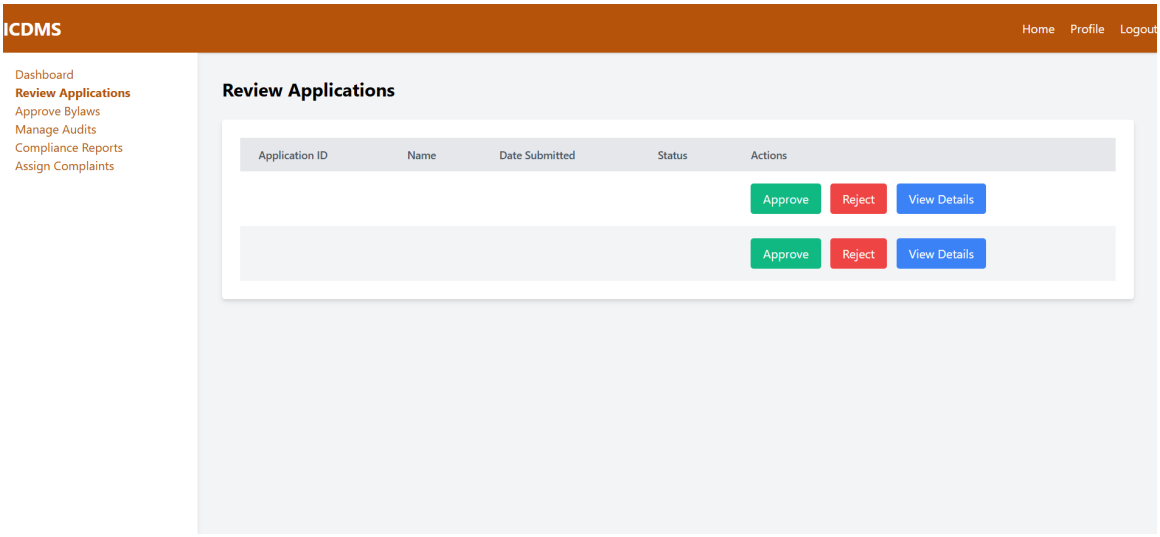

Figure 4.21: Review Application

4.7.18 Approve Bylaw

The ”Approve Bylaws” page in the ICDMS system provides an interface for users to review and manage proposed bylaws. The sidebar allows quick navigation to various sections such as the dashboard, review applications, and more. In the main content area, a table displays the bylaws with their ID, title, proposed date, status, and available actions. Users can approve, reject, or view the details of each bylaw. The layout is user-friendly, enabling efficient decision-making on the proposed changes to bylaws.

