Resolve Now: Your Platform for Online Complaints

1. INTRODUCTION

1.1 Project Overview:

Resolve Now is an online complaint registration and management system that allows users to easily submit, track, and resolve complaints. It provides a user-friendly platform where complaints are securely recorded, automatically assigned to agents, and updated in real-time. With features like chat support, status notifications, and admin controls, the system ensures a smooth and transparent complaint handling process.

1.2 Purpose:

The purpose of Resolve Now is to simplify the complaint registration process by providing a centralized online platform. It aims to ensure quick, transparent, and efficient resolution of user complaints through real-time tracking and secure communication.

2. IDEATION PHASE

2.1 Problem Statement:

I am a user trying to register a complaint, but the process takes too long because the website is not responsive and lacks a mobile version, which makes me feel frustrated.

2.2 Empathy Map Canvas:

- User Thinks & Feels:
 - -> Wants to register a complaint online
 - -> Feels it could be frustrating if the process is too long
- User Says:
 - -> Which apps can I use?
- User Does:
 - -> Browses phone for complaint apps

2.3 Brainstorming:

- Conducted team sessions on 24 June 2025.
- Listed multiple solutions for complaint management.
- Prioritized based on feasibility, impact, and novelty.
- Finalized "Resolve Now" as the best-fit solution idea for development.

3. REQUIREMENT ANALYSIS:

3.1 Customer Journey map:

3.2 Solution Requirement:

- Functional Requirements:
 - -> User Authentication
 - -> Complaint Posting & Management
 - -> Real-time Messaging
 - -> Agent & Admin functionalities
- Non-functional Requirements:
 - -> Usability, Security, Performance, Availability, Scalability.

3.3 Data Flow Diagram:

- DFD illustrates data movement between users, agents, and admins within the system.
- Key interactions: Complaint submission, query handling, message exchange, moderation.



3.4 Technology Stack:

The Resolve Now platform is designed with a scalable 3-tier architecture that includes the presentation layer (frontend), business logic (backend), and data storage layer. The solution ensures performance, security, and ease of integration with third-party APIs (e.g., Stripe for

payments).

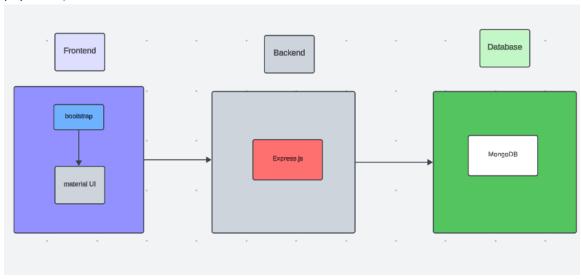


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Web-based interface for clients and freelancers	HTML, CSS, JavaScript / React JS etc.
2.	Application Logic-1	Complaints posting	Node.js, Express.js
3.	Application Logic-2	Admin panel	React JS, Node.js
4.	User Interface	Web-based Interface for clients	HTML, CSS, JavaScript, React JS etc,
5.	Database	Stores user data, jobs, applications, messages	MongoDB

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Frontend frameworks	React.js, Node.js, Bootstrap, Tailwind CSS
2.	Scalable Architecture	3-tier architecture with RESTful	Microservices

APIs	

4. PROJECT DESIGN:

4.1 Problem Solution Fit:

Resolve Now directly addresses the inefficiencies in complaint management by centralizing processes and introducing real-time tracking and messaging.

4.2 Proposed Solution:

- Online platform for complaint submission with tracking ID.
- Role-based dashboards.
- Real-time updates and escalation.
- Performance analytics and categorization system.

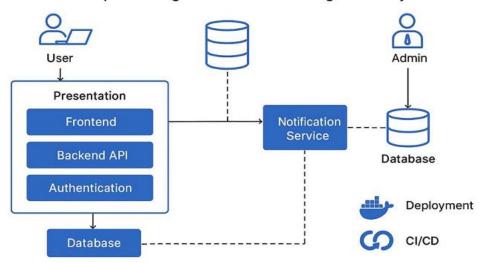
4.3 Solution Architecture:

- Frontend: Developed using React.js for responsive UI.
- Backend: Node.js with Express.js for APIs and logic handling.
- **Database:** MongoDB for storing complaints, user data, and chat history.

