ResolveNow: Your Platform for Online Complaints

Project Report

Submitted by:

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Abstract

This project report presents the development of an Online Complaint Registration and Management System, a full-stack web application designed to streamline the process of submitting, tracking, and resolving user complaints. The system allows users to register grievances, track progress, and communicate with assigned agents in real-time. The report outlines the problem statement, objectives, technical architecture, implementation details, and future enhancements.

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1. Introduction

The Online Complaint Registration and Management System is a centralized platform that allows users to raise complaints, track their status, and communicate with service agents. It enhances operational transparency, improves user satisfaction, and supports compliance with industry regulations.

2. Problem Statement

Traditional complaint handling mechanisms lack transparency and efficiency. Users often remain uninformed about the status of their complaints. This system addresses these issues by providing a web-based platform for real-time complaint registration, tracking, and resolution.

3. Objectives

- To develop a user-friendly platform for lodging complaints.
- To implement real-time status tracking and agent communication.
- To ensure secure handling of complaint and user data.
- To automate complaint routing and assignment.

4. System Architecture

The application follows a client-server architecture. The frontend, built with React.js, communicates with the backend using RESTful APIs. The backend, developed with Node.js and Express.js, handles business logic and communicates with MongoDB for data persistence.

5. Module Descriptions

5.1 User Module

- Users can register, login, lodge complaints, track status, and chat with agents.

5.2 Agent Module

- Agents receive complaint assignments, update status, and communicate with users.

5.3 Admin Module

- Admin oversees complaint distribution, manages users and agents, and maintains system operations.

6. Database Design

The MongoDB database uses the following schemas:
- User Schema: Stores user info such as name, email, phone, and userType.
- Complaint Schema: Captures complaint details with user linkage.
- Assigned Complaint Schema: Links complaints to agents with status tracking.
- Chat Window Schema: Manages messages between users and agents.

7. Technology Stack

- Frontend: React.js, Axios, Bootstrap, Material UI
- Backend: Node.js, Express.js
- Database: MongoDB with Mongoose
- Authentication: bcrypt, JWT
- Communication: RESTful APIs

8. Implementation

Milestone 1: Project Setup and Installation

- Created frontend and backend directories, installed required libraries using npm.

Milestone 2: Backend Development

- Set up Express server, routes, middleware, and database models.

Milestone 3: Database Integration

- Defined Mongoose schemas for users, complaints, and chat.

Milestone 4: Frontend Development

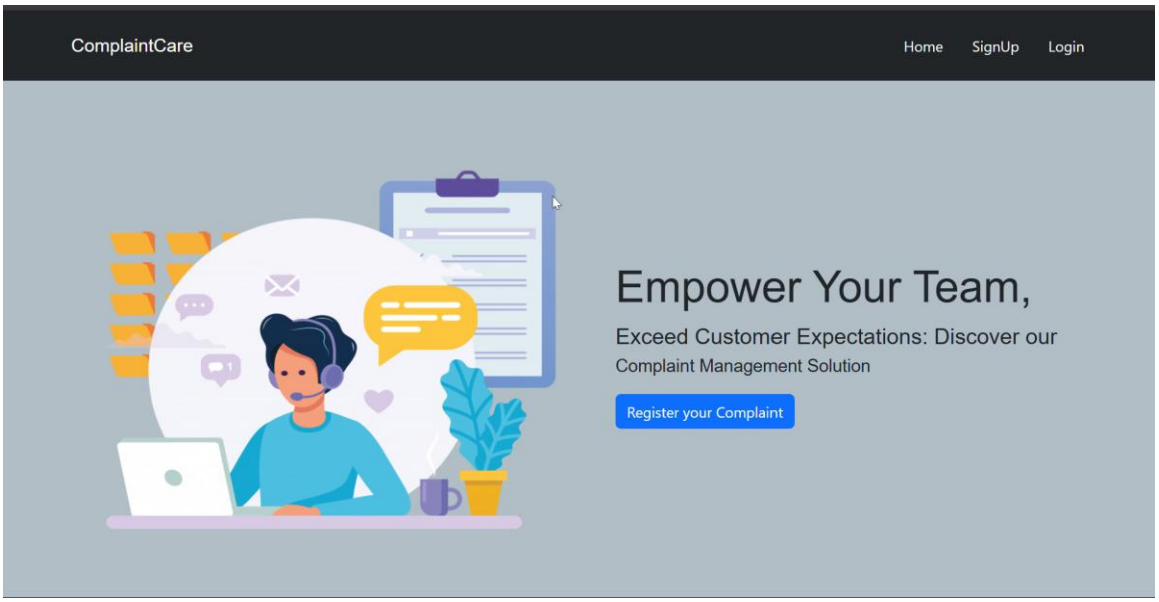
- Designed UI components, connected with backend APIs, implemented dashboards.

