

# NAAN MUDHALVAN MERN STACK POWERED BY MONGODB

# PROJECT NAME: ONLINE COMPLAINT REGISTRATION AND MANAGEMENT SYSTEM

# **TEAM MEMBERS:**

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# **Key Features of the Online Complaint Registration and Management System**

The system requires all users to create an account to register and track complaints. The sign-up process involves providing essential details such as name, email address, and password. Existing users can log in to their accounts using their credentials.

# 1. Registration and Login

# 1.1. Customer/Ordinary User:

**Role:** Create and manage complaints, interact with agents, and update profile information.

# • Steps:

- 1. Registration and Login: Create an account and log in.
- 2. Complaint Submission: Fill out and submit a complaint form with relevant details and attachments.
- 3. Status Tracking: View complaint status and receive updates.
- 4. Interaction with Agents: Chat with agents for further clarifications.
- 5. Profile Management: Update personal details and addresses.

## **1.2. Agent:**

**Role:** Handle complaints assigned by the admin and communicate with customers.

#### • Steps:

- 1. Registration and Login: Create an account and log in.
- 2. Complaint Management: View and manage assigned complaints.
- 3. Status Update: Change complaint status and notify customers.
- 4. Customer Interaction: Respond to customer inquiries and provide resolutions.

#### **1.3. Admin:**

**Role:** Oversee system operations and manage users and complaints.

# • Steps:

- 1. Management and Monitoring: Monitor complaints and ensure compliance.
- 2. Complaint Assignment: Assign complaints to agents.
- 3. User and Agent Management: Manage accounts and enforce policies.
- 4. Continuous Improvement: Enhance platform functionality and address feedback.

# 2. Pre-Requisites

# **Technologies and Tools Used:**

# 1. Node.js and npm:

o JavaScript runtime for server-side scripting.

# 2. Express.js:

- Framework for building APIs and handling server-side logic.
- Installation: npm install express

# 3. MongoDB:

o NoSQL database for storing structured and unstructured data.

# 4. React.js:

o Library for building interactive user interfaces.

# 5. HTML, CSS, and JavaScript:

o For structuring, styling, and adding client-side interactivity.

# 6. Mongoose:

o ODM library to connect Node.js with MongoDB.

#### 7. **Git:**

o For Version Control

#### 8. IDE/Editor:

Visual Studio Code.

#### 9. UI Libraries:

o Material UI and Bootstrap for better design.

# 3. Application Setup

# **Steps to Set Up the Project Locally:**

# 1. Clone the Repository:

git clone https://github.com/awdhesh-student/complaint-registery.git

# 2. Install Dependencies:

- 3. cd complaint-registery
- 4. cd frontend
- 5. npm install
- 6. cd../backend

npm install

# 7. Start the Development Server:

npm start

o Access the application at <a href="http://localhost:3000">http://localhost:3000</a>.

## 4. Process Overview

## 1. Frontend Development:

- o Built using React.js to create dynamic user interfaces.
- o Libraries like Material UI and Bootstrap used for design consistency.

# 2. Backend Development:

- o Server-side logic implemented with Node.js and Express.js.
- o MongoDB connected using Mongoose for data handling.

## 3. Database:

o MongoDB used for storing user profiles, complaints, and admin data.

#### 4. Version Control:

o Git used for code management and collaboration.

# 5. Key Features

# 1. User-Friendly Interface:

- Simplified registration and login process.
- o Interactive dashboard for tracking complaints.

# 2. Real-Time Updates:

- o Email notifications for complaint progress.
- Live status tracking on the dashboard.

# 3. Efficient Complaint Handling:

- o Built-in chat feature for customer-agent communication.
- Quick status updates and resolutions.

# 4. Admin Oversight:

- Monitoring of complaints and user accounts.
- o Effective assignment of complaints to agents.