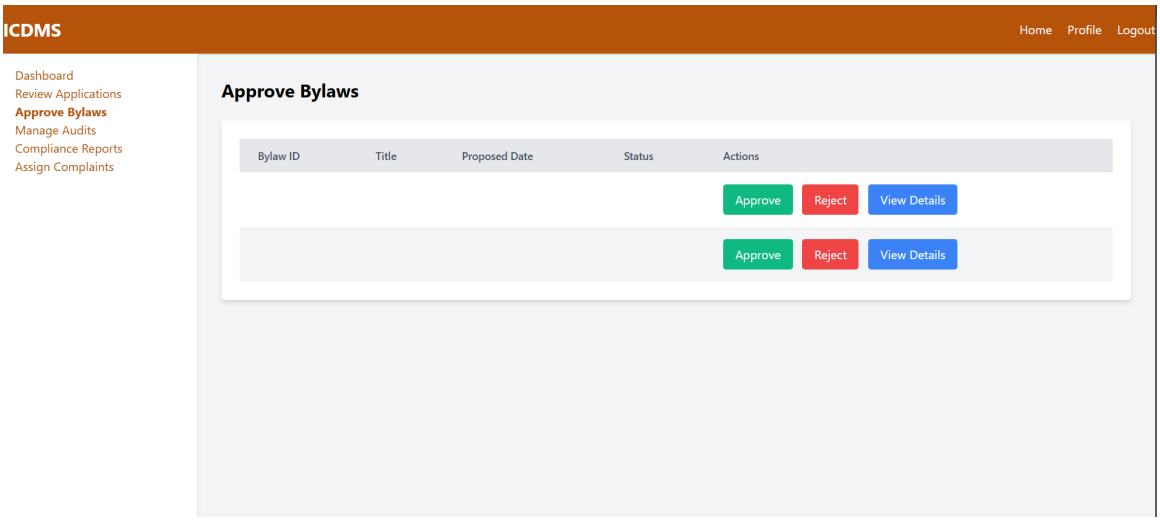

Figure 4.22: Approve Bylaw

4.7.19 Manage Audit

The ”Manage Audits” page in the ICDMS system allows users to view, schedule, and manage audit activities. It features a sidebar for easy navigation to sections like the dashboard and compliance reports. In the main content area, users can see a table displaying the audit ID, name, date, status, and available actions. Users can view completed audit reports, access details of ongoing audits, or cancel audits. Additionally, a button is provided for scheduling new audits, making the process of managing audits streamlined and efficient.

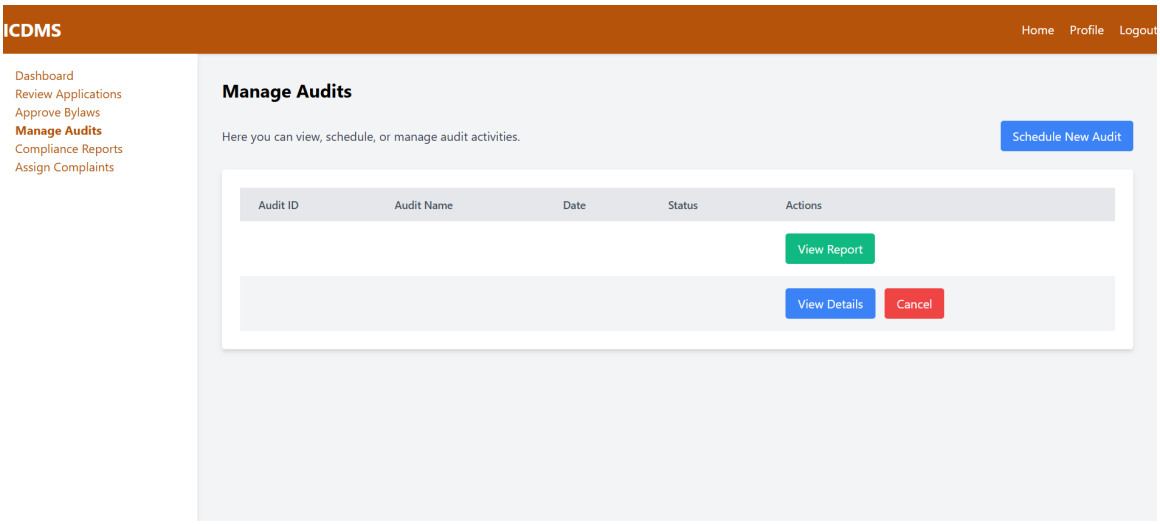

Figure 4.23: Manage Audit

4.7.20 Compliance report

The ”Compliance Reports” page in the ICDMS system enables users to view, download, and generate compliance reports. It features a sidebar for navigation and a main section displaying a table of reports, including their ID, name, generation date, and status. Users can take actions such as viewing, downloading, or generating reports. A button to generate new reports is also available, making it easy to manage compliance documentation effectively.