Example:

Solution Architecture

Onine Complaint Registration and Management System



5. PROJECT PLANNING & SCHEDULING

5.1 Project Planning:

Product Backlog, Sprint Schedule, and Estimation (4 Marks)

Use the below template to create product backlog and sprint schedule

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Registration	USN-1	As a user, I can register for the application by entering my email, name, password, Phone number.	2	High	
Sprint-1		USN-2	As a user, I can reset my password	2	Medium	
Sprint-2	Crime posting	USN-3	As a user, I can register a complaint	2	Low	
Sprint-1	Application	USN-4	As an Agent, I can take care of queries	2	Medium	
Sprint-1	Login	USN-5	As a user, I can log into the application by entering	1	High	

		email & password			
Dashboard	USN-6	As a user, I can see the status for the registered complaints	2	Medium	
	USN-7	As a User, I can leave a review after project completion	2	Medium	

Project Tracker, Velocity & Burndown Chart: (4 Marks)

Sprint	Total Story Points	Durati on	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	20	6 Days	19 June 2025	20 June 2025	20	20 June 2025
Sprint-2	20	6 Days	21 June 2025	22 June 2025	20	22 June 2025
Sprint-3	20	6 Days	23 June 2025	24 June 2025	20	24 June 2025
Sprint-4	20	6 Days	25 June 2025	26 June 2025	20	26 June 2025

- Sprint Summary:
 - -> Sprint-1: Registration, Password Reset, Agent Queries
 - -> Sprint-2: Complaint Submission
 - -> Sprint-3 & 4: Dashboard, Review System
- All sprints were completed on time with full story point delivery.

6. FUNCTIONAL AND PERFORMANCE TESTING:

6.1 Performance Testing:

- Testing Scope:
 - User Registration and Login
 - Complaint Submission and Attachment Upload
 - Real-Time Complaint Tracking and Notifications
 - Agent and User Interaction Chat
 - Complaint Assignment and Routing
 - Admin Dashboard
 - Data Security and Confidentiality
- Requirements to be Tested:

- As a user, I want to register and login in securely
- As a user, I want to submit a complaint with supporting details
- As an user, I want to track the status and get notified
- As an agent, I want to interact with users and update complaint status
- As an admin, I want to assign complaints and monitor platform performance

• Testing Environment:

URL/Location: http://localhost:3000

Credentials (if required):

User- srivarshinigeddada3@mail.com: 12345678

Admin- admin1v@mail.com: 12345678 Agent-agent1v@mail.com: 12345678

Test Cases:

Test Case	Test Scenario	Test Steps	Expected Result	Actual Result	Pass/Fail
TC-001	User Registration	Navigate to sign up Enter details Submit the form as ordinary	Registered successfully	Record submitted	Pass
TC-002	Admin Registration	Navigate to sign up Enter details Submit the form as admin	Registered successfully	Record submitted	Pass

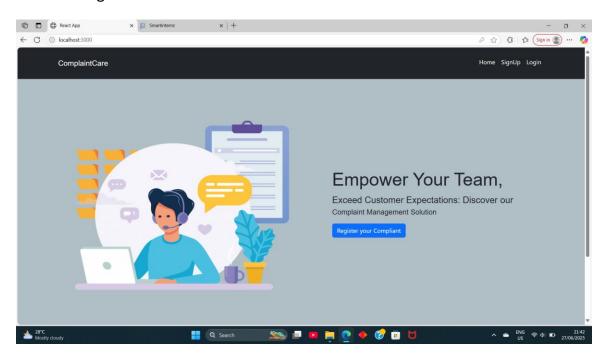
Bug Tracking:

Bug ID	Bug Description	Steps to reproduce	Severity	Status	Additional feedback
BG-001	Notification not received on update	Submit complaint Wait update	Medium	Open]	May need to check mail system

