SUPPORT TICKET ASSIGNMENT - ASSIGN USERS BASED ON HISTORICAL PATTERNS ALONG WITH SOP RULES.

A Spring Boot-based web application for managing, tracking, and resolving support tickets with role-based access for Customers, Agents, and Admins.

Overview

Support Ticket Assignment is a web application designed to streamline support ticket management. It allows:

- **Customers** to submit and track tickets
- **Agents** to resolve tickets based on their expertise
- **Admins** to manage users and oversee ticket activity

The application features a modern, responsive UI with role-based authentication and authorization.

Features

- **User Registration and Login**
  Users can register as:
  - **Customer**
  - **Agent** (must specify their expertise like login, payment, etc.)
  - **Admin**
- **Role-Based Access:**
  - **Customers:** Create and view their tickets.
  - **Agents:** View and resolve tickets matching their expertise.
  - **Admins:** Manage users and oversee all tickets.
- **Ticket Management:**
  Create, assign, update, and resolve support tickets through the web interface.

Technologies Used

- **Backend:** Spring Boot, Spring Security, Spring Data JPA
- **Frontend:** Thymeleaf, HTML, CSS
- **Database:** H2 (in-memory) or MySQL
- **Build Tool:** Maven
- **Java Version:** 17 or later

Access the Application

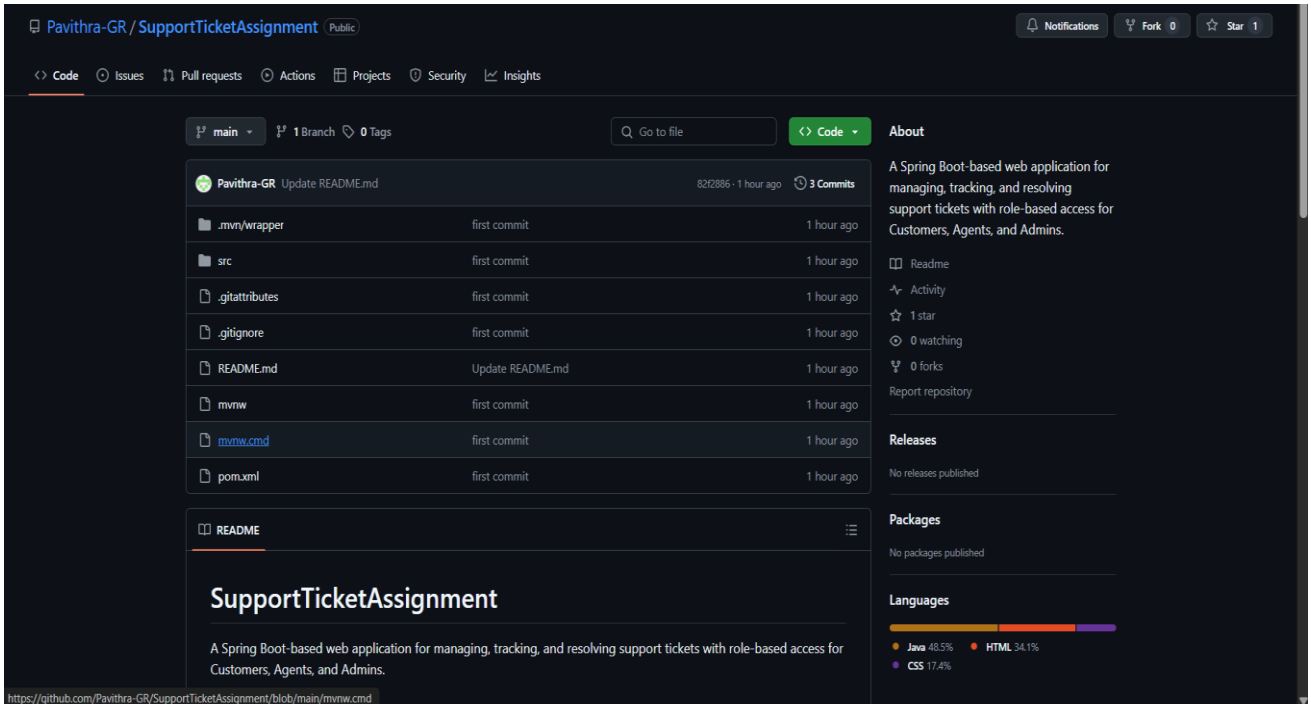
Once the application is running, open: http://localhost:8080/home

Database Connection – MYSQL

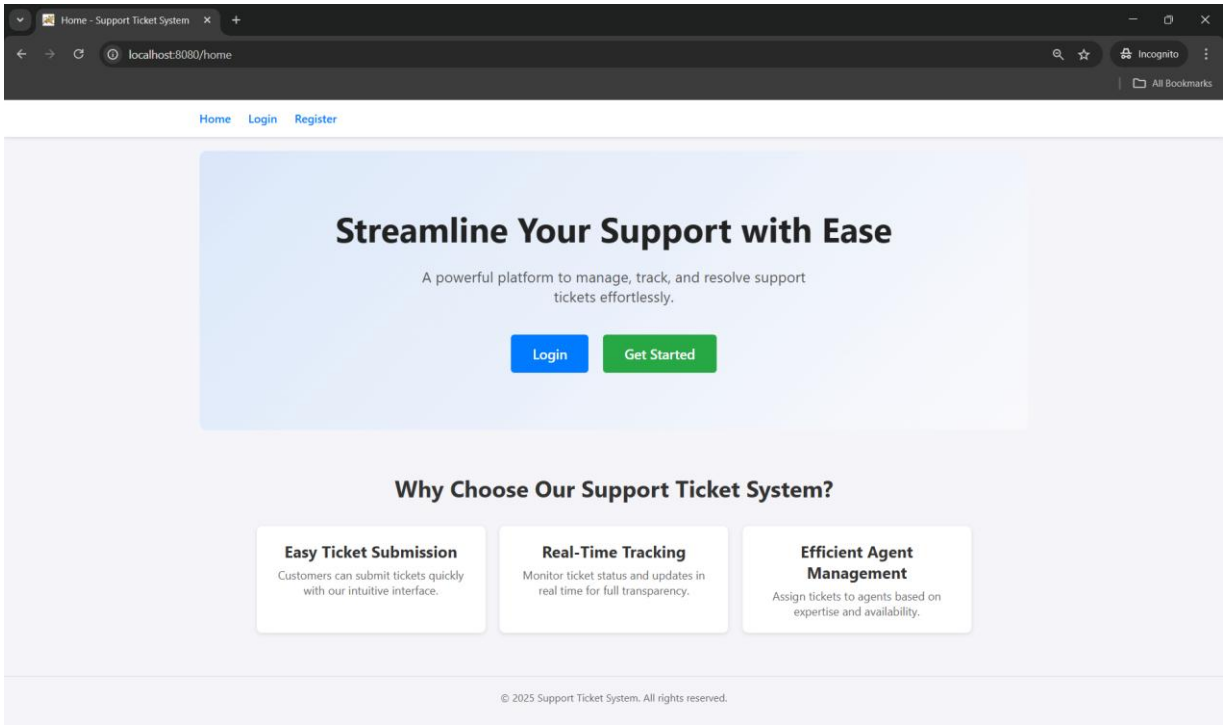
1. create database support_ticket_db;
2. use support_ticket_db;

