

Key Features and Requirements

1. User Registration and Authentication

- **Registration:**
 - Implement user registration with fields for email, password, and role selection (Admin, Manager, Employee).
 - Send a confirmation email to new users containing a verification link to activate their accounts.
- **Login:**
 - Enable users to log in using their email and password.
- **Forgot Password:**
 - Provide a feature to request a password reset link via email.
 - Implement a secure mechanism for resetting the password.

2. Role-Based Access Control (RBAC)

- Assign roles during user registration or by an admin.
- Define permissions for each role:
 - **Admin Role:**
 - Full control over user and employee management.
 - **Manager Role:**
 - View employees and send/receive messages.
 - **Employee Role:**
 - Limited access, including viewing their own details and messaging colleagues.

3. Employee Management

- Implement CRUD (Create, Read, Update, Delete) operations for managing employee records.
- Include the following fields for employee records:
 - Name
 - Department
 - Position
 - Salary

4. Messaging System

- Implement a real-time messaging feature to allow employees to communicate within the application.
- Features:
 - Simple interface for selecting recipients and viewing conversation history.
 - Notifications for new messages.

Additional Requirements

1. **Dummy Database:**
 - a. Use JSONPlaceholder as the backend dummy database for storing and retrieving data.
2. **Testing:**
 - a. Write tests to ensure the functionality of all features. Include unit tests for key components.
3. **Group Collaboration:**
 - a. Work in groups of 2-3 participants. Ensure clear division of tasks and effective communication within the group.
4. **Project Submission:**
 - a. Submission Deadline: **Monday**
 - b. Deliverables:
 - i. Complete project codebase (hosted on a Git repository with clear documentation).
 - ii. Test cases and results.
 - iii. A brief report summarizing the implementation and roles of each group member.