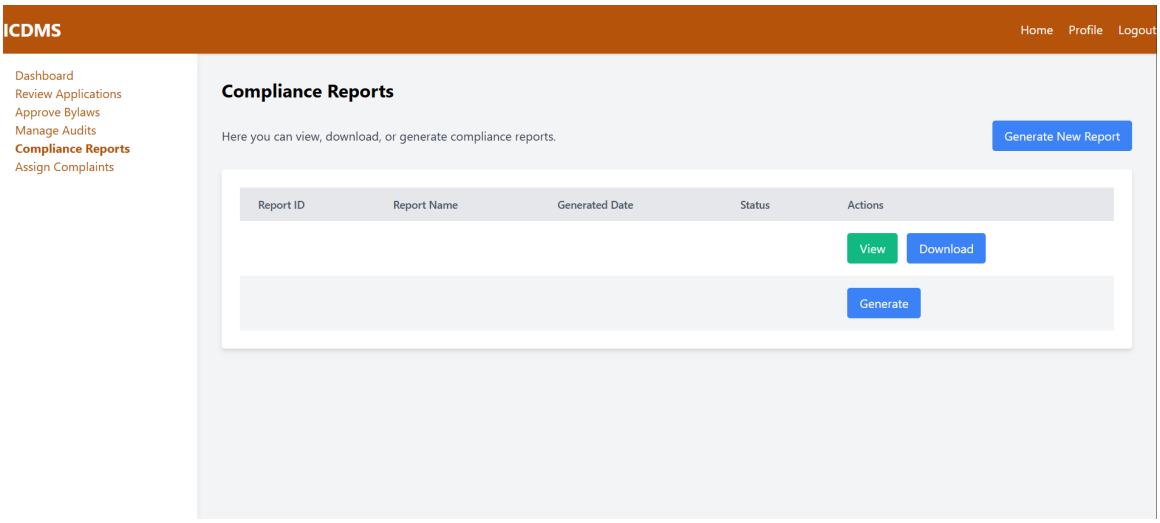

Figure 4.24: Compliance report

4.7.21 Assign Complaints

This is the ”Assign Complaints” page of the ICDMS system, designed to help administrators manage and assign complaints efficiently. The page features a user-friendly layout with a header, sidebar navigation, and a main content area. It displays a table listing complaint details such as ID, type, date filed, and assigned personnel. Administrators can easily assign or reassign complaints using the ”Assign” or ”Reassign” buttons, which open a modal form to select the responsible person. The modal includes options to view the complaint ID and choose an assignee.

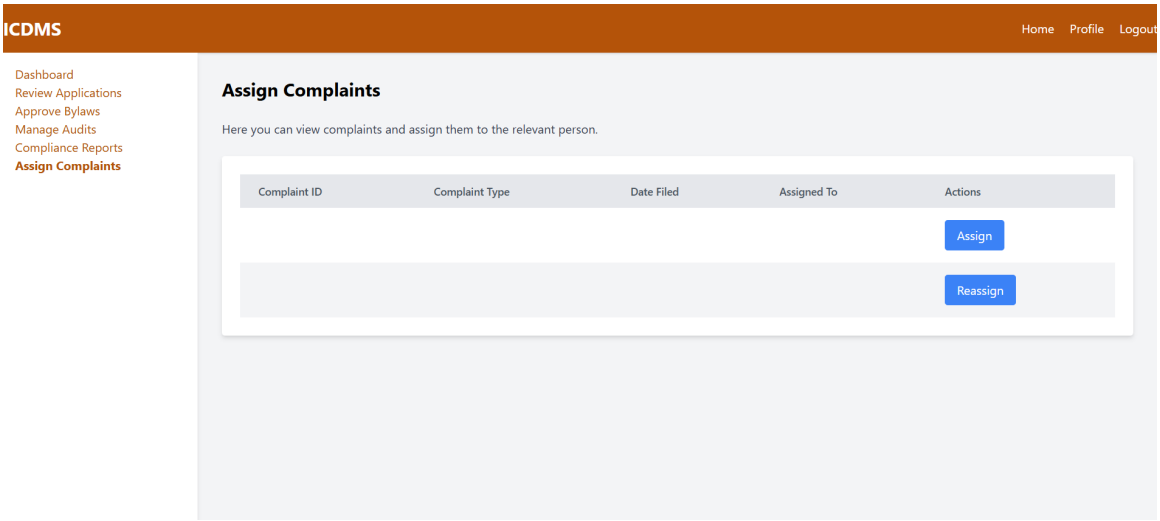

Figure 4.25: Assign Complaints

4.7.22 DR Home

This is the ”Deputy Registrar Dashboard” page of the ICDMS system, designed to provide a clear and organized overview of key tasks and information. The page features a header with navigation links and a sidebar for quick access to actions such as approving applications, accessing compliance data, and viewing assigned complaints. The main dashboard displays interactive widgets summarizing forwarded applications, approval-pending items, and completed tasks. With its clean layout the dashboard ensures a user-friendly experience, enabling the Deputy Registrar to efficiently manage and track their responsibilities.

