PROJECT REPORT

Project Title:

ResolveNow: Your Platform for Online Complaints

Team Members:

1.Gude Gopi Krishna

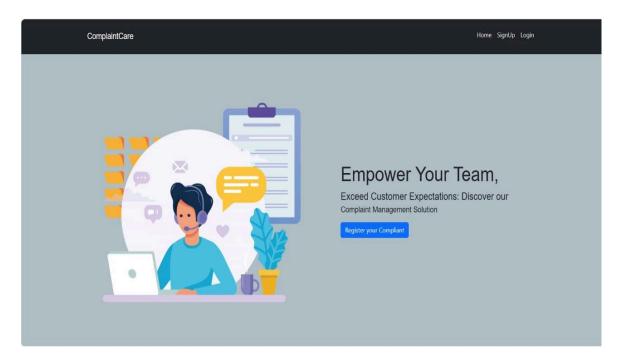
2.Godi Renuka

3.Gokarla Dharani

4.Jetti Sathish

Introduction

An Online Complaint Registration and Management System is a digital platform designed to simplify the process of submitting, managing, and resolving complaints. It allows users to report issues, track their status, and communicate with support personnel in real time, enhancing accountability, transparency, and user satisfaction.



Project Overview

I. Purpose

The system aims to provide an efficient, user-friendly complaint registration platform that improves complaint resolution by automating the process and allowing real-time tracking and communication.

II. Features

- User Registration & Login
- Complaint Submission with Attachments
- Status Tracking & Notifications
- Live Chat with Assigned Agent
- Admin Complaint Assignment
- Secure Data Handling and Encryption

Architecture

Frontend

- Built using React.js
- Libraries used: Bootstrap, Material UI, Axios for API calls

Backend

- Built using Node.js and Express.js
- Includes RESTful APIs for data communication

Database

- MongoDB for storing user, complaint, and chat data
- Schemas: User, Complaint, AssignedComplaint, Message

Requirement Analysis

Customer Journey Map

1. Register/Login \rightarrow Submit Complaint \rightarrow Track Progress \rightarrow Chat with Agent \rightarrow Get Resolution

Solution Requirement

- Real-time communication
- Role-based access (User/Agent/Admin)
- Notification system

Data Flow Diagram

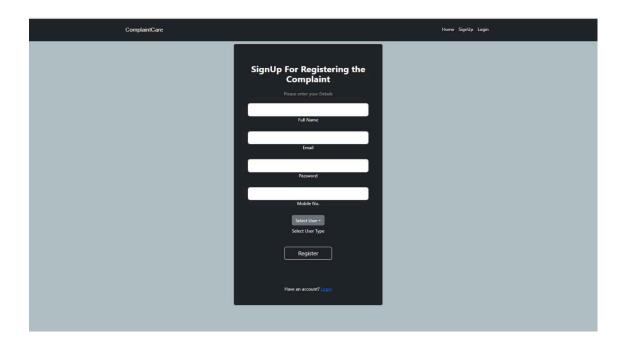
 $User \to Complaint \ Submission \to Server \ API \to Database \to Agent/Admin \ Assignment \to Updates \to User$

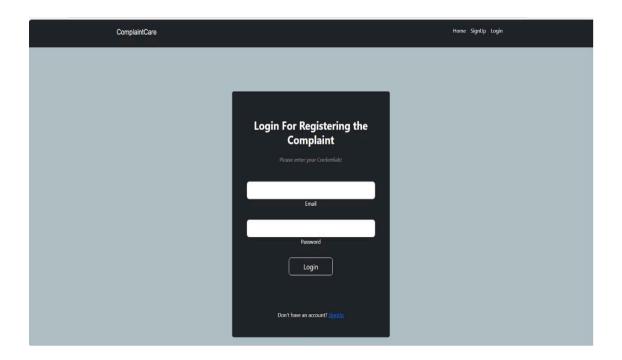
Technology Stack

- Frontend: React.js, Bootstrap, Material UI
- Backend: Node.js, Express.js

• Database: MongoDB

• Others: Socket.io, WebRTC API





Project Design

Problem-Solution Fit

Manual complaint resolution systems are slow and lack transparency. Our system offers a centralized and interactive approach to improve efficiency.

Proposed Solution

A full-stack web application where users can file complaints, track their status, and communicate with assigned agents.

Technical Architecture

Solution Architecture

A client-server model with RESTful APIs connecting the frontend and backend.

Frontend (Client)

- React.js with responsive UI
- Axios for HTTP requests

Backend (Server)

- Express.js handles routing and logic
- MongoDB for persistent storage

Prerequisites

- Node.js & npm
- MongoDB
- React.js CLI
- Git
- Code Editor (VS Code)
- Basic knowledge of HTML, CSS, JavaScript

Installation and Setup

Clone the Repository git clone https://github.com/awdhesh-student/complaint-registery.git cd complaint-registery

Frontend Setup cd frontend npm install npm start

Backend Setup cd ../backend npm install npm start

Advantages and Disadvantages

Advantages:

- Real-time status tracking
- Role-based interfaces
- Easy-to-use UI
- Secure data storage
- Centralized system

Disadvantages:

- Requires internet connectivity
- Initial setup complexity
- Dependence on backend server availability

Conclusion

This project successfully delivers a comprehensive solution for complaint registration and management. It streamlines the process, enhances user satisfaction, and ensures efficient communication and resolution.

Future Scope

- Integrate mobile app version
- Add AI-based complaint routing
- Advanced analytics for admin
- Multi-language support
- Feedback analytics

Appendix

- GitHub Repo: complaint-registery
- Demo: Google Drive Demo Video
- Project Folder Setup Images
- ER Diagram & DFD Snapshots
- Libraries/Dependencies Used (package.json)