GITHUB LINK:

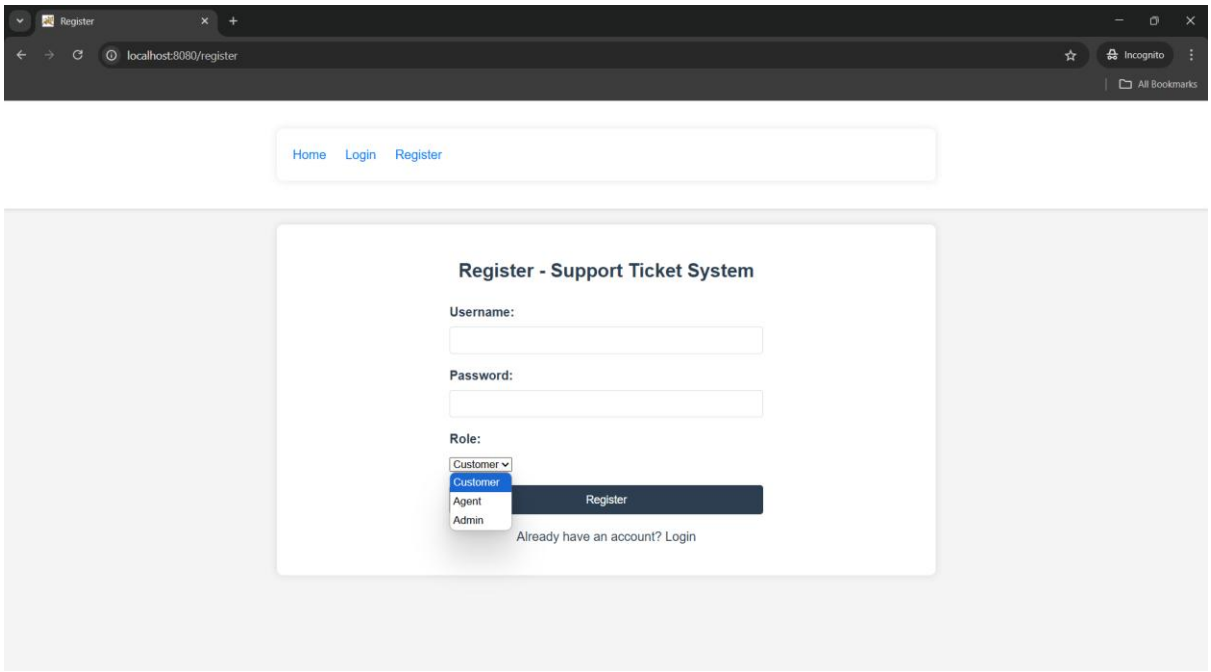
https://github.com/Pavithra-GR/SupportTicketAssignment



