1. Introduction

This manual provides a guide for end-users on how to set up and use the Complaint / Helpdesk Management System. It covers the steps to get the application running, how to use its core features, and discusses potential future enhancements.

2. Execution Steps

To run the application, you need to start both the backend and frontend servers.

2.1 Prerequisites

- Python 3.x
- Node.js and npm
- A cloned copy of the project repository.

2.2 Running the Backend Server

1. Open a terminal and navigate to the `backend` directory of the project.

```
cd path/to/Complaint / Helpdesk-management/backend
```

2. Activate the Python virtual environment.

```
source .venv/bin/activate
```

3. Start the Flask server.

```
flask run
```

4. The backend API will now be running at `http://127.0.0.1:5000`. Keep this terminal window open.

2.3 Running the Frontend Application

1. Open a **new** terminal window and navigate to the `frontend` directory.

```
cd path/to/Complaint / Helpdesk-management/frontend
```

2. Install the necessary Node.js packages (only required for the first time).

```
npm install
```

3. Start the frontend development server.

```
npm run dev
```

4. The application will be accessible in your web browser at `http://localhost:5173`.

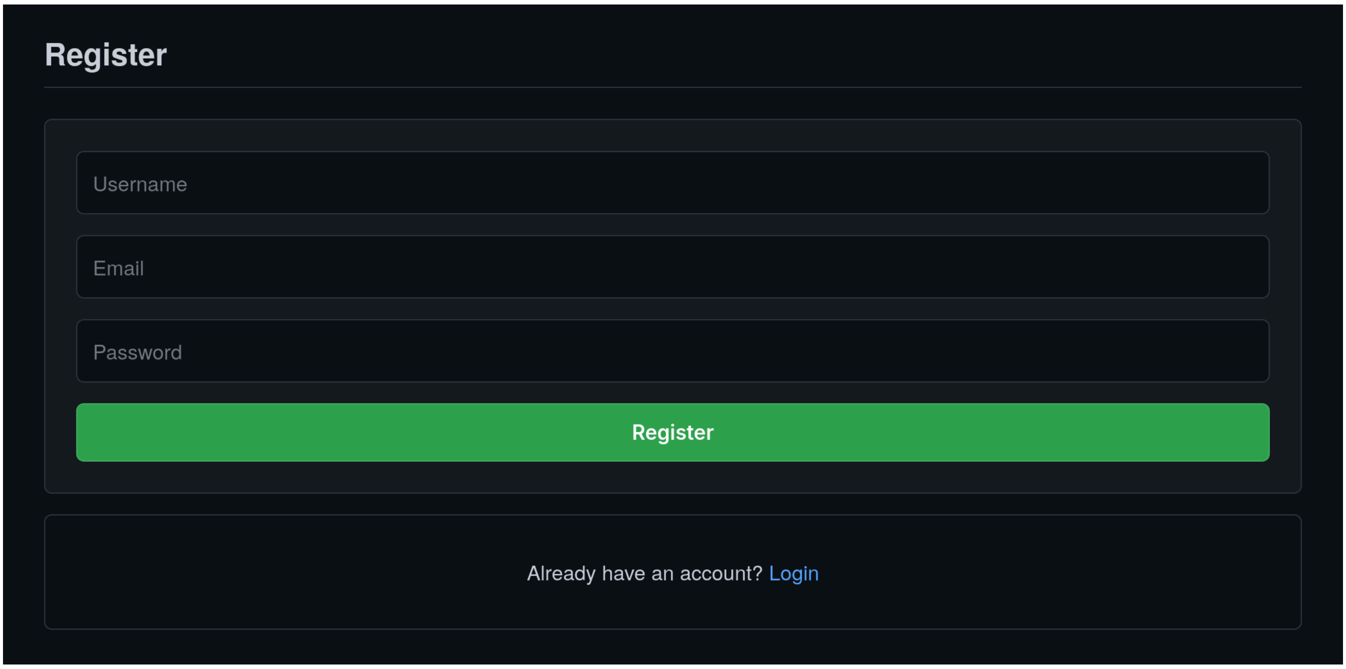
3. Using the Application: A Step-by-Step Guide

3.1 Registration

1. Navigate to the application URL (`http://localhost:5173`).

2. Click on the "Register" link in the navigation bar.
3. Fill in the registration form with your desired username, email, and password.
4. Click the "Register" button to create your account.

