REQUIREMENT ANALYSIS

Date: 01-11-2025
Team ID: NM2025TMID01677
Project Name: Optimizing User Group and Role Management with Access Control and Workflows

INTRODUCTION:
The requirement gathering phase plays a crucial role in defining the structure and direction of the project. This document outlines the requirements for the system titled "Optimizing User Group and Role Management with Access Control and Workflows". The project focuses on designing a robust and efficient framework for managing user roles, permissions, and access control while ensuring secure and streamlined workflows across the organization.

OBJECTIVES OF THIS PHASE:

• Identify stakeholder needs, including administrators, managers, and end-users, to align system functions with organizational goals.

• Define functional and non-functional requirements to ensure usability, performance, and security.

• Map current access management processes to identify redundancies and areas for automation.

• Establish integration requirements with existing authentication systems (e.g., LDAP, SSO).

• Set project scope and priorities, ensuring alignment with compliance and security standards.

• Create a validated baseline for design and testing phases to ensure smooth implementation.

TYPES OF REQUIREMENTS:

A. Functional Requirements

• User Group Creation and Management: The system must allow administrators to create, edit, and delete user groups.

• Role Definition: Define and assign roles with specific permissions and hierarchical structures.

• Access Control: Implement fine-grained access control to ensure users can only access authorized resources.

• Workflow Automation: Enable workflows for role requests, approvals, and updates.

• Audit and Reporting: Maintain a complete audit trail for role and access changes.

• Integration: Support integration with third-party identity providers and APIs.

B. Non-Functional Requirements

• Usability: The system interface should be intuitive for both admins and users.

• Performance: Operations like role assignment and workflow execution should occur with minimal latency.

• Reliability: The system must ensure consistent uptime and fault tolerance.

• Security: Implement multi-level authentication and encryption for sensitive data.

• Scalability: Support increasing numbers of users and roles without performance degradation.

• Maintainability: Provide modular architecture for easy updates and extensions.

SYSTEM REQUIREMENTS (HARDWARE & SOFTWARE NEEDS):

TYPE	REQUIREMENT
Hardware	A laptop or desktop with stable internet connection.
Software	Web browser (Chrome/Edge).
Platform	ServiceNow Developer Instance or equivalent platform.
Tools	Flow Designer, Access Control Lists (ACL), Reports & Dashboards.
Users	Admin, Manager, and End-Users.

OUTCOME OF REQUIREMENT ANALYSIS PHASE:
After a detailed requirement analysis, the team has a comprehensive understanding of the key features and functionalities required for the "Optimizing User Group and Role Management with Access Control and Workflows" system. These documented requirements form the foundation for the next phase — Design and Development — where the architecture, interface, and workflows will be defined and implemented for optimal performance and security.