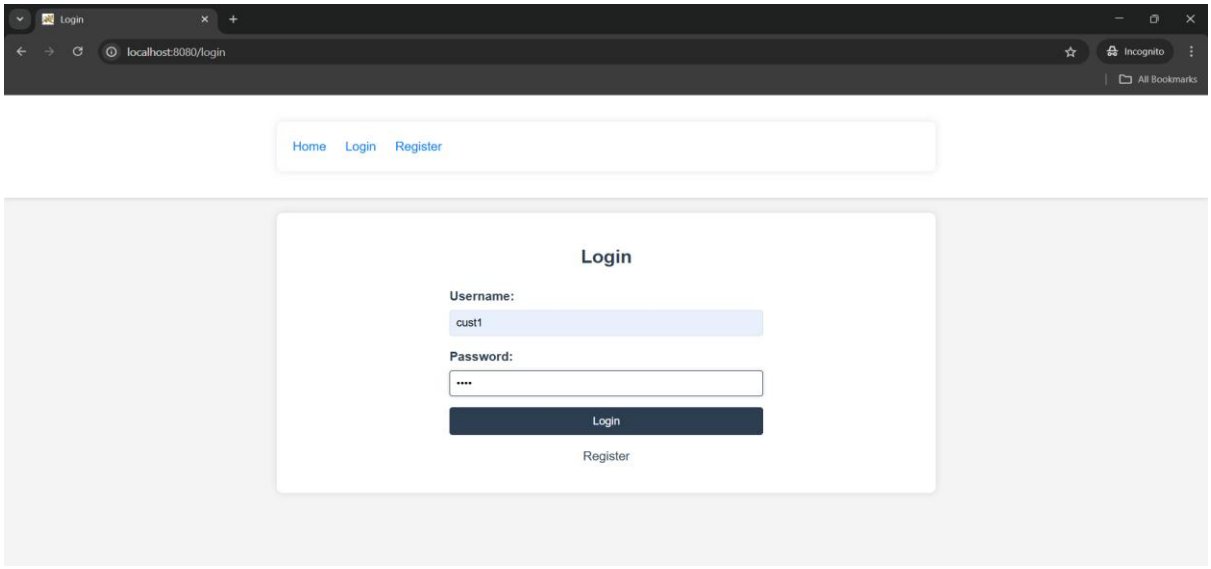
Home Page



Register Page



Login Page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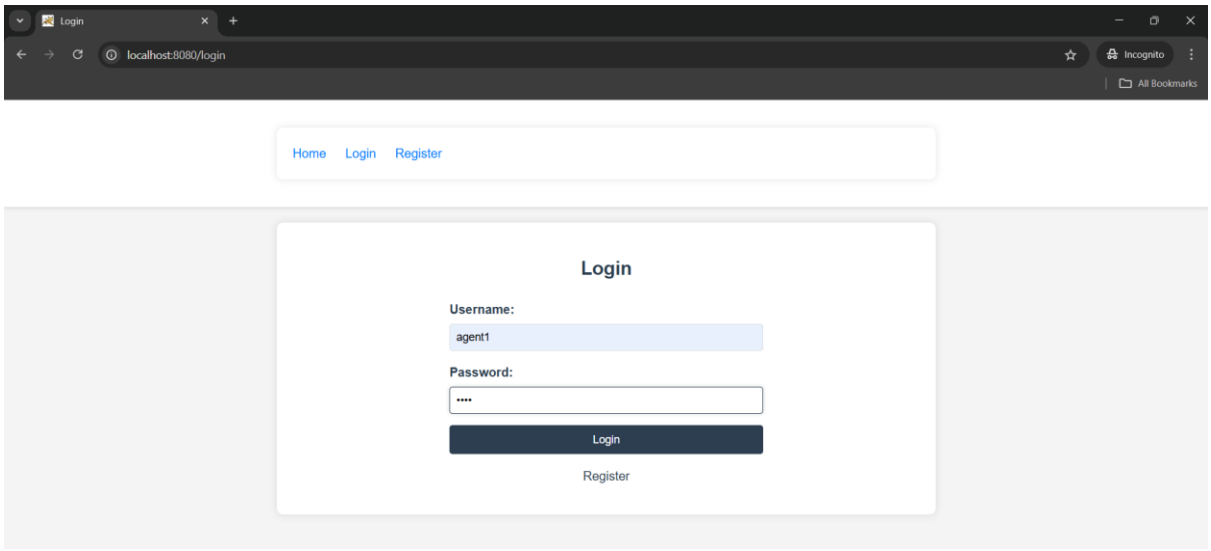
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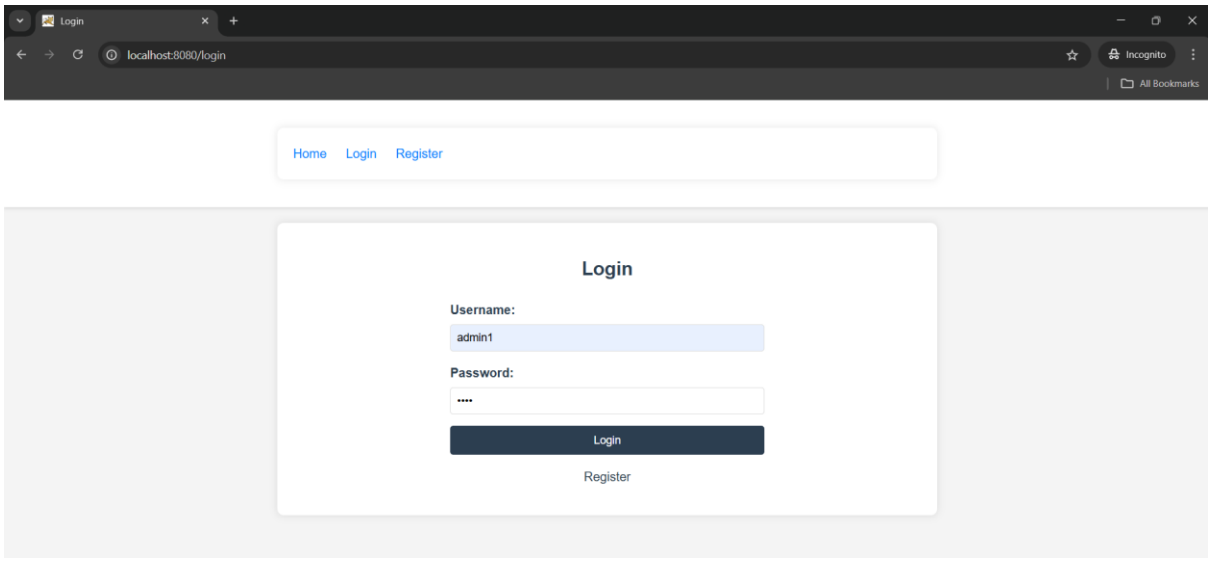