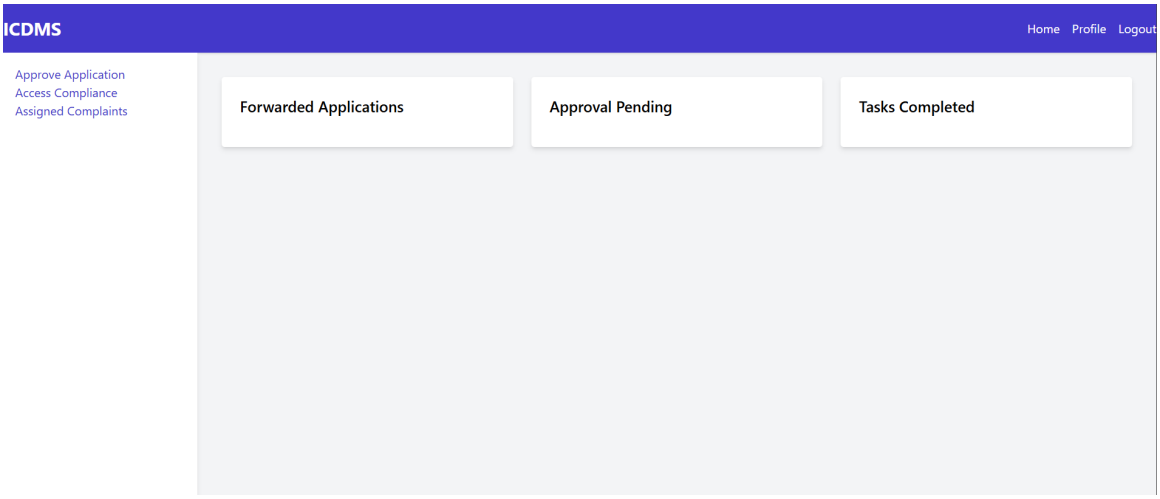

Figure 4.26: DR Home

4.7.23 Approve application

This ”Approve Applications” page is designed to streamline the application approval process for the ICDMS system. It features a sidebar for easy navigation to related tasks and a user-friendly interface for managing applications. The page includes a search form to filter applications by ID, society name, or status. A dynamic table displays application details such as ID, society name, submission date, and current status. Each row includes action buttons to approve or reject applications, ensuring efficient handling.