# 6. Testing and Deployment

# • Testing:

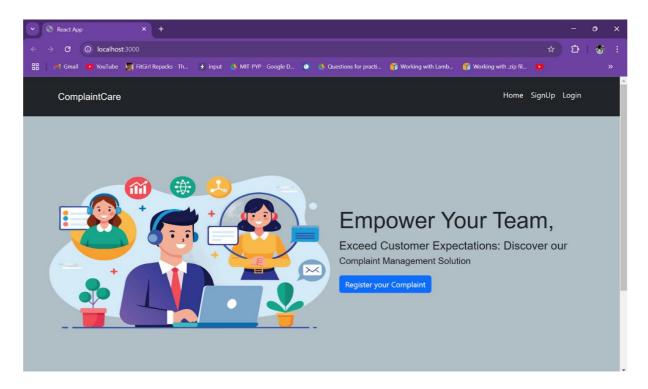
- Performed unit testing for backend APIs.
- o UI tested for responsiveness and functionality.

# • Deployment:

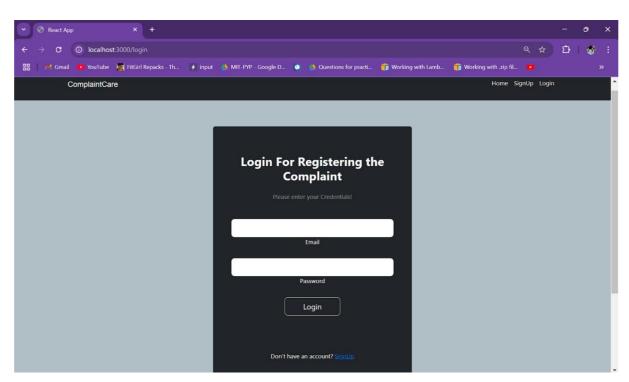
- o Application deployed on a local server for demonstration.
- o Further deployment options include AWS or Heroku.

