ResolveNow - SmartInternz

ResolveNow Online Complaint Management System

"Empowering users to register and resolve complaints seamlessly"

Project Title: ResolveNow – Your Platform for Online Complaints

Category: Full Stack Development with MERN

Team ID: LTVIP2025TMID56856

Team Size: 4

Team Members:

- Bola Hari Kethan
- Battula Dwarakamai
- Boddukuru Lokesh
- Kota Bhargavi

Prepared by: Bola Hari Kethan

Full Stack Developer

Submitted to:

SmartInternz | AICTE | RISE Krishna Sai Prakasam Group Of Institutions







Project Overview

Purpose:

ResolveNow is an online complaint registration and management system that simplifies the complaint handling process for users, agents, and admins. It aims to empower organizations to handle customer complaints efficiently, ensuring transparency and quick resolution.

Features:

- User registration and secure login
- · Complaint submission with detailed fields
- Track complaint status and updates
- Chat window to communicate with assigned agent
- Admin dashboard to monitor and assign complaints
- Agent dashboard to manage assigned complaints
- Real-time notifications
- Security and confidentiality with authentication and access controls

Architecture

Frontend:

- Built with React.js
- Uses HTML, CSS, JavaScript, Bootstrap, and Material UI
- · Axios for API communication
- React Router for routing
- Organized reusable components and pages
- Real-time UI updates

Backend:

Node.js + Express.js server

- RESTful APIs for CRUD operations
- Authentication and middleware
- Routes: user, agent, admin, complaints

Database:

- MongoDB (NoSQL)
- Collections: user_Schema, complaint_schema, assigned_complaint, message
- Mongoose ODM for schema definitions and interactions
- Secure storage and efficient queries

Additional:

- Chat system uses complaintld and userld references
- Real-time updates and status changes handled via API

Setup Instructions

Prerequisites:

- Node.js (v18+)
- MongoDB (local or Atlas)
- Git

Installation:

- 1. Download the project from Google Drive: Click Here --- Drive Link
- 2. Extract the ZIP file (if zipped) and navigate into the folder.
- 3. Install frontend dependencies:

cd frontend npm install

4. Install backend dependencies:

cd ../backend npm install

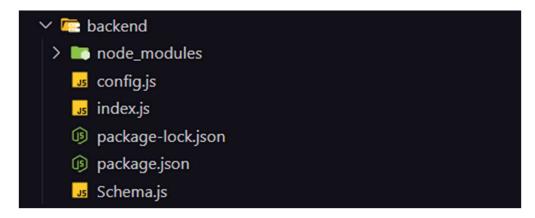
Create a .env file inside /backend:
 MONGO_URI=your_mongodb_connection_string
 JWT_SECRET=your_secret_key

Folder Structure

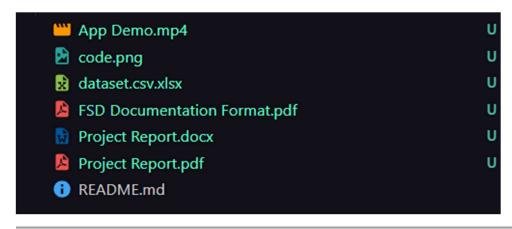
Frontend (React):



Backend (Node.js):



Other:



Running the Application

Frontend:

```
E:\PROJECT\SmartBridge Online Complaints>cd frontend
E:\PROJECT\SmartBridge Online Complaints\frontend>npm start
> task1@0.1.0 start
> react-scripts start
Browserslist: caniuse-lite is outdated. Please run:
  npx update-browserslist-db@latest
Why you should do it regularly: https://github.com/browserslist/update-db#readme
(node:16628) [DEP_WEBPACK_DEV_SERVER_ON_AFTER_SETUP_MIDDLEWARE] DeprecationWarning: 'onAfterSetupMiddleware' option is deprecated. Please use
he 'setupMiddlewares' option.
(Use `node --trace-deprecation ...` to show where the warning was created)
(node:16628) [DEP_WEBPACK_DEV_SERVER_ON_BEFORE_SETUP_MIDDLEWARE] DeprecationWarning: 'onBeforeSetupMiddleware' option is deprecated. Please us
 the 'setupMiddlewares' option.
Compiled successfully!
You can now view task1 in the browser.
                     http://localhost:3000
  On Your Network: http://192.168.109.144:3000
Note that the development build is not optimized.
To create a production build, use npm run build.
webpack compiled successfully
```

