

Project Design Phase – II

Technology Stack (Architecture & Stack)

Date	01 November 2025
Team ID	NM2025TMID02606
Project Name	Educational Organisation Using ServiceNow
Maximum Marks	4 Marks

Technical Architecture:

The deliverable includes the architecture diagram and information presented in Table 1 and Table 2. Example: Educational Organisation Management on ServiceNow Platform.

Reference: ResearchGate – Cloud-Based Educational Information Systems Architecture

Guidelines:

- Include all processes (Application Logic / Technology Block)
- Provide infrastructural demarcation (Local / Cloud)
- Indicate external interfaces (APIs, notifications, etc.)
- Indicate Data Storage components / services
- Indicate interfaces to automation or AI models (if applicable)

Table–1: Components & Technologies

S.No	Component Description	Technology
1	User Interface: Admin, Teacher, and Student dashboards in ServiceNow.	ServiceNow UI Builder, Web UI
2	Application Logic–1: Automates student admission workflows and approvals.	ServiceNow Flow Designer
3	Application Logic–2: Calculates marks, totals, and results automatically.	GlideRecord Server Script
4	Application Logic–3: Sends notifications when admissions or results are updated.	ServiceNow Notifications
5	Database: Stores data for Students, Teachers, and Admissions.	ServiceNow Tables (CMDB)
6	Cloud Database: Managed by ServiceNow’s cloud backend for high availability.	ServiceNow Cloud Database
7	File Storage: Used minimally for storing logs or exports.	System Logs / Internal Storage
8	External API–1: Optional integration for sending result emails or SMS.	REST API in ServiceNow
9	External API–2: Not applicable for this use case.	—
10	Machine Learning Model: Not applicable in current scope.	—
11	Infrastructure (Server / Cloud): Hosted entirely on ServiceNow SaaS platform.	ServiceNow Cloud (SaaS)

Table–2: Application Characteristics

S.No	Component Description	Technology
1	User Interface: Admin, Teacher, and Student dashboards in ServiceNow.	ServiceNow UI Builder, Web UI
2	Application Logic–1: Automates student admission workflows and approvals.	ServiceNow Flow Designer
3	Application Logic–2: Calculates marks, totals, and results automatically.	GlideRecord Server Script
4	Application Logic–3: Sends notifications when admissions or results are updated.	ServiceNow Notifications
5	Database: Stores data for Students, Teachers, and Admissions.	ServiceNow Tables (CMDB)
6	Cloud Database: Managed by ServiceNow’s cloud backend for high availability.	ServiceNow Cloud Database
7	File Storage: Used minimally for storing logs or exports.	System Logs / Internal Storage
8	External API–1: Optional integration for sending result emails or SMS.	REST API in ServiceNow
9	External API–2: Not applicable for this use case.	—
10	Machine Learning Model: Not applicable in current scope.	—
11	Infrastructure (Server / Cloud): Hosted entirely on ServiceNow SaaS platform.	ServiceNow Cloud (SaaS)