# **Implementation:**

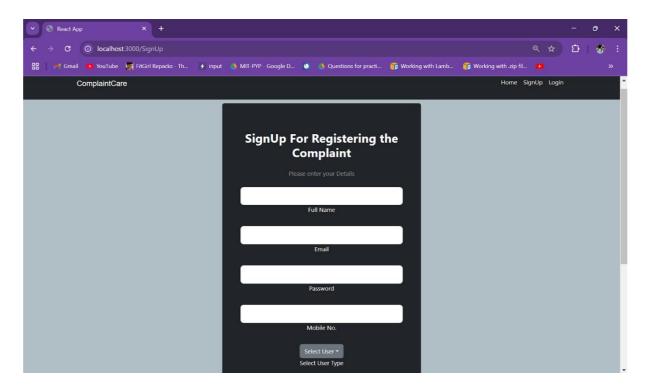
#### **HOME PAGE**



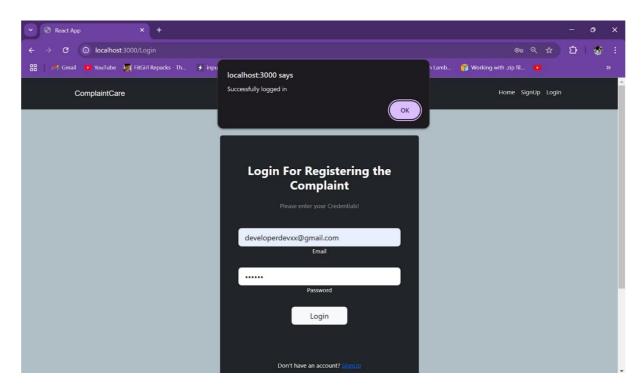
# **LOGIN PAGE**



#### **SIGNUP PAGE**

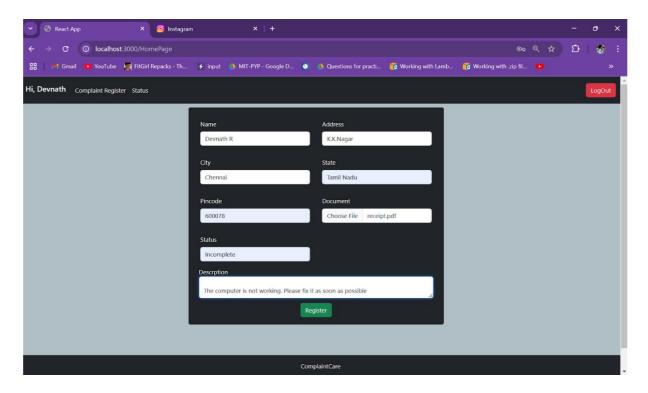


## ALERT MESSAGE AFTER SUCCESSFUL LOGIN

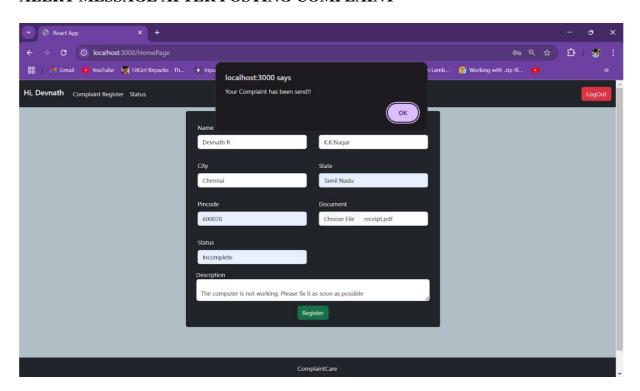


# **CUSTOMER:**

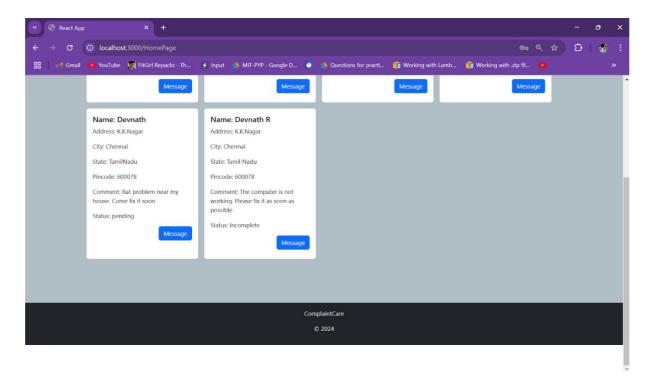
## **COMPLAINT REGISTRATION PAGE**



#### ALERT MESSAGE AFTER POSTING COMPLAINT

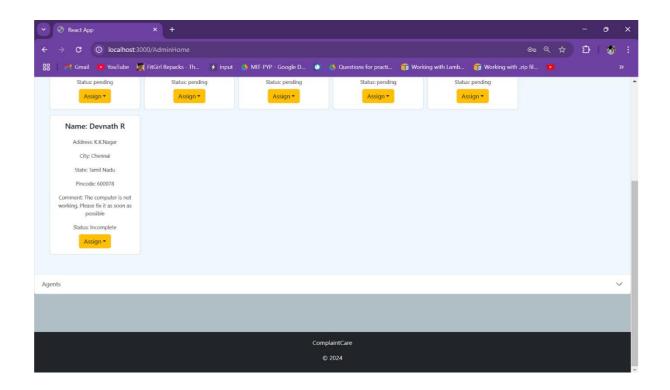