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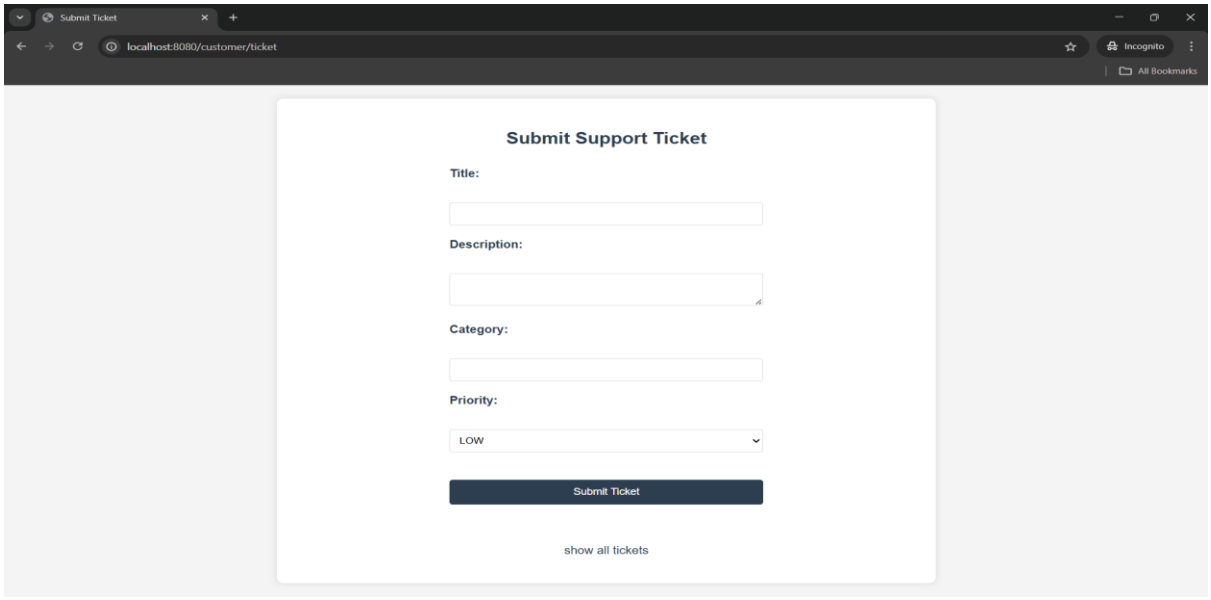
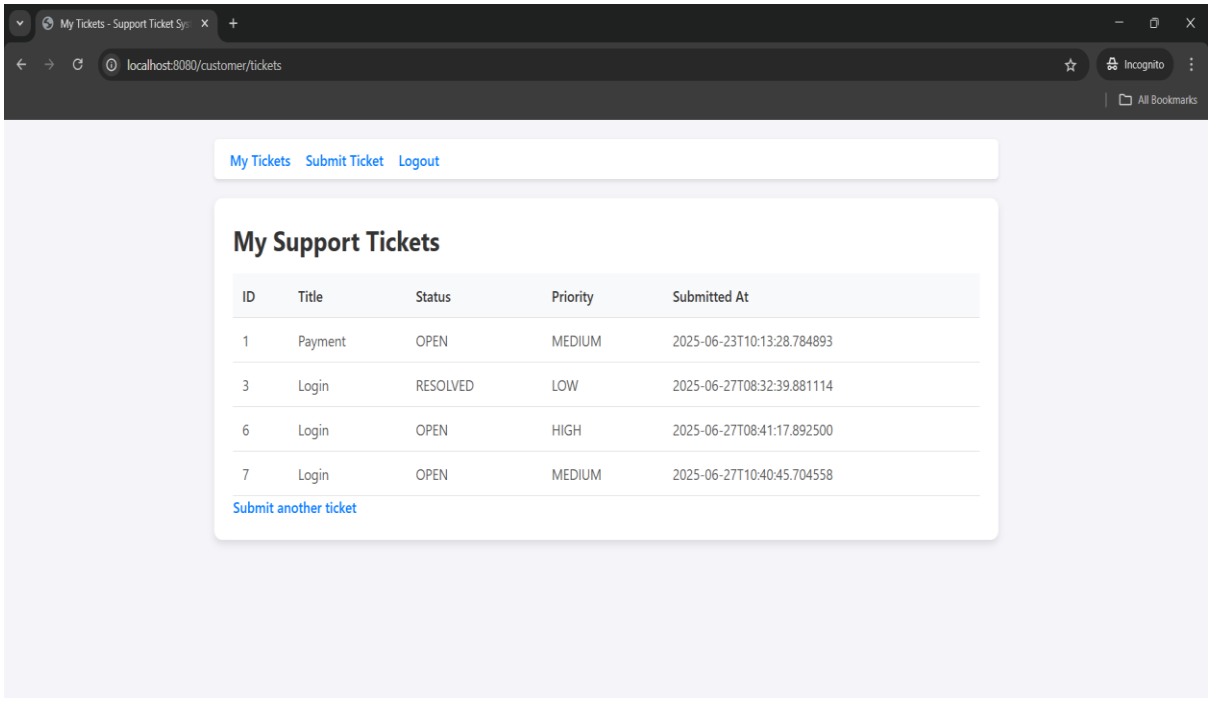
Incognito
All Bookmarks
Home Login Register
Login
Username:
admin1
Password:
Login
Register