Milestone 5: Testing and Finalization

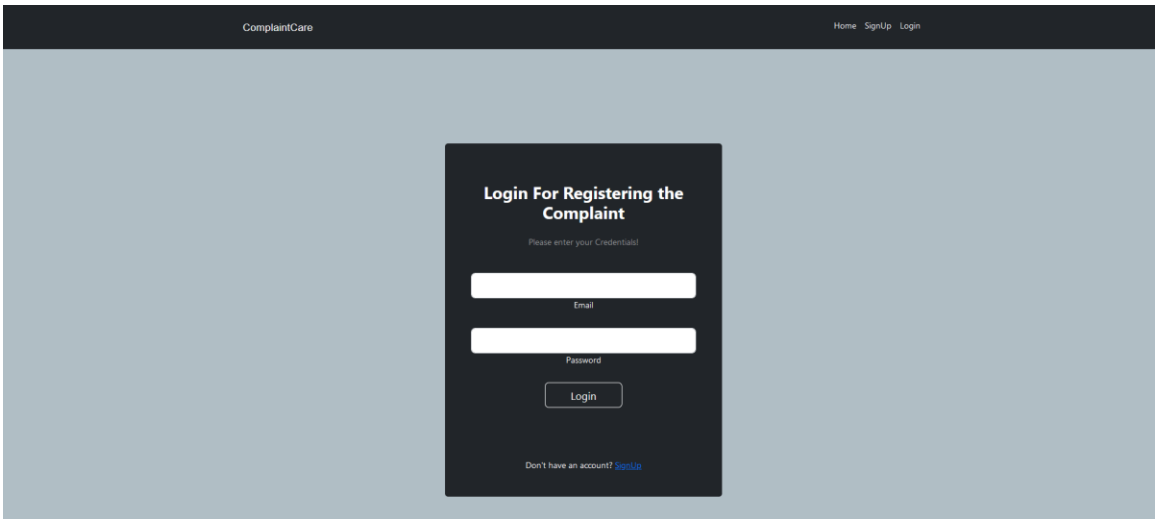
- Tested functionality, fixed bugs, prepared final demo.