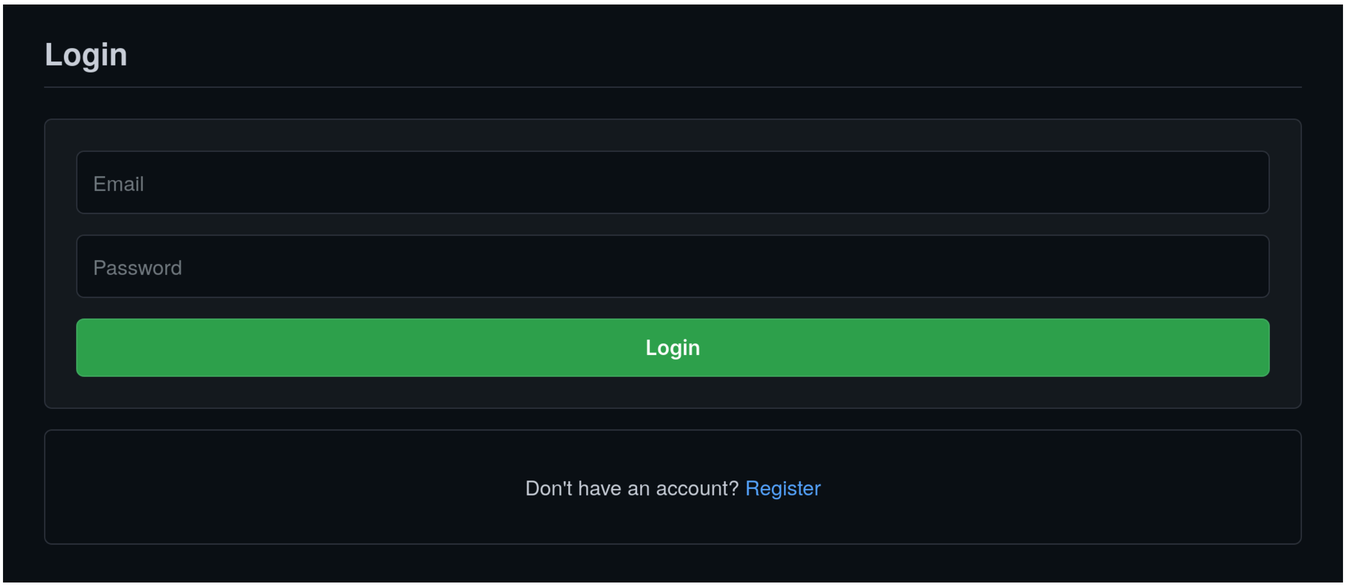
(Screenshot of the registration page)



3.2 Login

1. After registering, or if you already have an account, go to the "Login" page.
2. Enter your username and password.
3. Click the "Login" button to access your dashboard.

(Screenshot of the login page)