Customer Dashboard

To submit New Ticket

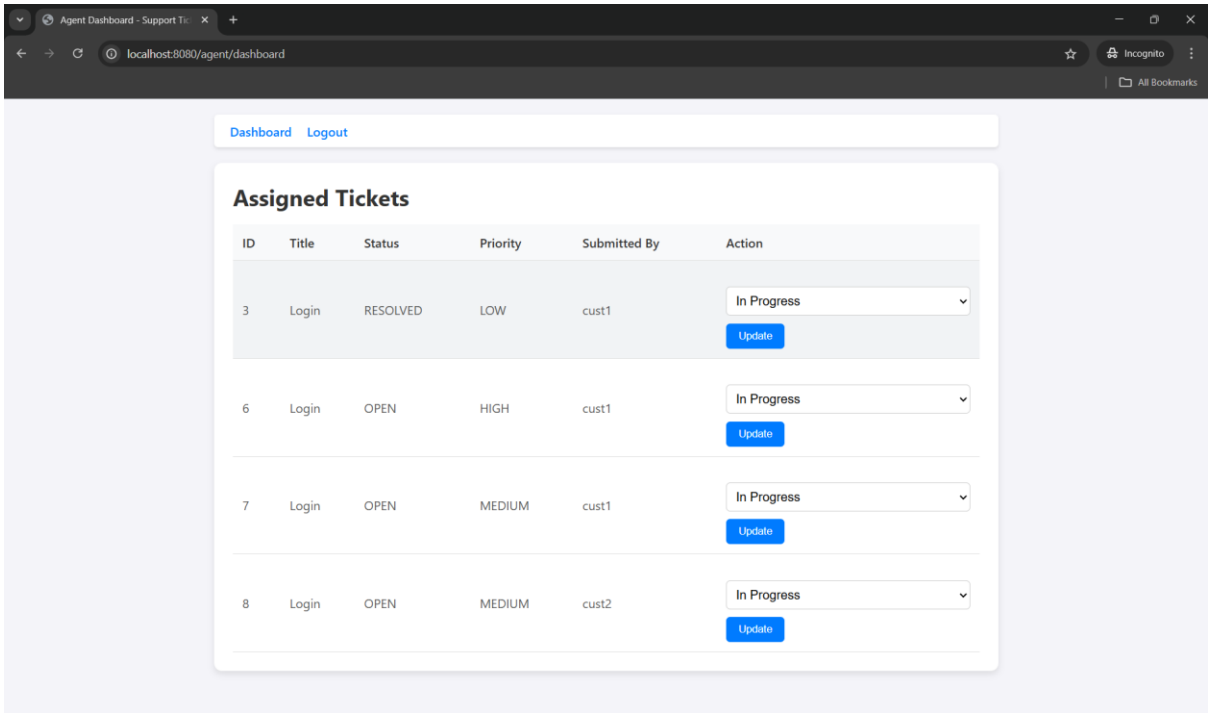


Show Already Submitted Tickets

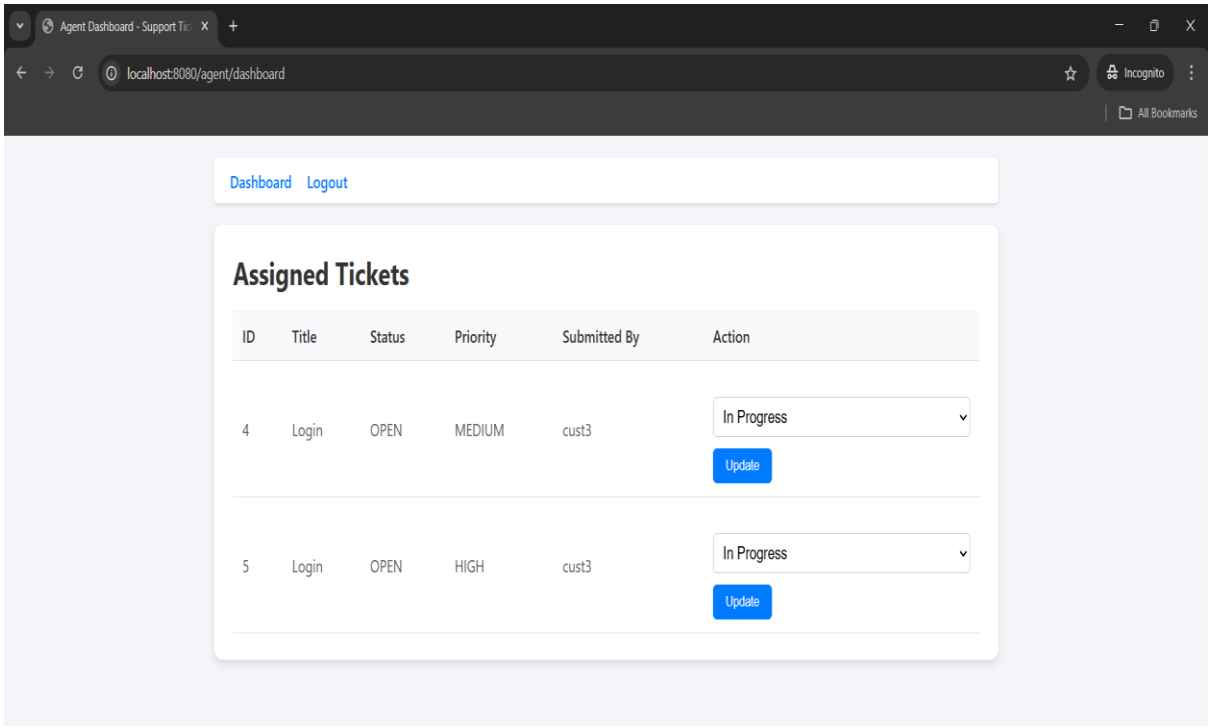


Agent Dashboard

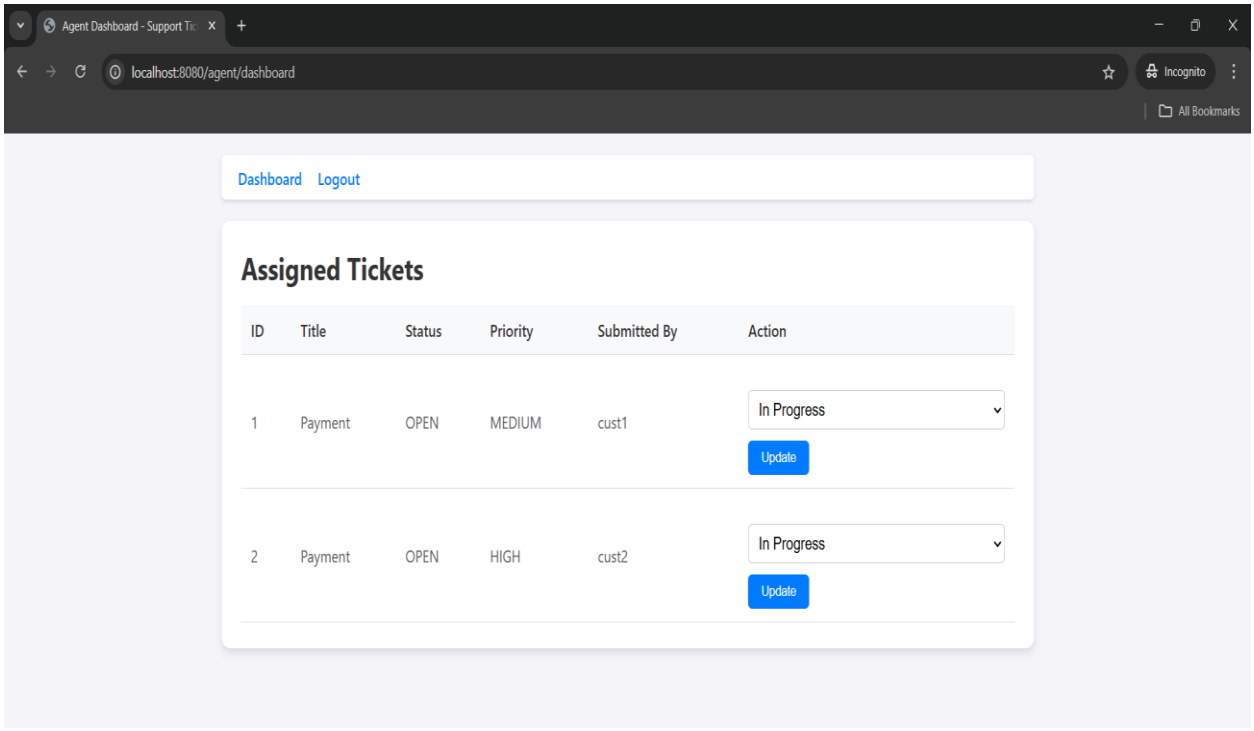
Agent 1 - Specialised (Historically) in Login based Issues



