

Project Design Phase
Solution Architecture

Date	01 Nov 2025
Team ID	NM2025TMID07925
Project Name	Optimizing User, Group, and Role Management with Access Control and Workflows
Maximum Marks	4 Marks

Solution Architecture:

Workflow for Role-Based Access Control and Task Management

1. **User Identification and Role Assignment**
 - Each team member is assigned a role upon onboarding (e.g., Project Manager, Team Member).
 - Roles determine the level of access and control over project resources and tasks.
2. **Task Creation and Allocation**
 - The Project Manager creates tasks and assigns them to specific team members based on their roles.
 - Tasks are categorized by priority, deadline, and required skills.
3. **Access Control Implementation**
 - Role-based permissions ensure that users only access relevant tools, documents, and information.
 - Admin rights remain with the Project Manager, while members access only assigned task zones.
4. **Task Execution and Status Updates**
 - Team members execute tasks and regularly update progress within the system.
 - Each status change (e.g., In Progress, Blocked, Completed) triggers a notification to the relevant stakeholders.
5. **Review and Feedback**
 - The Project Manager reviews task outputs and provides feedback or approvals.
 - A feedback loop ensures continuous improvement and knowledge transfer.
6. **Reporting and Documentation**
 - The system generates reports on task completion, timelines, and performance.
 - These insights help in future project planning and accountability.

Example - Solution Architecture Diagram:

Figure 1: Architecture and data flow of the Optimizing User, Group, and Role Management with Access Control and Workflows

Optimizing User, Group, and Role Management with Access Control Workflow