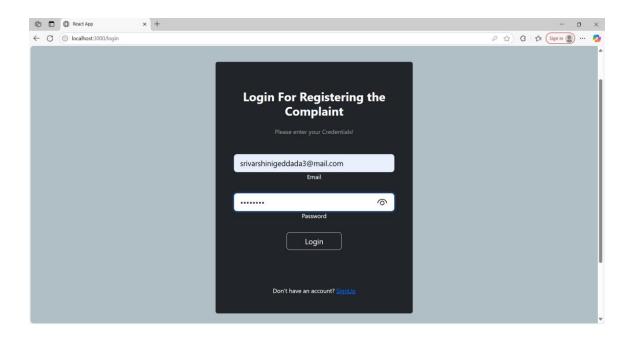
7. RESULTS

7.1 Output Screenshots:

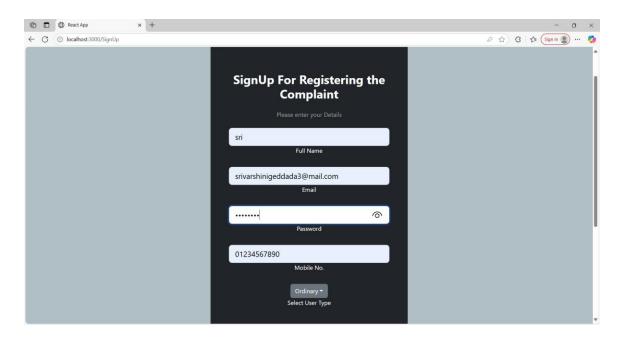
1. Home Page



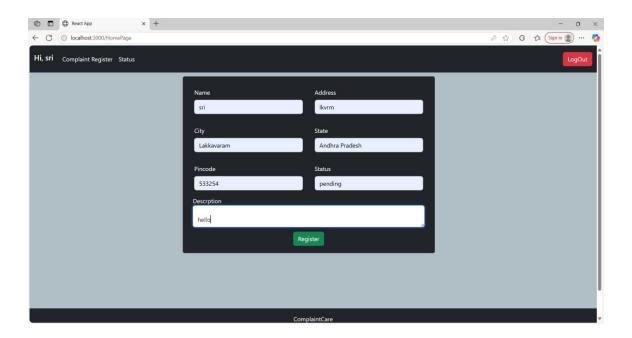
2. Login Page



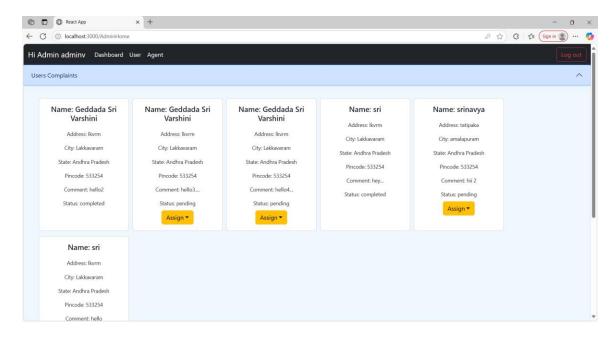
3. User Register Page



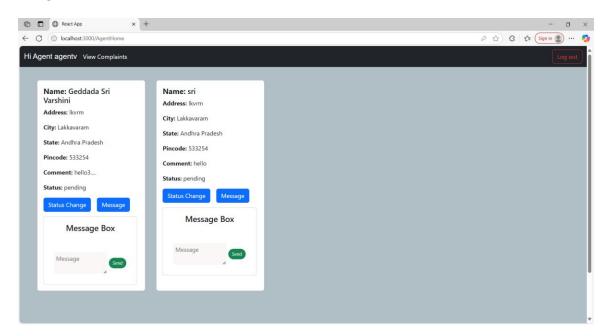
4. Register Complaint



5. Admin Dashboard



6. Agent Dashboard



8. ADVANTAGES & DISADVANTAGES

Advantages:

- Real-time tracking & notifications
- Intelligent complaint routing
- Secure and compliant
- User-agent real-time interaction

Disadvantages:

- Learning curve for non-tech users
- Internet dependency
- Scalability issues without infrastructure
- Potential data security risks
- Agent availability challenges

9. CONCLUSION

Resolve Now provides a comprehensive, secure, and user-centric solution for managing complaints. While minor challenges exist, they can be addressed through infrastructure improvements and user training. The platform empowers both users and organizations to handle grievances efficiently and transparently.

10. FUTURE SCOPE

• AI-Powered Complaint Analysis:

Integrate AI and machine learning to analyze complaint patterns, predict common issues, and recommend solutions automatically.

• Multi-Language Support:

Expand accessibility by supporting regional and international languages, making the platform user-friendly for a broader audience.

Mobile App Integration:

Develop Android and iOS apps to provide users with on-the-go access to complaint registration and tracking.

• Analytics Dashboard for Admins:

Implement advanced dashboards for data visualization, complaint trends, agent performance, and resolution rates.

• Third-Party API Integration:

Enable integration with government, corporate, or consumer protection databases for automatic escalation and validation.

11. APPENDIX

GitHub Link: https://github.com/varshini22885/Your-Platform-for-Online-Complaints.git **Project Demo Link:**

https://drive.google.com/file/d/1sYFgYx5FWyvRVqjwKXv5UU NZp5jhAql/view?usp=sharing