9. Screenshots

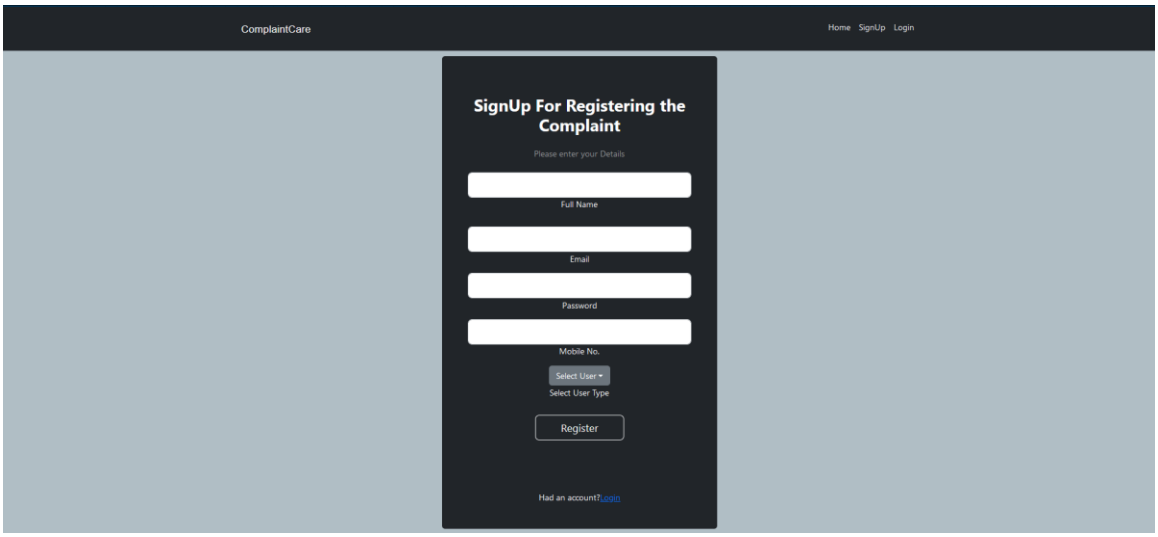
- Landing page



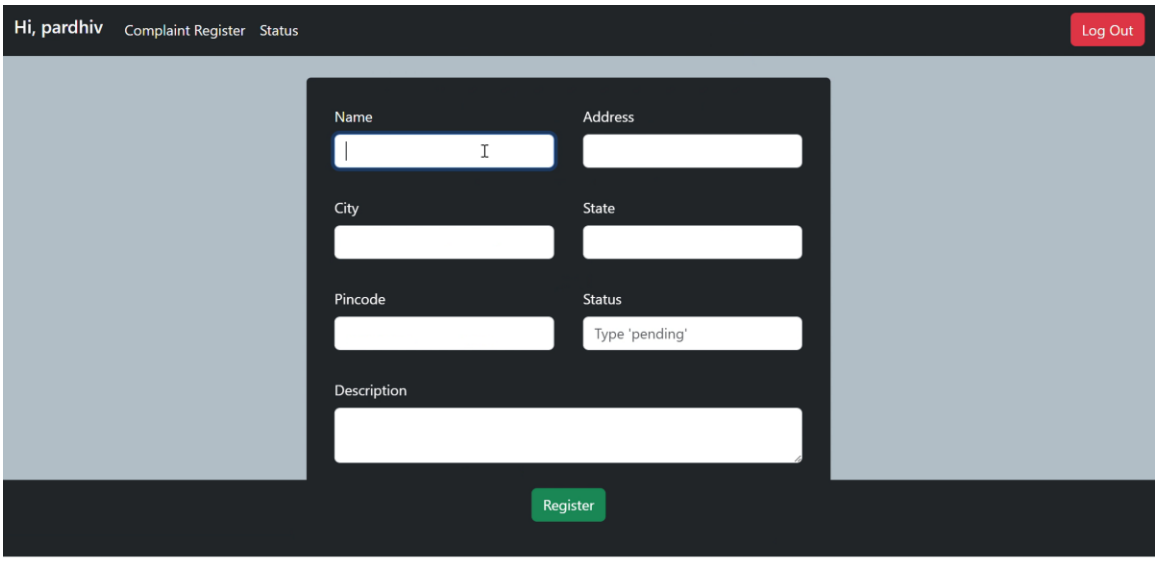
- Login page



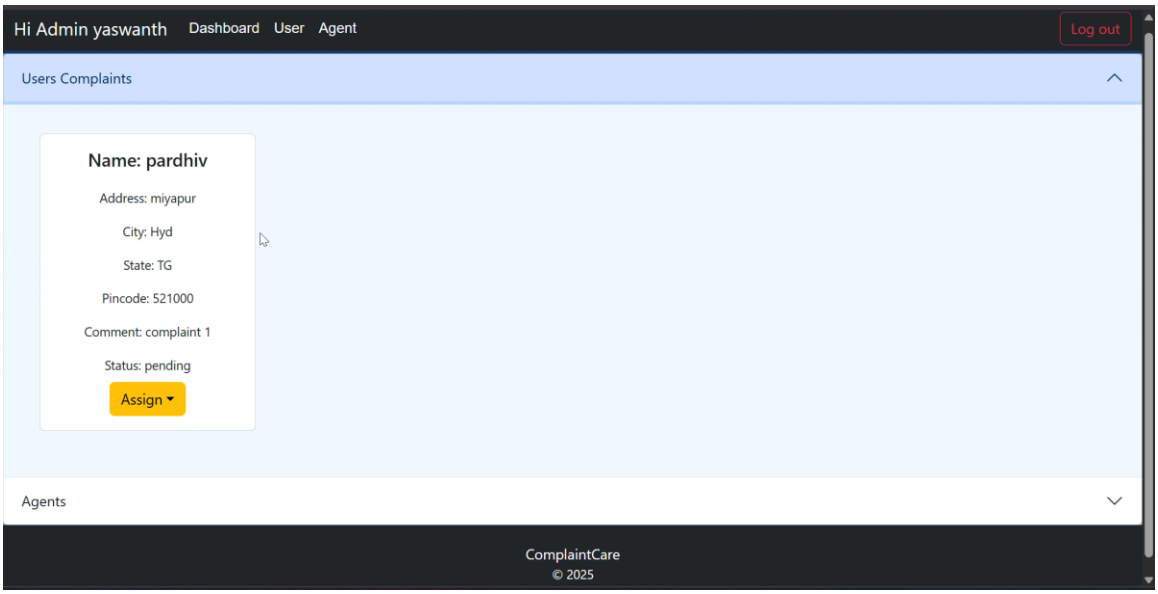
- Registration Page



- Complaint Dashboard



- Admin Dashboard



- Agent Dashboard

10. Conclusion

The Online Complaint Registration and Management System successfully achieves its goal of providing an efficient, secure, and transparent method for managing complaints. The platform's modular design and real-time communication features ensure enhanced user experience and better administrative control.

11. Demo

- Project Demo:

https://drive.google.com/file/d/1qxliruC8qnFJvE4cWPbSjztwBZUQzs1u/view?usp=sharing