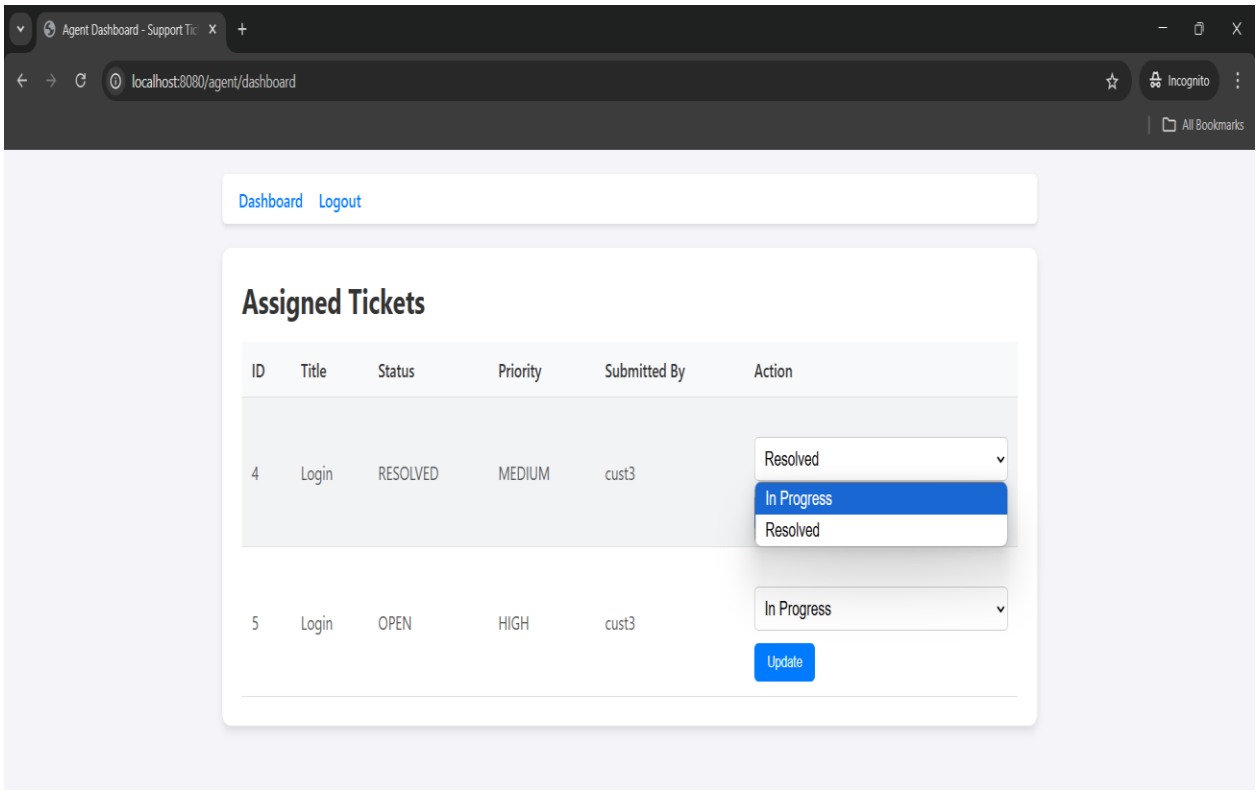
Agent 3 -Specialised in Login (According to rules it assigns the ticket to the Agents and Verifies the agent in not overloaded**).**