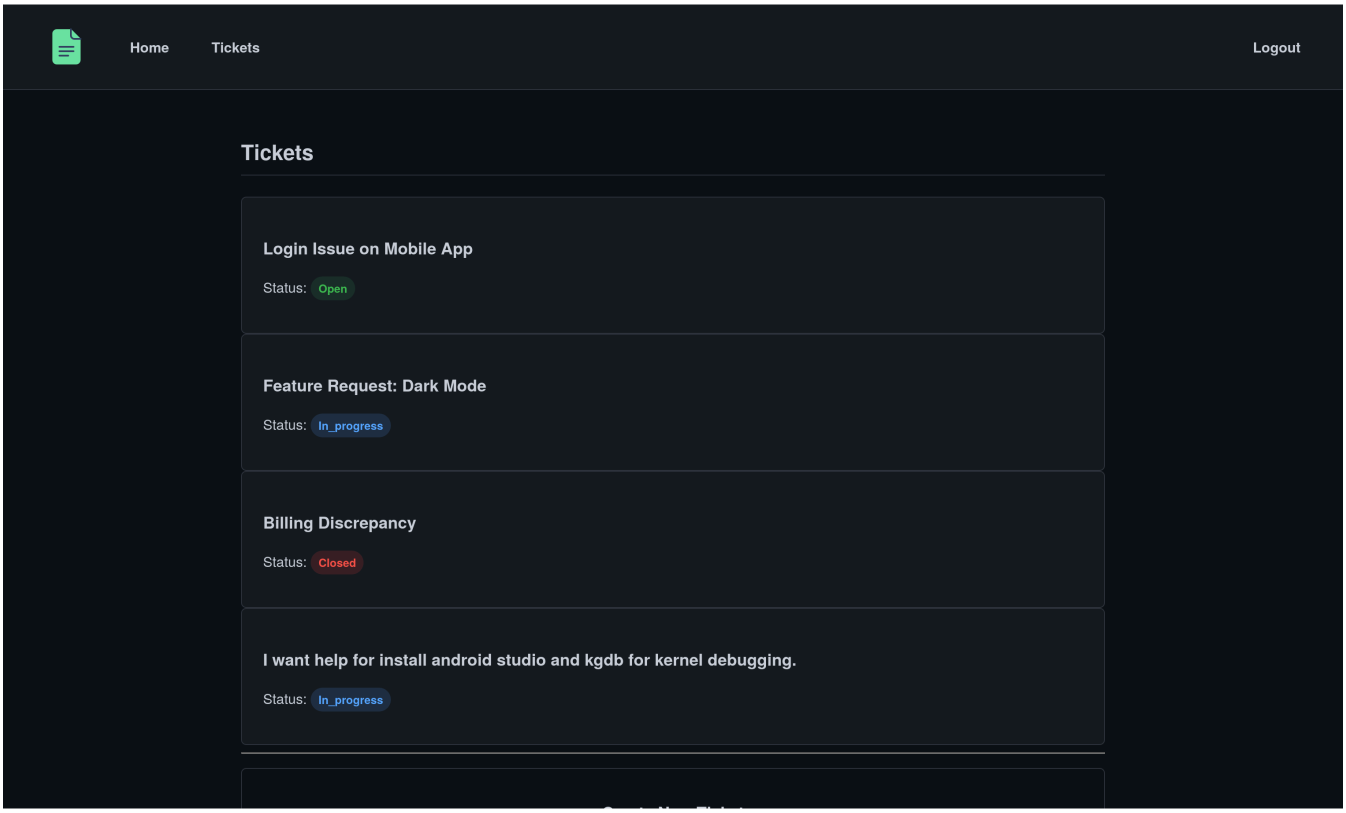


3.3 Viewing the Tickets Dashboard

1. Upon logging in, you will be redirected to the tickets dashboard.
2. This page displays a list of tickets.

- **Customers** will see a list of tickets they have created.
- **Agents and Admins** will see all tickets in the system.