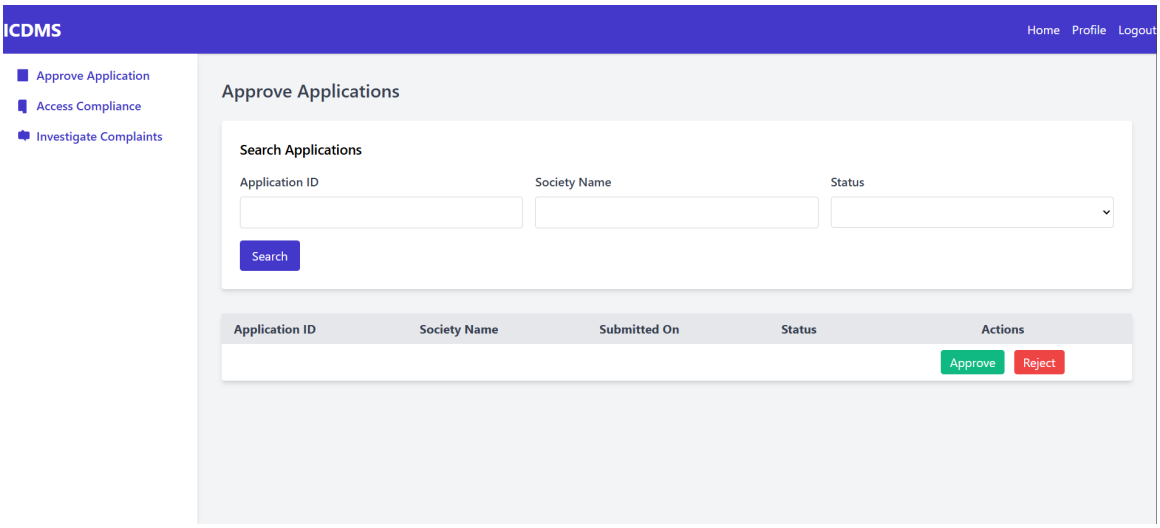

Figure 4.27: Approve application

4.7.24 Access Compliance

This is a web page designed for the ”Access Compliance” section of the ICDMS system. It features a responsive header with navigation links for easy access to the Home, Profile, and Logout options. A sidebar menu provides quick links to key functions such as approving applications, accessing compliance records, and investigating complaints. The main content area includes a search form where users can filter compliance records by Compliance ID, society name, and status. Below the form, a table displays compliance records with details like Compliance ID, society name, last checked date, and status. Users can take actions like verifying or marking records as non-compliant directly from the table.

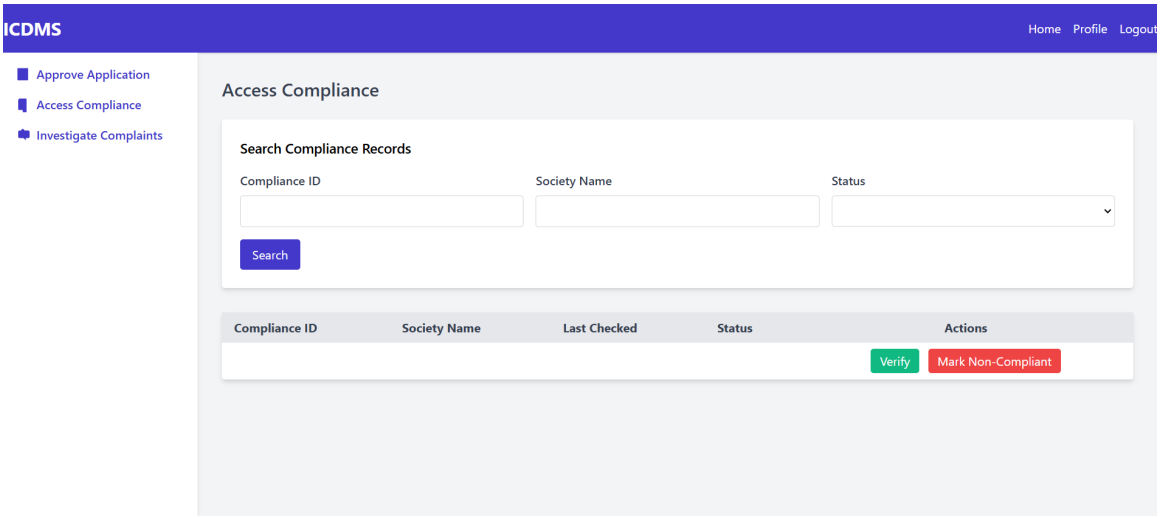

Figure 4.28: Access Compliance

4.7.25 Investigate Complaints

The ”Investigate Complaints” page provides a user-friendly interface to manage and track complaints efficiently. It includes a search form that allows users to filter complaints based on Complaint ID, Society Name, and Status. The page displays a table listing complaint details such as Complaint ID, Society Name, Date Filed, and Status. Users can view specific complaint details or mark complaints as resolved using action buttons.

