

Project Design Phase-II

Technology Stack (Architecture & Stack)

Date	1 NOVEMBER 2025
Team ID	NM2025TMID00502
Project Name	Educational Organisation Using
Maximum Marks	ServiceNow 4 Marks

Technical Architecture:

The deliverable includes a system architecture diagram and the detailed technology stack information tables below.

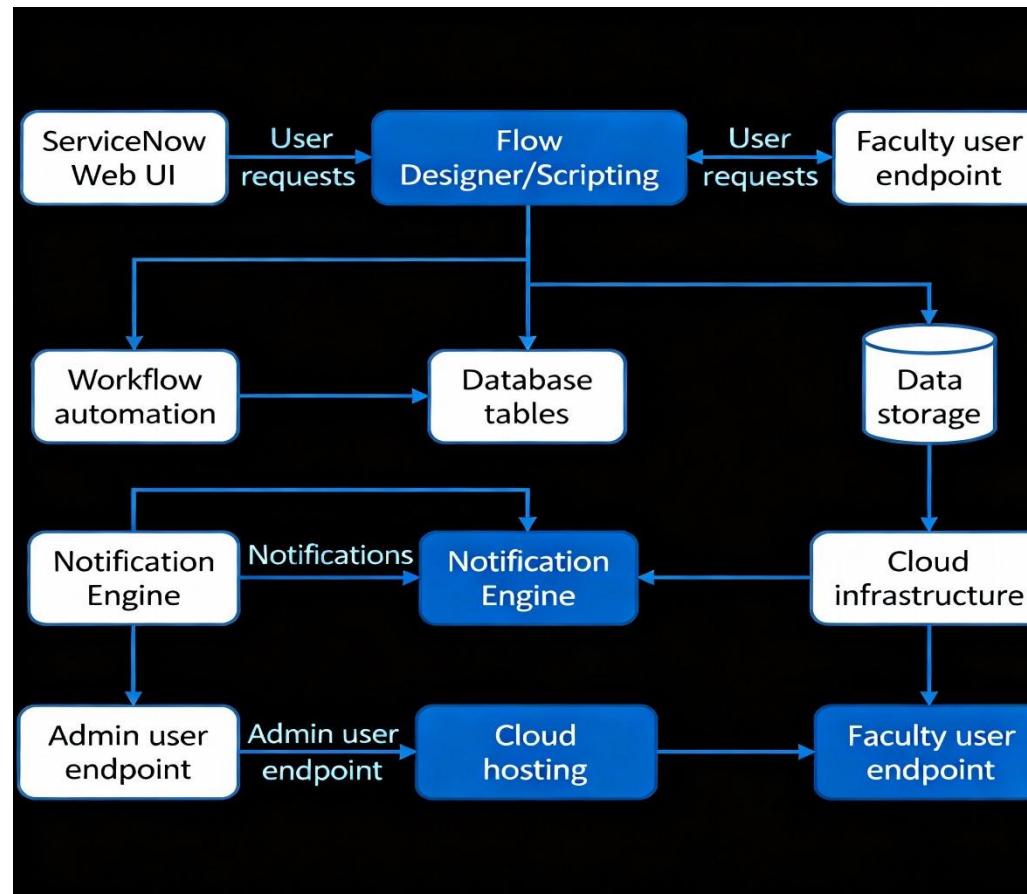


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Admin interacts via web dashboard on ServiceNow	ServiceNow Web UI
2.	Application Logic-1	Checks if user is linked to a course before allowing deletion	ServiceNow Flow Designer, Script
3.	Application Logic-2	Validates user status from course/enrollment tables	GlideRecord in Server Script
4.	Application Logic-3	Sends notification if deletion/action is blocked	ServiceNow Notifications
5.	Database	Stores user, course, and assignment data	ServiceNow CMDB, Custom Tables
6.	Cloud Database	Managed by ServiceNow cloud backend	ServiceNow Cloud Database
7.	File Storage	Minimal logs, stored internally for audit	ServiceNow System Logs
8.	External API-1	(Optional) Integration with HRMS for user verification	REST API in ServiceNow
9.	External API-2	Not applicable	-
10.	Machine Learning	Not applicable for current use case	-
11.	Infrastructure	Hosted and managed on ServiceNow SaaS platform	ServiceNow Cloud (SaaS)

Table-2: Application Characteristics:

S.No	Characteristic	Description	Technology/Method
1.	Open-Source Frameworks	Not applicable, ServiceNow is proprietary	-
2.	Security Implementations	Role-based access, ACLs, secure scripts	ACLs, Scoped Applications
3.	Scalable Architecture	SaaS, horizontally scalable	ServiceNow Cloud Architecture
4.	Availability	Highly available via ServiceNow cloud hosting	Load-balanced ServiceNow Instances
5.	Performance Optimization	Async flows, indexed tables	GlideRecord, Background Scripts