Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	2 NOVEMBER 2025
Team ID	NM2025TMID00383
Project Name	Optimizing User, Group, and Role Management with Access Control and Workflows
Maximum Marks	4 Marks

Technical Architecture:

The technical architecture for "Optimizing User, Group, and Role Management with Access Control and Workflows" is built upon the robust and extensible ServiceNow Platform. It integrates various modules and functionalities to deliver a seamless, secure, and automated access provisioning and governance solution.

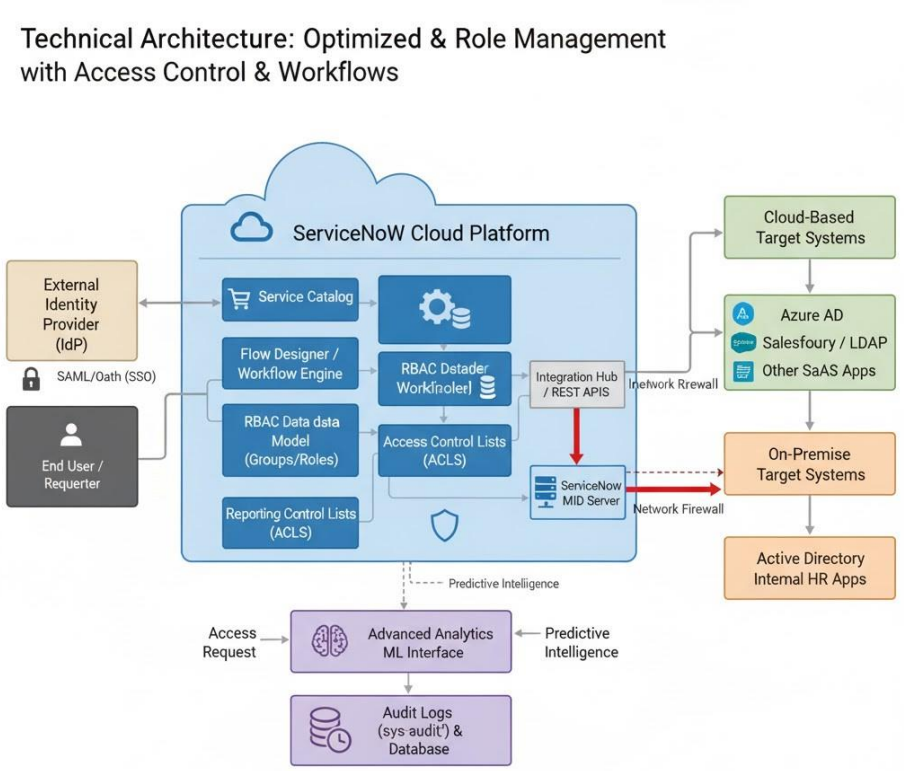

Table-1: Components & Technologies:
Optimizing User, Group, & Role Management with Access Control & Workflows

	S.No.		Description Technology
1	**User Interface**	End-users request access, admins manage via Web dashboard in Serchlnowe.	ServiceNow Catalog / UI
2	**Application Logic-1**	Orchestess multi-level approval flow, task	ServiceNowe Catalog / UI
3	**Application Logic-2**	Automates user provisining: adds usrect	Task creatiove Dchiner wtored
3	**Application Logic-3**	and notifcations.	groups bestor and rerɔfous
4		Enforces access rules (e.g), SoD checks) before de apradsonal	Integration Hub
5		roles. before//oruring provisining.	
5	**Data Model**	Servicelow Business Rules / Script Includes	ServiceNow ServNoowe barurn
6	**Cloud Database**	Stores userrs, groups, roles, requests	and prova! Rables
7	**File Storage**	ServiceNow Access Control Tables	ServiceNow Cloud Database
8		ServiceNow Cloud Database	SAML / Oath 2.0
9	**External API-1** for SSO)	Manageion by ServNoowe backend infrastucture.	Integistion in Identity SSO)
9	**External API-2**	Integration with corporate in target apps (justjsf system logs / Attachentls	e.g, (e.ID, Azure AD SAP),

Table-2: Application Characteristics:

Optimizing User, Group, & Role Management with Access Control & Workflows

S.No	Characterisus	Description	Description
1.	Open-Source Frameworks	Not applicable (ServiceNow is proprietary)	-
2.	Security Implementations	Role-based access control (RBAC), Access Control	ACLs, Scoper ACLS, secure scripts
3.	Scalable Architecture	SaaS-based access control (Segergaation of Duities (SOD) checks)	ServiceNow Cloud Architecture
4.	Availability	Highly available with ServiceNow cloud hosting	Load-balanced ServiceNow Instances
5.	Performance	Highly available with ServiceNoud hosting, Load-balblent Cluxed queries	GlideRecord, Background Scrripts
6.	Integration Capabilities	Optimized via asynchronous flows, indesed tables and effiicient GlideRecord queriys	GlideRecord, identlity providders (IIPs)