

Project Design Phase-II

Technology Stack (Architecture & Stack)

Template

Date	02 NOVEMBER 2025
TEAM ID	NM2025TMID05272
Project Name	Education Organisation Using ServiceNow
Maximum Marks	4 Marks

Technical Architecture Architecture

Description

The platform uses ServiceNow to automate and manage student service requests such as admissions, certificates, academic support, and administrative queries. The system includes student and staff portals, workflow automation, database access, notification services, and reporting dashboards.

Workflow:

Student → Request Portal → Workflow Engine → Department Review → Approval / Rejection → Notification → Records stored in Student DB

Architecture Guidelines Delivered

1. Included all application logic blocks – All essential modules such as student management, admission workflows, and service requests have been properly structured and integrated.
2. Cloud SaaS architecture used – The solution is developed on the ServiceNow Cloud SaaS model, ensuring high scalability, security, and ease of maintenance.
3. External educational APIs (optional) – Supports optional integration with third-party educational APIs for features like attendance tracking, exam results, or communication systems.
4. Database + Document storage noted – Centralized ServiceNow database tables manage structured data, while secure document storage handles uploaded files and reports.

Table-1: Components & Technologies:

S.No	Component	Technology
1.	User Interface (Student/Faculty)	ServiceNow Service Portal / UI Pages
2.	Request Management	Service Catalog Items & Record Producers
3.	Workflow Execution	Flow Designer / Approval Actions
4.	Alerts & Communication	Notification Engine / Email Templates
5.	Data Management	Custom ServiceNow Tables & Dictionary
6.	Hosting Environment	ServiceNow Cloud Infrastructure
7.	File Handling	Attachment API / Document Management
8.	System Integration (Optional)	REST / SOAP Web Services

Table-2: Application Characteristics:

S.No	Characteristic	Technology / Description
1.	Security	Role-Based Access Control (RBAC), Encryption Policies
2.	Scalability	Cloud-native multi-instance ServiceNow framework
3.	Availability	99.9% uptime with redundant data centers
4.	Performance	Optimized workflows, indexed queries for fast processing
5.	Platform	Proprietary ServiceNow SaaS Platform