#### **COMPLAINT STATUS PAGE**

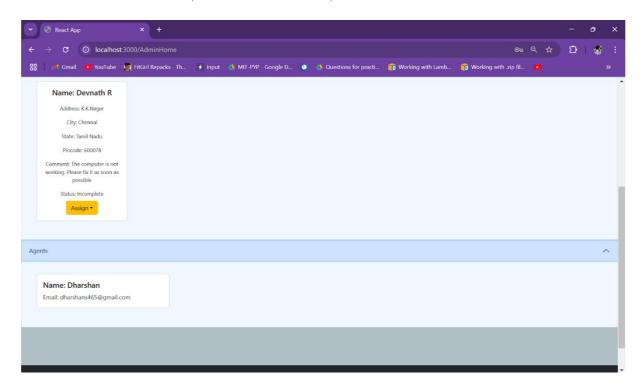


## **ADMIN:**

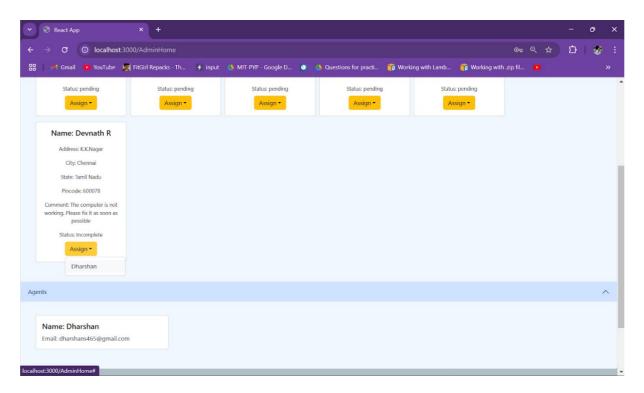
# ADMIN DASHBOARD (USER COMPLAINTS)



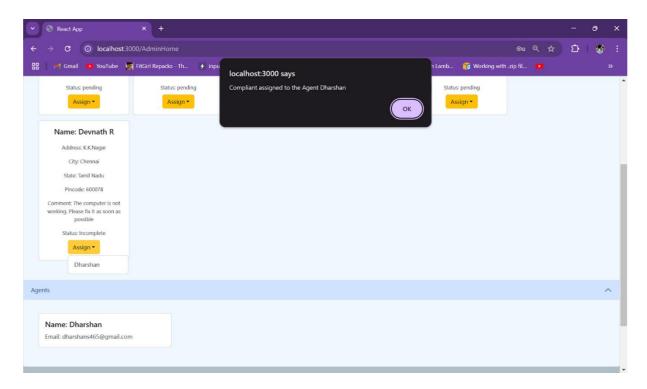
# ADMIN DASHBOARD (LIST OF AGENTS)



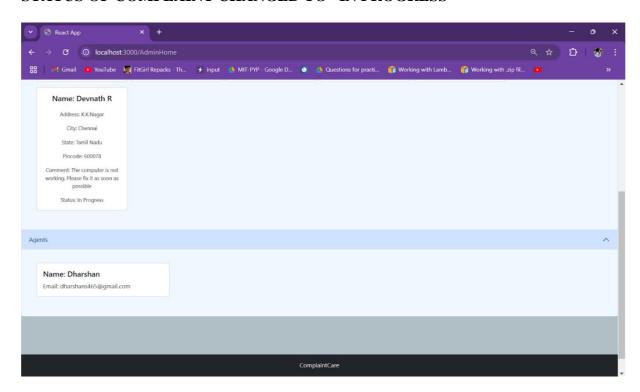
## MAPPING USER COMPLAINT TO AGENT



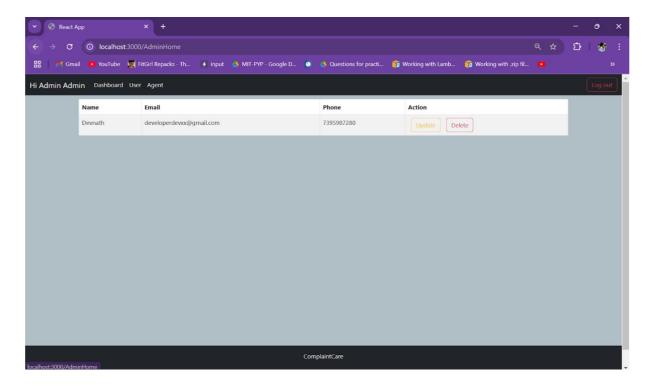
#### ALERT MESSAGE AFTER SUCCESSFUL MAPPING



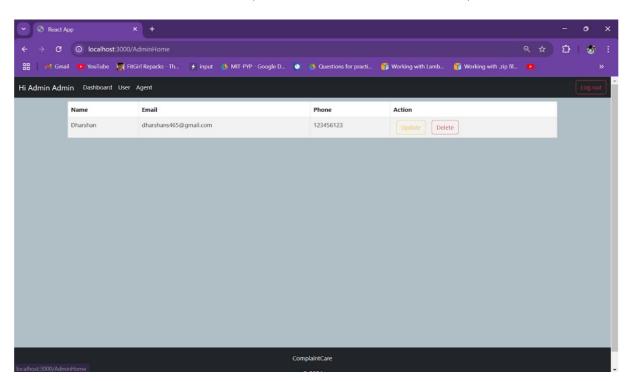
#### STATUS OF COMPLAINT CHANGED TO "IN PROGRESS"