Backend:

```
E:\PROJECT\SmartBridge Online Complaints>cd backend

E:\PROJECT\SmartBridge Online Complaints\backend>npm start

> backend@1.0.0 start

> nodemon index.js

[nodemon] 2.0.22
[nodemon] to restart at any time, enter `rs`
[nodemon] watching path(s): *.*

[nodemon] watching extensions: js,mjs,json
[nodemon] starting `node index.js`
server started at 8000

Connected to MongoDB: OnlineComplaint
```

Open browser: http://localhost:3000

API Documentation (Example)

Register a new user

```
Body:
{
    "name": "Bola Hari Kethan",
    "email": "ketan@gmail.com",
    "password": "mysecurepass"
}

POST /api/login
```

Login user

```
Body:
{
    "email": "ketan@gmail.com",
    "password": "mysecurepass"
}
```

POST /api/complaints

• Submit new complaint

```
Body:
{

"userId": "123",

"description": "Street light not working in Gaddalagunta Palem",

"address": "2-1-38, Water Tank degara, Gaddalagunta Palem, Ongole",

"status": "pending"
}
```

GET /api/complaints/123

• Get complaints submitted by user Bola Hari Kethan

PUT /api/complaints/456

Update status of complaint (e.g., mark as resolved)

```
Body:
{
    "status": "resolved"
}
```

(* Full detailed list available in final version *)

Authentication

- JWT-based authentication
- Passwords hashed using bcrypt
- Role-based access: User, Agent, Admin
- Auth middleware to protect routes
- Secure token storage

User Interface

- Landing page with login/register options
- Dashboard to submit complaints and track status
- Admin dashboard to assign/manage complaints
- Agent dashboard to update and resolve complaints
- Built-in chat window to communicate with agent
- Responsive design with Bootstrap and Material UI

Testing

- Manual testing of flows
- API testing with Postman

- Validation of database operations with MongoDB Compass
- (Optional) Plan to add Jest for unit testing

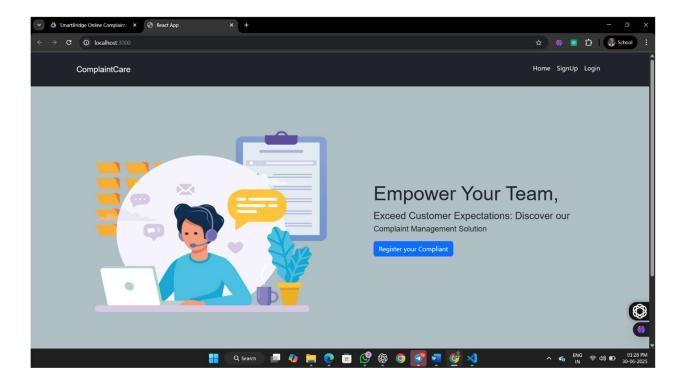
Screenshots or Demo

Project demo video:

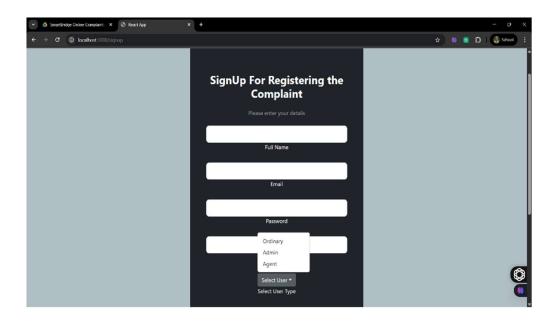
https://drive.google.com/file/d/1RRF34M8DiE24LamnBjGNdvaJyxojTlgx/view?usp =sharing