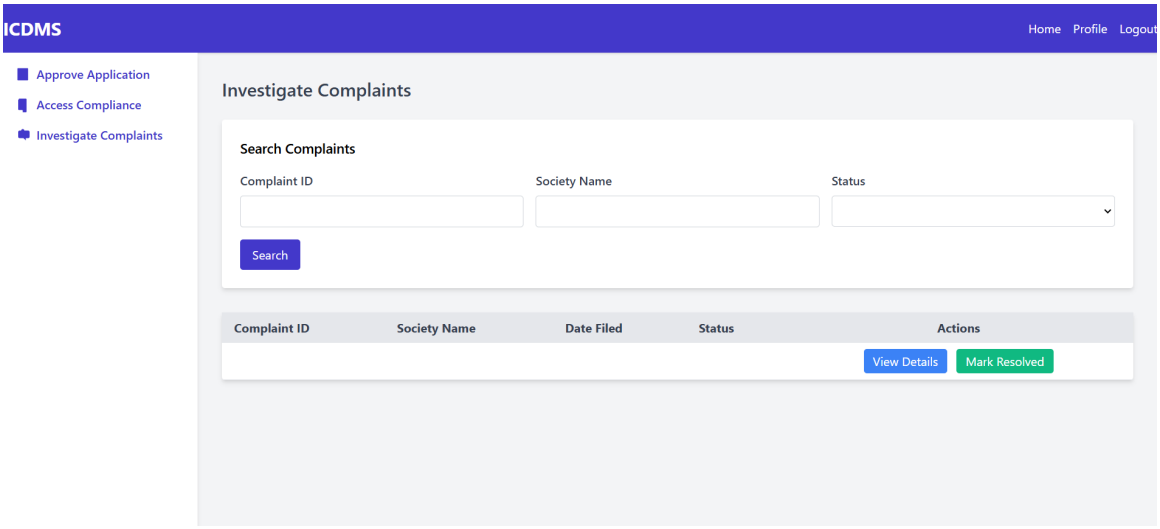

Figure 4.29: Investigate Complaints

4.7.26 JR Home

The ”Joint Registrar Dashboard” is a streamlined interface designed for efficient management and monitoring of society-related tasks. It features a sidebar for easy navigation to sections like Society Applications and Bylaw Amendments. The main dashboard includes widgets displaying key metrics such as Active Applications, Pending Approvals, and Tasks in Progress, providing an at-a-glance overview of critical information.

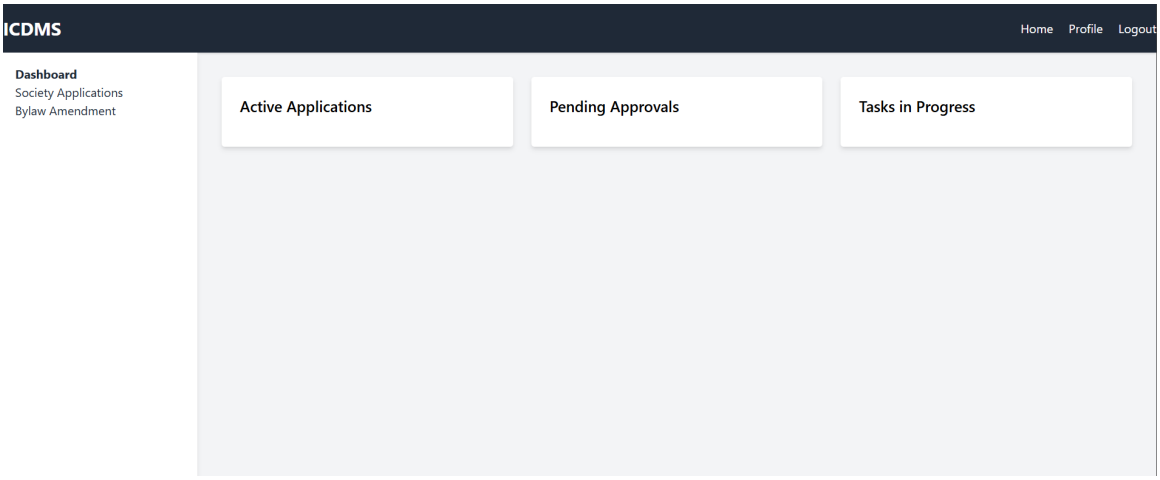

Figure 4.30: JR Home

4.7.27 Digital Sign Certificate

The ”Society Applications” page is designed to manage applications submitted by society members efficiently. It displays a table with details such as Application ID, Applicant Name, Status, and available actions. Users can review applications and perform actions like approving, rejecting, or digitally signing them using clearly labeled buttons.