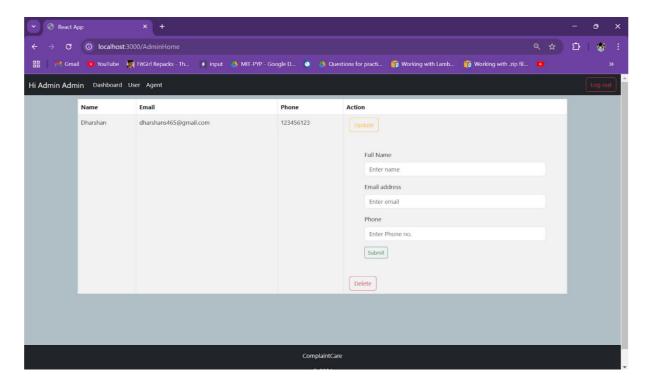
# **USER MANAGEMENT PAGE (UPDATION AND DELETION)**



# AGENT MANAGEMENT PAGE (UPDATION AND DELETION)

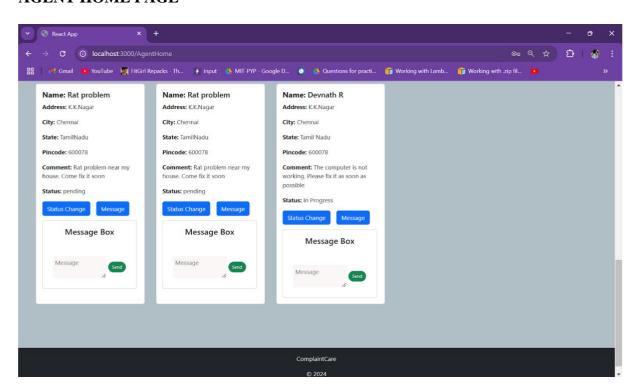


#### UPDATION OF AGENT DETAILS

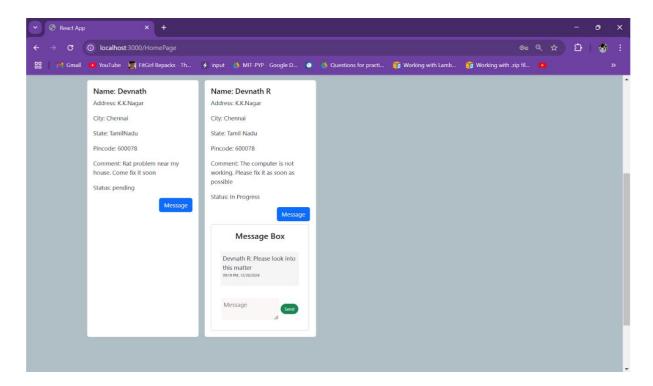


## **AGENT:**

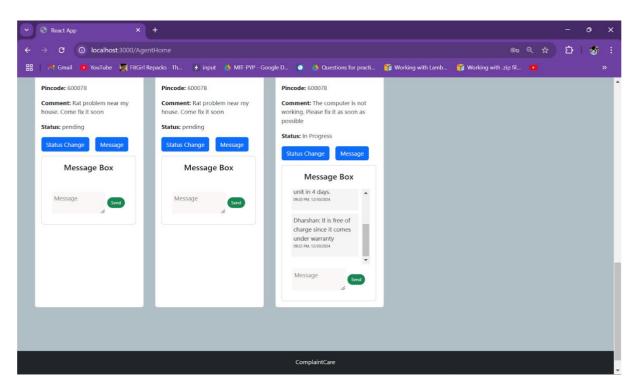
#### **AGENT HOME PAGE**



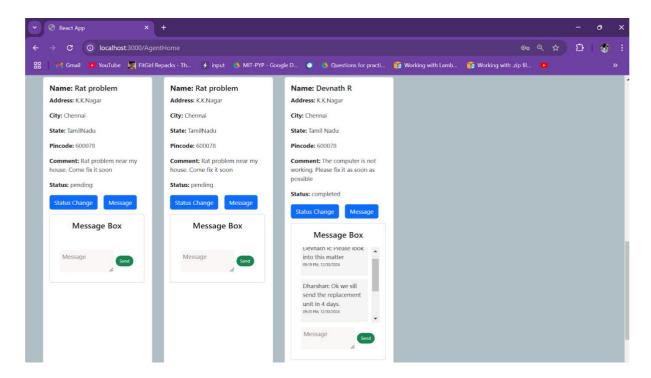
#### CHAT FUNCTION INSIDE ASSIGNED COMPLAINT



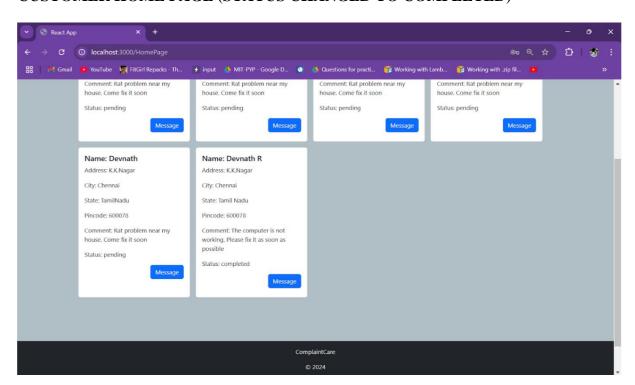
#### CHAT MESSAGE SENT TO CUSTOMER



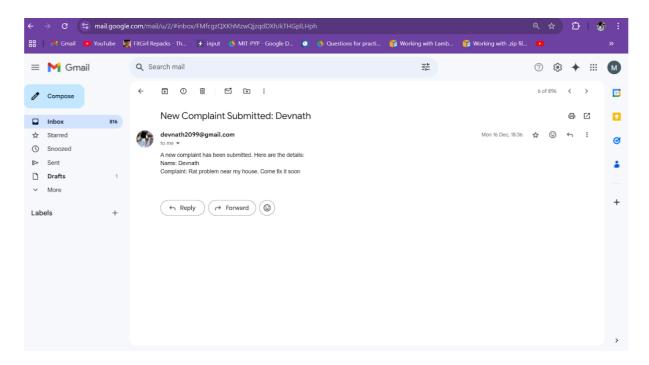
