Project Design Phase-II

Solution Requirements (Functional & Non-functional)

Date	06 NOV 2025
Team ID	NM2025TMID09177
Project Name	Optimizing User, Group, and Role Management with Access Control and Workflows
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Creation	Create Alice and Bob users for testing access.
FR-2	Group Management	Create groups for managing department access levels.
FR-3	Role Management	Create roles and assign them to users for specific permissions.
FR-4	Application Access	Assign table-level access to applications based on role.
FR-5	Access Control List (ACL)	Configure ACLs for dynamic permission control.
FR-6	Workflow Automation	Design a flow to auto-assign operational tickets to user groups.
FR-7	Testing and Validation	Verify user access, ACL permissions, and workflow triggers.

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	**Scalability**	Must handle growing numbers of users, groups, and workflows efficiently.
NFR-2	**Security**	Only authorized roles can manage access, groups, and ACLs.
NFR-3	**Availability**	The access management system should be available at all times.
NFR-4	**Performance**	Access checks and workflow triggers should execute instantly.
NFR-5	**Reliability**	System should correctly apply roles and ACLs before any access change.
NFR-6	**Usability**	Interface should be intuitive for admins and group managers.