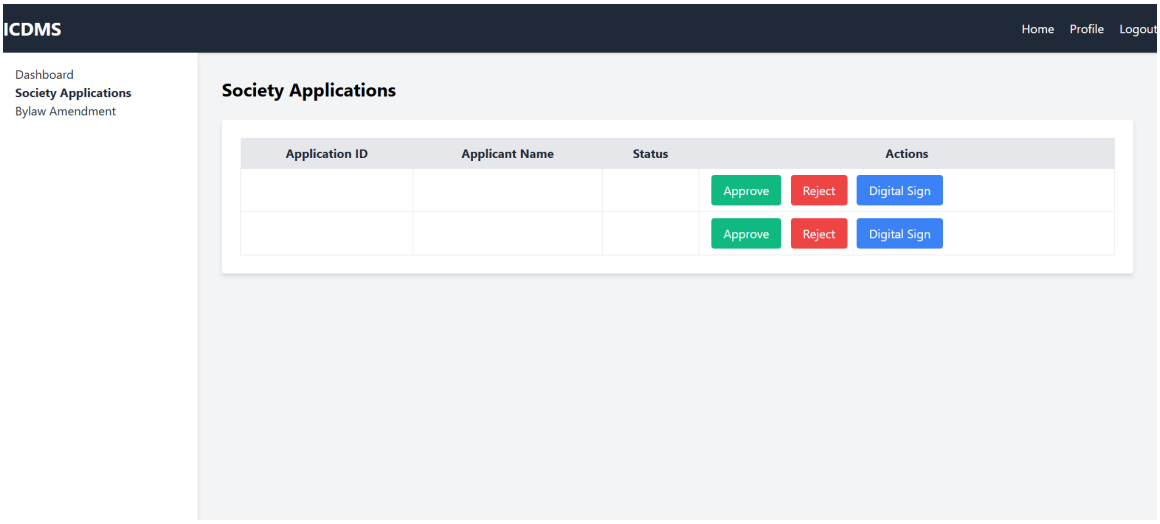

Figure 4.31: Digital Sign Certificate

4.7.28 JR Approve Byelaw Amendent

The ”Bylaw Amendment” page is a dedicated section for managing proposed changes to society bylaws. It features a clean and organized layout with a table displaying details such as Amendment ID, Proposed Amendment, Date Proposed, and available Actions. Users can review each proposal and take appropriate actions like approving or rejecting it using intuitive buttons.

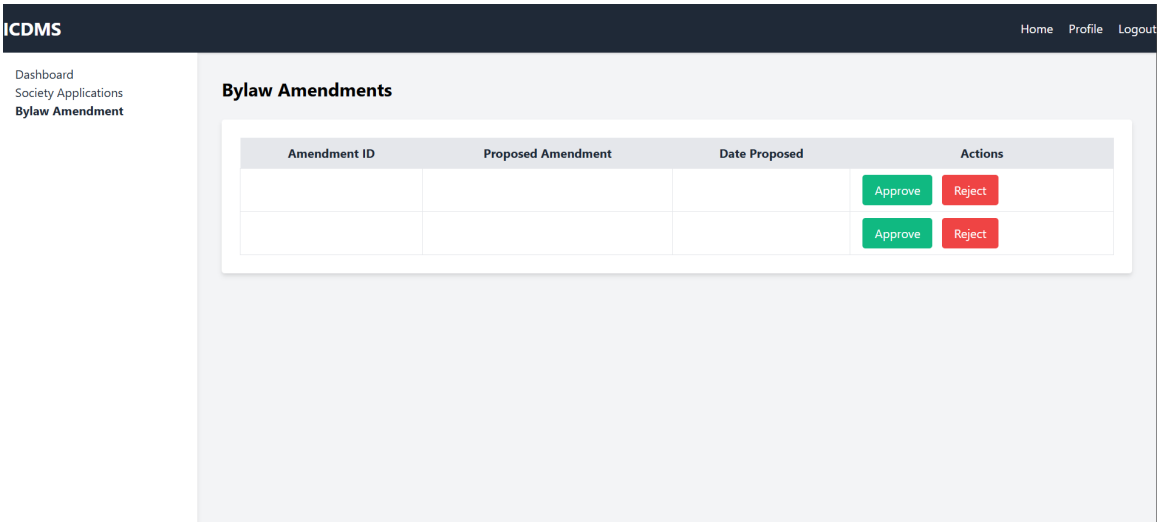

Figure 4.32: Approve Byelaw amendent