Project Design Phase-II

Technology Stack (Architecture & Stack)

Date	1st November 2025
Team ID	NM2025TMID06439
Project Name	Optimizing User, Group, and Role Management with Access Control and Workflows
Marks	4 Marks

Technical Architecture:

The deliverable includes the architectural diagram and technology stack used in the project 'Optimizing User, Group, and Role Management with Access Control and Workflows'. It outlines how various components such as user management, group assignments, and role-based access controls are integrated within a workflow-driven system to ensure data integrity and secure operations.

• **Example:**

Table-1: Components & Technologies:

S.No	Component	Description	Technology Date & Time
1	User Interface Web UI	Admin interacts dashboard for managing	ServiceNow via web

S.No	Component	Description	Technology
		users, groups, and roles.	
2	Application Logic-1	Implements workflows for role assignment and group management.	ServiceNow Flow Designer
3	Application Logic-2	Validates user-role and group relationships GlideRecord before updates.	ServiceNow Scripts /
4	Application Logic-3	Triggers notifications on updates or access changes.	ServiceNow Notifications
5	Database	Stores user, group, and role details.	ServiceNow CMDB
6	Cloud Infrastructure	Hosted and managed on ServiceNow Cloud.	ServiceNow SaaS Platform
7	File Storage	Stores system logs and audit trails.	ServiceNow System Logs
8	External API	Integrates with HRMS for identity verification.	ServiceNow REST API

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology

#				Date & Time
1	Security Implementations	Role-based access control, ACLs, and secure workflows.	ServiceNow ACLs & Scoped Applications	
2	Scalable Architecture	SaaS-based scalable architecture for large organizations.	ServiceNow Cloud Platform	
3	Availability	High availability through redundant instances.	Load-balanced SaaS Nodes ServiceNow	
4	Performance	Optimized workflows operations and ensure fast validations.	Flow Designer, Background Scripts	
5	Integration	Seamless connection with external systems via REST APIs.	ServiceNow IntegrationHub	