Agent 2 - Specialised (Historically) in Payment based Issues

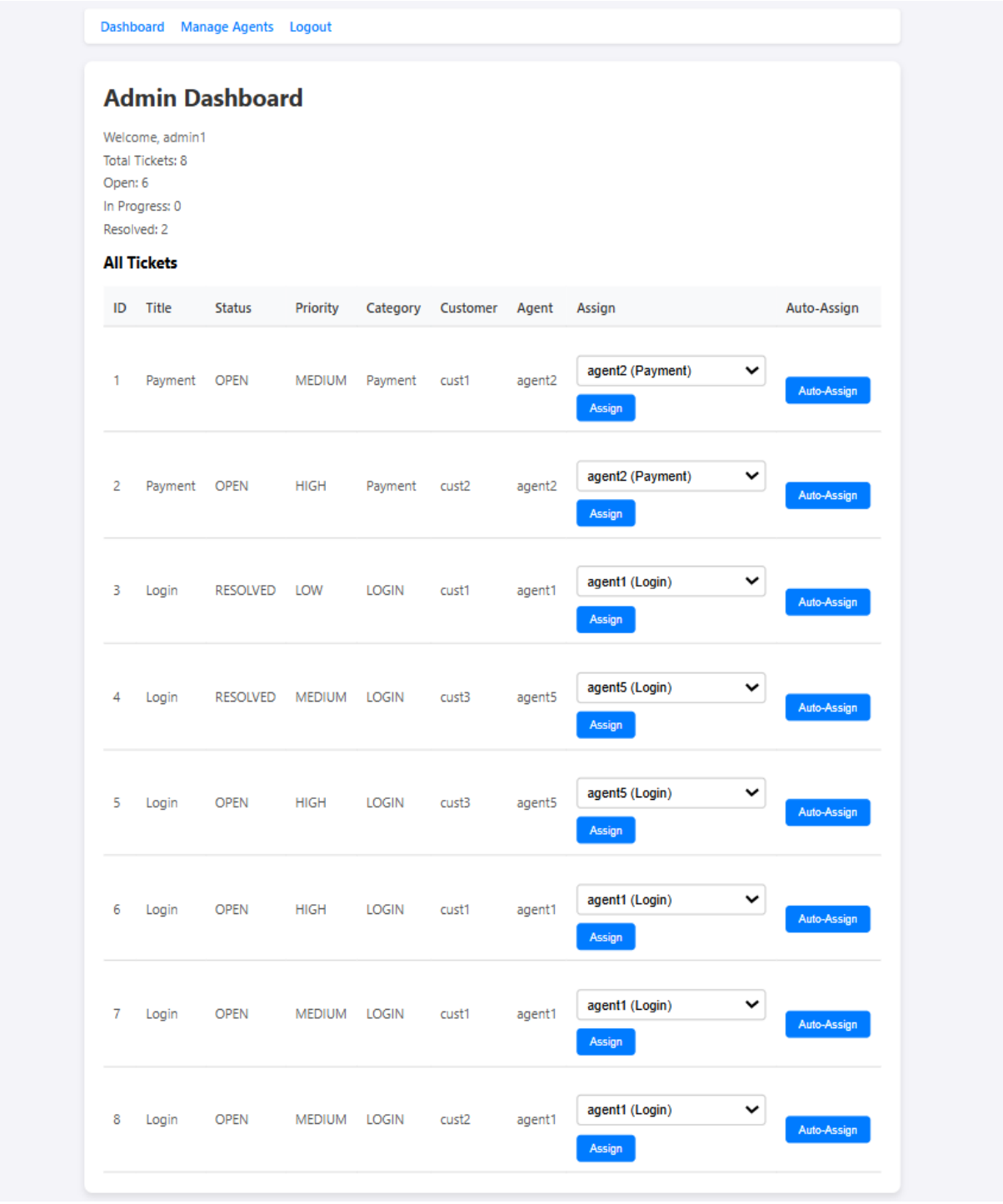


Agents can Resolve the Tickets it will be notified to the customer

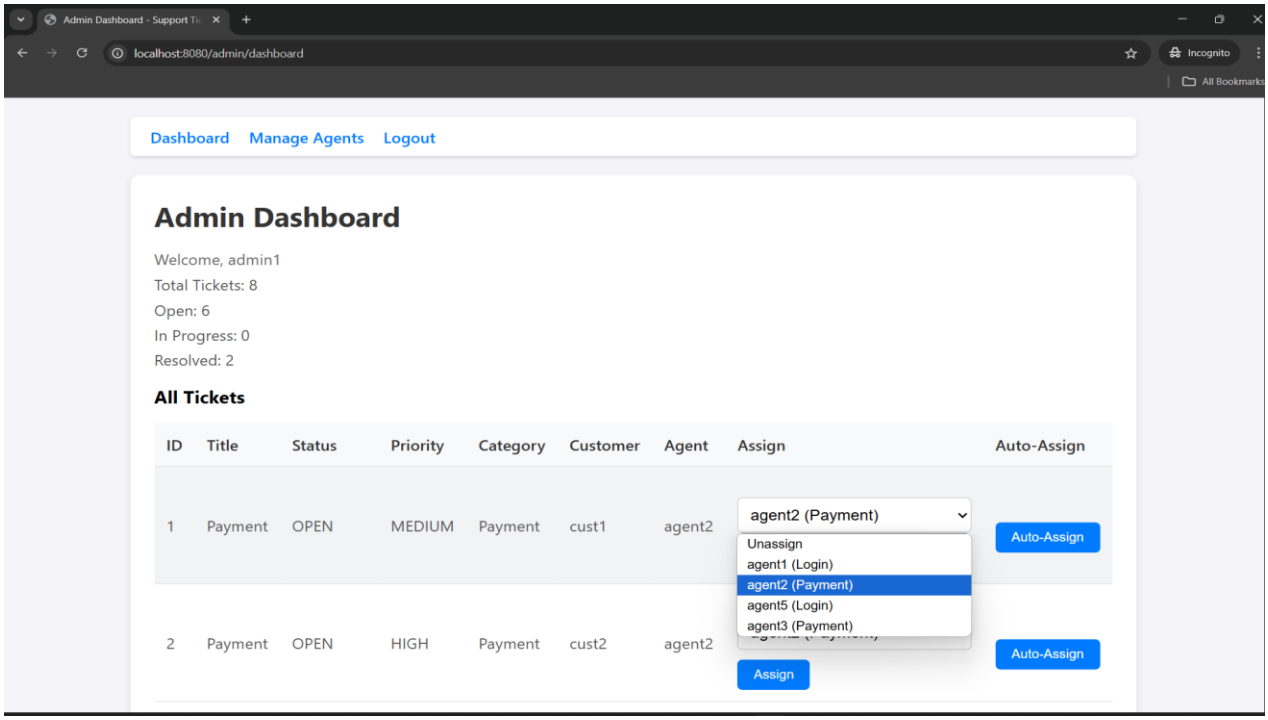


Admin Dashboard

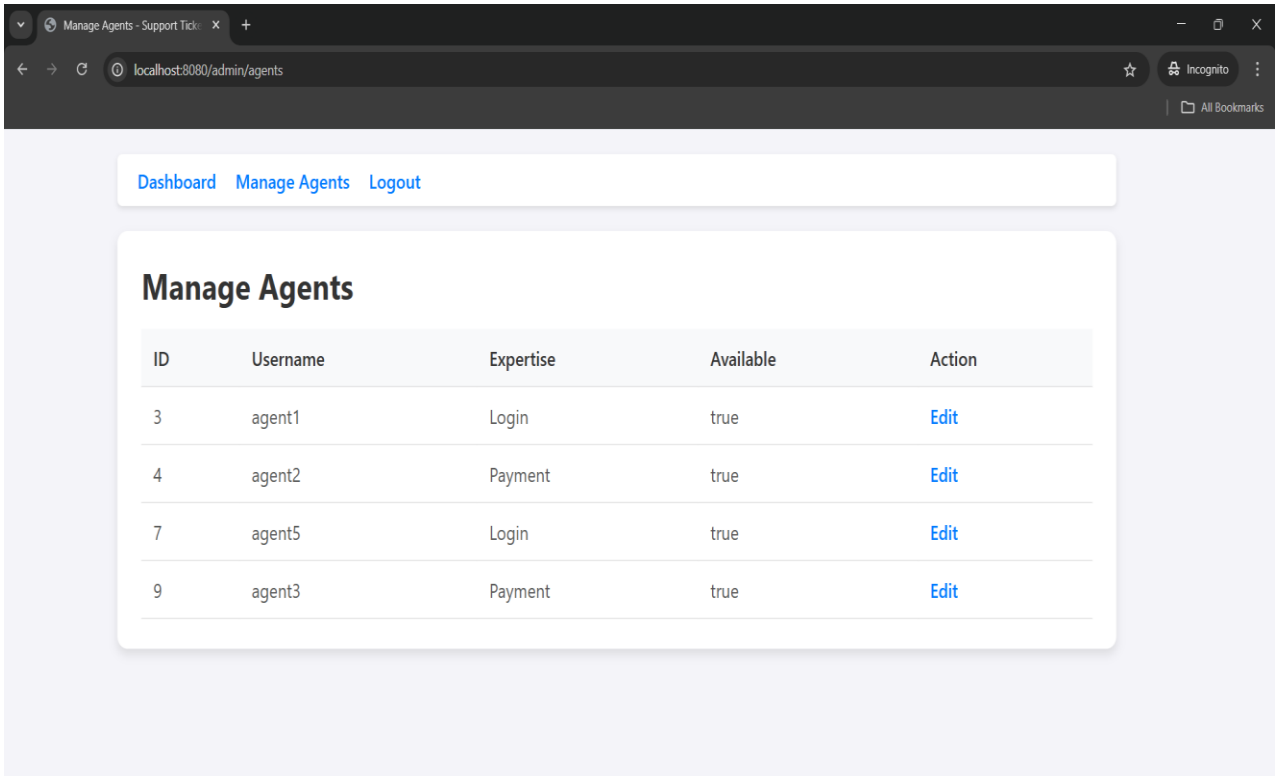
- Admin can view all agents and Assigns tokens, the tokens can also be auto-assigned based on agents specialization.
- The Admin can manage all agents and access their Specialization.



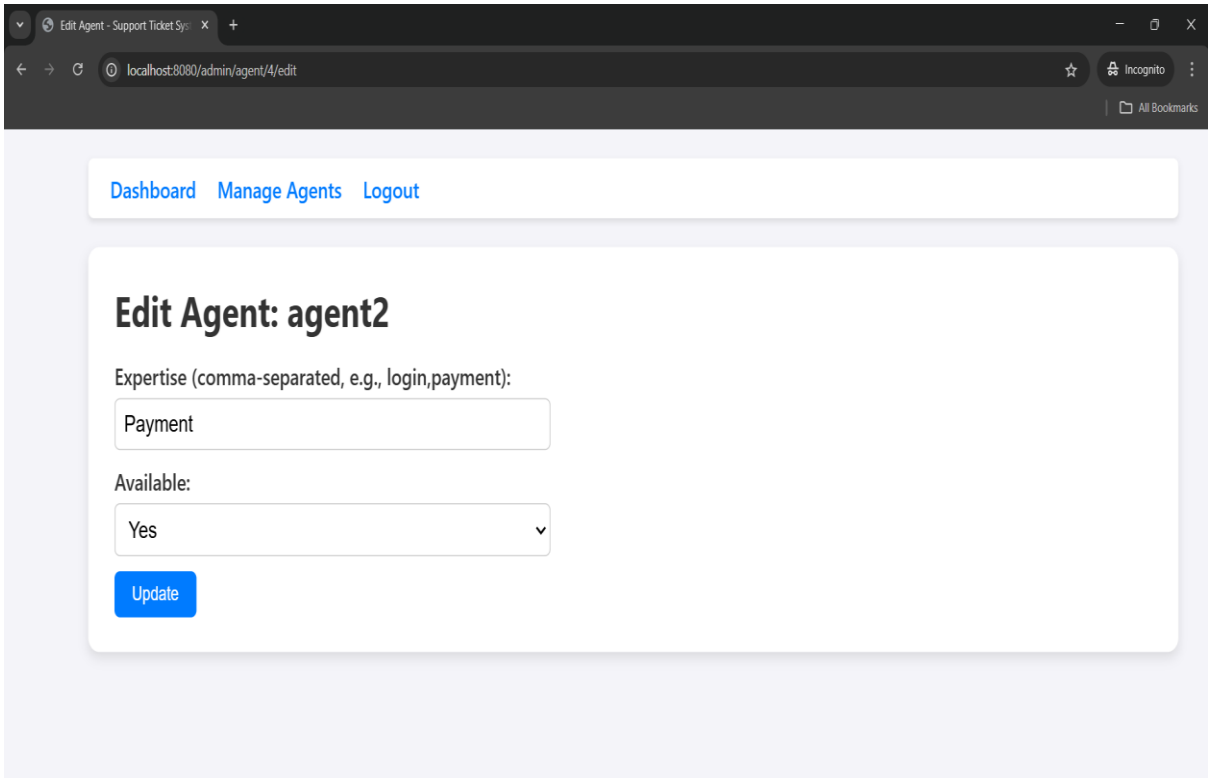
Admin – Assigning Agents



Admin – Manage Agents



Admin – Edit Agents



Conclusion

The Support Ticket Assignment System is a comprehensive and user-friendly web application developed using Java Full Stack technologies. It provided valuable hands-on experience across both frontend and backend development, integrating key components such as Spring Boot, Spring Security, and Spring Data JPA on the backend, and Thymeleaf, HTML, and CSS on the frontend.

The system enhances efficiency in managing support tickets through role-based access control and intelligent ticket assignment, utilizing historical resolution data and predefined Standard Operating Procedures (SOPs).

Users interact with the system in distinct roles:

- Customers: Create, view, and track support tickets.
- Agents: Automatically assigned tickets relevant to their area of expertise (e.g., login issues, payment queries).
- Admins: Manage users, monitor system performance, and ensure proper ticket handling and resolution.

This project strengthened practical skills in Java Full Stack development, including secure user authentication, dynamic UI development, and persistent data handling through relational databases. It exemplifies the integration of robust backend logic with a responsive and intuitive frontend to deliver a real-world, scalable support solution.