Phase 4: Requirement Analysis

DATE	2 NOVEMBER 2025
TEAM ID	NM2025TMID04324
PROJECT NAME	Optimizing User, Group and Role Management with Access Control and Work Flows

4.1 Functional Requirements:

S. No	Functional Requirement	Description
FR-01	User Authentication	Users should be able to securely log in using credentials verified through ServiceNow instance.
FR-02	Create and Manage Users	Admin should be able to create, update, or deactivate user accounts.
FR-03	Create and Manage Groups	The system should allow creation of user groups for managing permissions collectively.
FR-04	Role Assignment	Admins should be able to assign roles to users and groups based on access needs.
FR-05	Access Control Management	The system must restrict or permit access to modules or records depending on assigned roles.
FR-06	Workflow Automation	Approval workflows should trigger automatically when new users or roles are created or modified.
FR-07	Audit Tracking	All actions related to user, group, and role management should be logged for security auditing.
FR-08	Notification System	System should notify users or admins of workflow status changes via email or system alerts.
FR-09	Dashboard & Reports	The system should provide a dashboard for viewing users, roles, and workflow summaries.

4.2 Non-Functional Requirements:

S. No	Non-Functional Requirement	Description
NFR-01	Performance	The system should handle user and role updates instantly without delay.
NFR-02	Usability	User interface must be simple, intuitive, and follow ServiceNow UI standards.
NFR-03	Reliability	User and access data must be consistent and protected from unauthorized modification.
NFR-04	Scalability	Should support large organizations with multiple departments and user hierarchies.
NFR-05	Security	Only authenticated and authorized users can access system modules and workflows.
NFR-06	Maintainability	The solution should be flexible for future upgrades like new role types or automated workflows.

4.3 Hardware Requirements:

Component	Specification
Processor	Intel Core i3 or above
RAM	Minimum 4 GB (8 GB recommended)
Storage	2 GB free disk space
Internet	Required to accessing ServiceNow Cloud Instance

4.4 Software Requirements:

Software	Version / Details
Operating System	Windows / MacOS / Linux
Browser	Chrome (recommended) / Edge / Firefox
ServiceNow Instance	PDI – Zurich or newer release
Tools	App Engine Studio, Flow Designer, ServiceNow Classic UI
Document Tools	WPS / MS Word
Version Control	GitHub (for project submission)

4.5 User Requirements:

User Type	Requirement
Student Administrator	Manage users, groups, and roles; configure workflows; monitor access logs.
End User	View assigned roles and access permitted modules.
Manager/Approver	Approve or reject role requests and workflow actions.
Developer	Maintain and enhance access control modules and automated workflows.