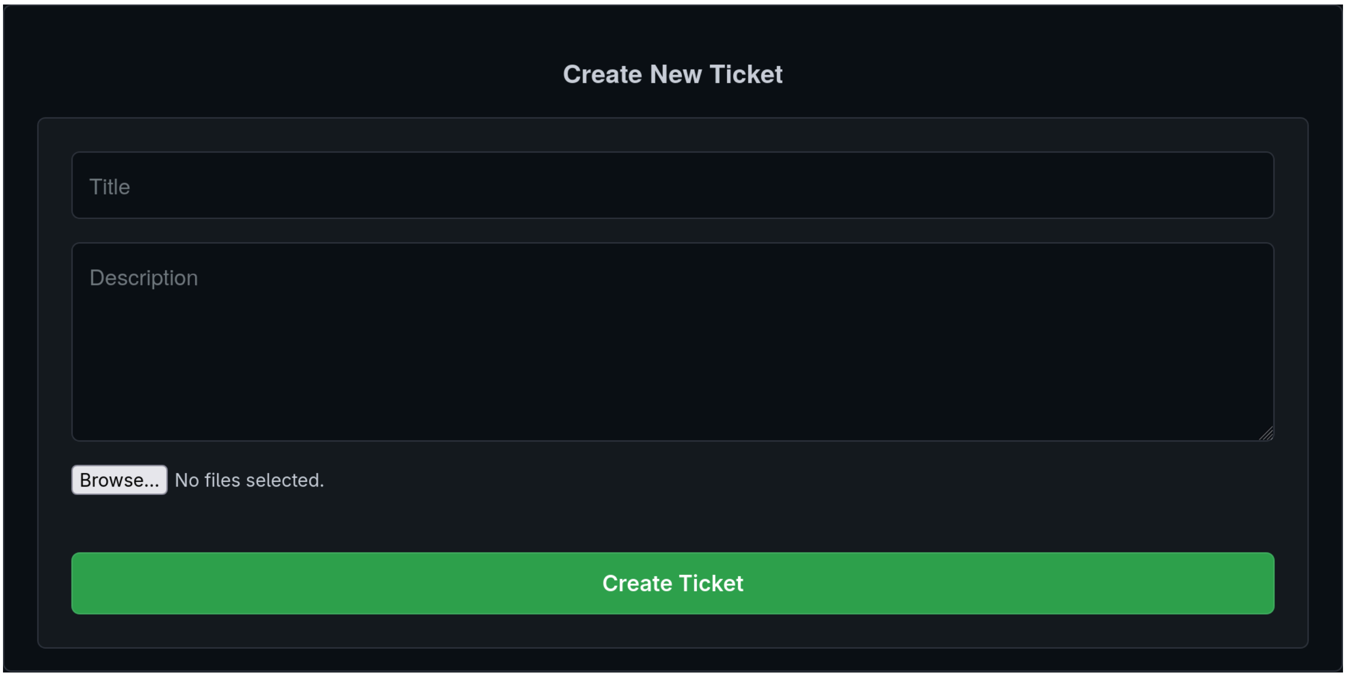
(Screenshot of the tickets dashboard)



3.4 Creating a New Ticket

1. From the dashboard, click on the "Create New Ticket" button.
2. You will be taken to a form where you can enter the ticket's title and a detailed description of the issue.
3. Click "Submit" to create the ticket. You will be redirected back to your dashboard where you can see the newly created ticket.