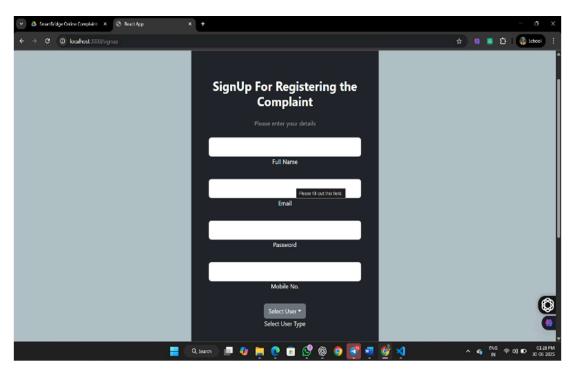
OUTPUT SCREENSHOTS

• Home Page

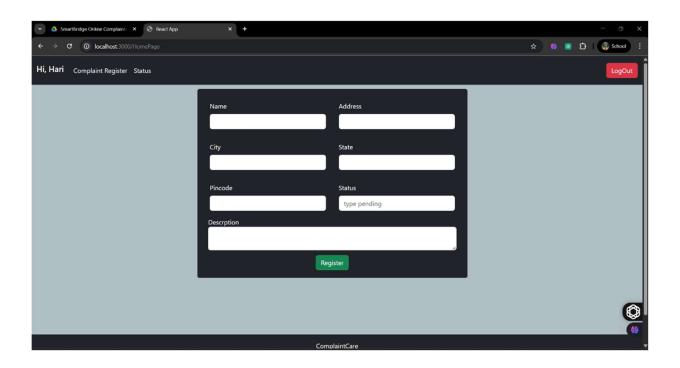


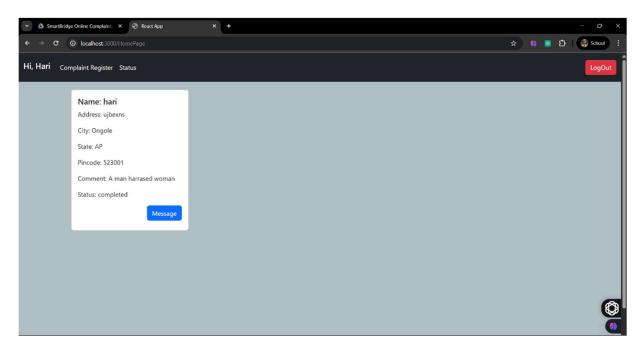
• Registration For OnlineComplaint



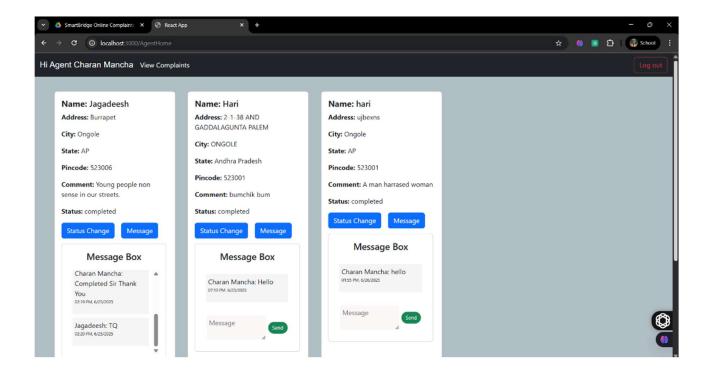


• User Login: To raise a Complaint

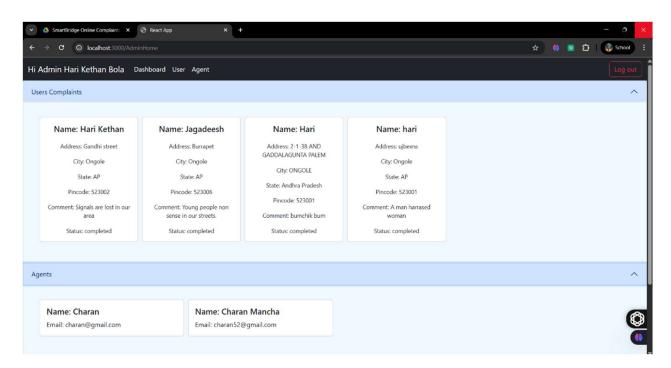




Agent Login



• Admin Login



Known Issues

- No email/SMS notifications yet
- Basic validation on some forms
- · Password reset feature missing

Future Enhancements

- Add real-time notifications via socket.io
- Email/SMS alerts on status change
- Analytics dashboard for admin
- Mobile app version using React Native
- Improve chat experience with file attachments

Technical Details

- Frontend: React.js, Bootstrap, Material UI, Axios
- Backend: Node.js, Express.js, REST API
- Database: MongoDB, Mongoose
- Version control: Git & GitHub
- Deployment ready for cloud (Heroku / Vercel)

Reference Links

- **Project Drive link**: https://drive.google.com/drive/folders/1kP6ZsEKbWHyV73YR7WpO4gnO-yfyy_sL?usp=drive_link
- Source code GitHub: https://github.com/HariKethanBola/RESOLVENOW

END