PROJECT DESIGN PHASE

Solution Architecture

Date	**7 NOVEMBER 2025**
Team ID	**NM2025TMID09139**
Project Name	**Educational Organisation Using ServiceNow**
Maximum Marks	**4 Marks**

Solution Architecture:

Goals of the Architecture:

- To design a centralized educational management system using ServiceNow.
- To automate the admission process and student data management.
- To integrate ServiceNow databases and workflow automation for real-time updates.
- To ensure secure data storage, analytics, and monitoring for educational operations.
- To provide a smooth interface for students, parents, and administrators.

Key Components:

- **Admission Table (u_ut_admission):** Manages student admission records with status transitions (New → In Progress → Joined → Rejoined → Closed → Canceled).
- **Integration Layer (ServiceNow IntegrationHub):** Handles communication between the Student/Parent interface and the ServiceNow database.
- **ServiceNow Database (CMDB / Custom Tables):** Stores all institutional data, including student, parent, and academic information.

- **Analytics & Reporting:** Generates reports for admissions, student progress, and system performance.
- **Security & Monitoring Layer:** Ensures data protection, user authentication, and system monitoring.
- **Cloud Storage and Email Notifications:** Sends alerts and admission updates automatically.

Development Phases:

1. **Set up the ServiceNow Instance** – Initialize and configure the instance for development.
2. **Create Custom Tables** – Build the Admission Table and related data structures for student and faculty records.
3. **Design Forms and Layouts** – Customize forms for data entry and simplify the user interface for administrators.
4. **Implement Process Flows** – Define workflows for admissions, updates, and approvals.
5. **Develop Client Scripts** – Add automation, validation, and dynamic behavior to forms.
6. **Integrate with Cloud and Email Services** – Enable notifications for admissions and progress updates.
7. **Apply Security and Monitoring Controls** – Configure access control and performance tracking.
8. **Test and Deploy the System** – Validate all workflows and ensure seamless data flow between components.

Solution Architecture Description:

The **Educational Organisation Using ServiceNow** solution architecture is designed to digitalize and automate the complete academic and administrative workflow of educational institutions. The system integrates various components like the **Admission Table**, **Integration Layer**, and **ServiceNow Database** to create a unified platform that manages student admissions, progress tracking, and communication efficiently.

Students or parents access the system through a user-friendly interface, which interacts with the **Integration Layer** (ServiceNow IntegrationHub) to connect with the ServiceNow backend. The **Admission Table** records every admission status—from new application to closure—while ensuring data integrity and accuracy. All records are securely stored in the ServiceNow Database (CMDB/Custom Tables), with automated workflows managing approvals, updates, and notifications.

The architecture also includes **Analytics & Reporting** modules for administrators to monitor institutional performance and **Security & Monitoring** layers to protect sensitive information. Cloud storage and email notifications enhance accessibility and communication.

This solution ensures **automation, transparency, and scalability**, allowing institutions to manage all their academic and administrative processes efficiently through a single, secure ServiceNow platform.

Example – Solution Architecture Diagram:

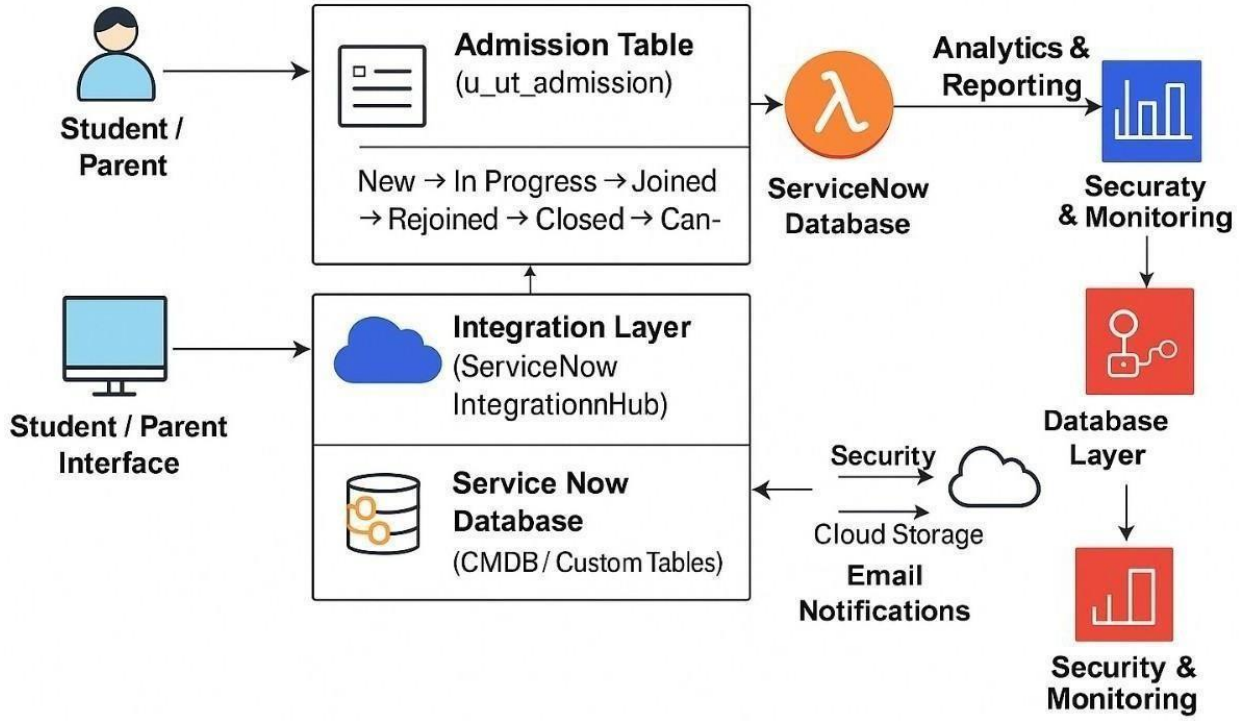

Figure 1: Architecture and data flow of the *Educational Organisation Using ServiceNow* application.