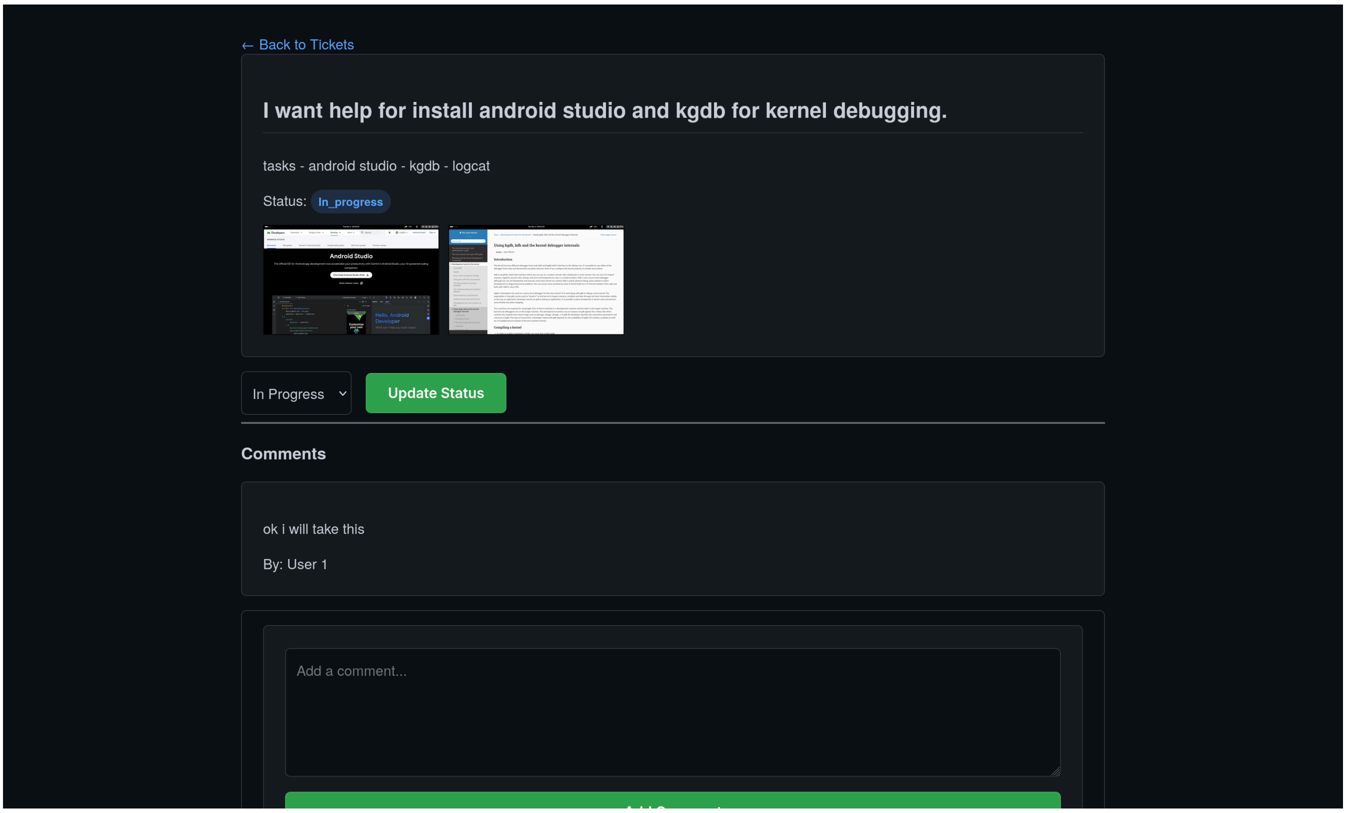
(Screenshot of the create ticket page)



3.5 Viewing a Ticket and Adding Comments

1. From the dashboard, click on the title of any ticket to view its details.
2. The ticket detail page shows the full description, status, and a history of comments
3. To add a new comment, type your message in the comment box at the bottom and click "Add Comment".

(Screenshot of the ticket detail view with comments)



4. Future Scope

The Complaint / Helpdesk Management System is a foundational application with significant potential for expansion. Future enhancements could include:

- **Enhanced User Roles and Permissions:** More granular permissions for different user roles (e.g., team leads, department managers).
- **Email Notifications:** Automatic email notifications to users when a ticket is created, updated, or commented on.
- **Ticket Assignment:** Functionality for admins or agents to assign specific tickets to individual agents.
- **Reporting and Analytics:** A dashboard for admins to view key metrics, such as ticket resolution times, agent performance, and common issue categories.
- **Full-Text Search:** A powerful search functionality to quickly find tickets based on keywords.
- **Knowledge Base Integration:** A section where users can find answers to frequently asked questions, potentially reducing the number of new tickets.