#### COMPLAINT STATUS CHANGED TO "COMPLETED"



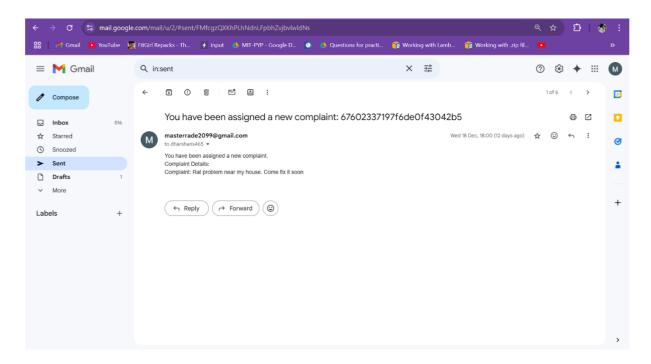
## **CUSTOMER HOME PAGE (STATUS CHANGED TO COMPLETED)**



#### MAIL SENT TO ADMIN AFTER COMPLAINT REGISTRATION



#### MAIL SENT FROM ADMIN TO AGENT AFTER MAPPING COMPLAINT



# **Conclusion:** The Online Complaint Registration and Management System offers a streamlined platform for resolving customer complaints efficiently. Its user-centric design and robust backend ensure reliable complaint management. Screenshots of the application are attached to illustrate its functionality and user interface.