

Project Design Phase – II

Technology Stack (Architecture & Stack)

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| 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) |