

Build a Ticketing System

Objective:

Develop a full-stack **Ticketing System** to simulate real-world scenarios in IT support or customer service. This system will allow users to raise, manage, and resolve support tickets with proper role-based access and admin control.

Tech Stack:

- **Backend:**
 - Java/Kotlin
 - Spring Boot
 - Postgresql
- **Frontend:**
 - Next.js (React-based framework)

Must-Have Features:

1. Authentication & Authorization

- Login and logout functionality.
- Role-based access control (User, Admin, Support Agent).
- Users should only be able to manage their own tickets.

2. User Dashboard

- Users can:
 - Raise new tickets (with subject, description, priority).
 - View the list of their tickets and current status.
 - Add comments to their own tickets.
 - See ticket status (Open, In Progress, Resolved, Closed).

- View ticket history (with all comments).

3. Ticket Management

- Ticket lifecycle: Open → In Progress → Resolved → Closed.
- Users can reassign tickets to another support agent (if role permits).
- Comment thread on each ticket (with timestamps and user info).
- Track ticket owner and assignee.

4. Admin Panel

- User management:
 - Add/remove users.
 - Assign roles (Admin, Support Agent, User).
- Ticket management:
 - View all tickets.
 - Force reassign or resolve/close any ticket.
 - Monitor ticket statuses across users.

5. Access Control

- Only admins can manage users and override tickets.
- Support agents can be assigned to tickets, add comments, and change statuses.
- Regular users can only manage their own tickets.

Good-to-Have Features:

1. Email Notifications

- On ticket creation, assignment, status change, or resolution.
- Basic templating (e.g., Ticket #123 assigned to you).

2. Search & Filter

- Search tickets by subject, status, priority, or user.

- Filter tickets by status or assigned agent.

3. Ticket Prioritization

- Add and manage ticket priorities (Low, Medium, High, Urgent).
- Sort or filter tickets based on priority.

4. File Attachments

- Allow users to attach files/screenshots to tickets.
- Secure file upload and download mechanism.

5. Rate Ticket Resolution

- Let users rate the resolution of a ticket (1-5 stars) and optionally provide feedback.

Format of submission

- Please submit your assignment at anjali.mishrar@leapfinance.com
- All the best for your assignment. We look forward to discussing it with you.