Customer issue tracking web Application

Project Abstract: This case study outlines the development of a ticketing web application designed to streamline the process of raising issue tickets for various issues like software installation, hardware issues etc. The platform aims to enhance user experience by providing a one-stop solution for raising issues, tracking and resolving it.

Objective: To develop a comprehensive issue ticketing system that offers ease of use, secure transactions, and efficient management of travel plans, thereby improving the issue resolution experience for users and operational efficiency for service providers.

Technology Stack:

- **Frontend**:
  - Angular for a dynamic and interactive user interface.
  - HTML5, CSS3, and Bootstrap or Tailwind for responsiveness and layout.
- **Backend**:
  - ASP.NET Core(Repository Pattern) for server-side logic with necessary UnitTesting (Minimum 4)..
  - Entity Framework Core for database interactions.
  - Role based JWT authentication for secure login.
- **Database**:
  - SQL Server for relational database management.

Any Additional Features (Recommended)

Modules and Implementation:

1. **User Module:**
   - **Registration/Login:** Allows users to create accounts and log in to access personalized services.
   - **Raise Issue Ticket:** Users can create an issue ticket with details of issue, priority, type (software/hardware).
   - **Search tickets:** the search for tickets based on priority, description etc.,
   - **Update tickets:** Users can view their ticket, update and respond to the comments.
2. **Issue Representative Module:**
   - **Login:** Secure login for Issue representative .
   - **Issue response:** Representatives can update, comment on the ticket.
   - **File upload:** Ability to upload and view files should be possible for more information.
3. **Admin Module:**
   - **Dashboard:** Provides an overview of all platform activities, including bookings, user interactions, and provider updates.
   - **User and Provider Management:** Admins can oversee accounts, ensuring proper access and resolving conflicts.
   - **Analytics and Reporting:** Generate reports on ticket sales, user activity, and service provider performance.

Project Flow

1. User Registration and Login:

- **Account Creation:** Users provide personal information and create a password during registration.
- **Secure Login:** Users log in to access the platform, with authentication.

2. Ticket Searching and Booking:

- **Create Ticket:** Users proceed to create ticket s
- **Search Tickets:** Users enter ticket details, such as description, priority level, and dates.
- **Select Tickets:** Users can filter tickets based on priority, and type (software/hardware).

3. Manage Tickets:

- **Representative Access:** Representatives can access the open tickets and view details and images.
- **Modifications and Cancellations:** Users can comment or request more information. Changes are processed in real-time, updating the database and notifying users on their login.

4. Administrative Controls:

- **System Oversight:** Admins monitor overall platform activity, manage user and provider issues, and ensure system integrity.
- **Generate Reports:** Admins generate detailed reports on tickets and performance.
- **Representative KPI:** Ability to view the tickets closed by the representative. Also, the turn-around-time (average time to resolve) indicating how quickly the issues are resolved