Project Design Phase-II

Solution Requirements (Functional & Non-functional)

Date	31/10/25
Team ID	NM2025TMID09014
Project Name	Optimization User, group and role management with access control and workflow
Maximum marks	4 Marks

Functional Requirements

Following are the functional requirements of the proposed solution:

FR No.	Functional Requirements (Epics)	Sub Requirement (Story / Sub-Task)
FR-1	User Management	Create, edit, delete, and view users; assign roles and groups.
FR-2	Group Management	Create and manage groups; assign multiple users to groups.
FR-3	Role Management	Define roles with specific permissions (e.g., Admin, Manager, User).
FR-4	Access Control	Grant or restrict access to modules and data based on user roles.
FR-5	Workflow Automation	Configure approval workflows for user/group updates.
FR-6	Audit Logging	Track all user and role related changes for accountability.
FR-7	Notification System	Send alerts/notifications when access or workflow changes occur.
FR-8	Reporting	Generate reports for users, roles, permissions, and workflow history.

Non-Functional Requirements

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

FR No.	Non-Functional Requirements (Epics)	Description
FR-1	Usability	The interface should be userfriendly and easy for admins to navigate.
FR-2	Security	Only authorized users can manage or access system roles and workflows.
FR-3	Reliability	The system must ensure consistent and accurate access control validation.
FR-4	Performance	Role and access checks should execute without noticeable delay.
FR-5	Availability	The system should be available 24/7 for user and workflow management.
FR-6	Scalability	The solution should handle a large number of users, roles, and workflows efficiently.
FR-7	Maintainability	The codebase should allow easy updates for new roles or workflow types.
FR-8	Auditability	All user actions and changes must be logged for future reference.