Date	02 November 2025
Team ID	NM2025TMID06204
Project Name	Prevent user deletion if assigned to an incident
Maximum Marks	4 Marks

Solution Architecture:

Goals of the Architecture:

- Provide automated student data management system

- Streamline admission process with real-time tracking

- Ensure accurate academic calculations and results

- Enable transparent communication with parents

Key Components:

- **Salesforce Table** (Student master data with Admin Number, Personal details)

- **Admission Table** (Extends Salesforce - Admission status, School details, Address)

- **Student Progress Table** (Academic records - Marks, Totals, Percentage, Results)

- **Client Scripts** (Auto-population, Pincode mapping, Grade calculations)

- **Process Flows** (Admission workflow: New→In Progress→Joined→Closed)

- **Form Designs** (User-friendly interfaces for each table)

- **Number Maintenance** (Auto-generation of Admin Numbers)

Development Phases:

1. **Table Creation** - Build Salesforce, Admission, Student Progress tables

2. **Automation Setup** - Implement client scripts for calculations and data mapping

3. **Process Configuration** - Set up admission workflow and form designs

4. **Testing & Validation** - Verify all automations and user workflows

⚙ Solution Architecture Description:

The Educational Management System architecture is built on a hierarchical table structure that ensures seamless data flow from student registration through academic tracking. The foundation begins with the Salesforce table containing core student information, which extends to the Admission table for process-specific data, and finally references the Student Progress table for academic performance management.

The architecture incorporates intelligent automation through client scripts that handle auto-population of student data when admission numbers are selected, automatic address mapping based on pincode entries, and real-time calculation of academic results including totals, percentages, and pass/fail status. Business rules enforce data integrity while process flows manage the complete admission lifecycle from application submission to final enrollment.

Form designs are optimized for each user role, providing administrative staff with efficient data entry interfaces, teachers with straightforward grade input screens, and parents with transparent status tracking. The system leverages ServiceNow's native capabilities to create a cohesive ecosystem that eliminates manual errors, reduces administrative workload, and provides real-time visibility across all educational processes.

Example - Solution Architecture Diagram:

EDUCATIONAL MANAGEMENT SYSTEM ARCHITECTURE

Data Layer

Salesforce Table (Base)	Admission Table (Extends)	Student Progress Table
Admin Number Student Details	Admission Status School Information Address Details	Subject Marks Total/Percentage Result

Automation Layer

Auto-Populate Scripts	Pincode Mapping Scripts	Calculation Scripts
Fills admission form automatically	Maps address fiom pincode input	Calculates totals and results

Process Layer

Admission Process Flow

NEW → IN PROGRESS → JOINED → CLOSED

Interface Layer

Admin Interface	Teacher Interface	Parent Portal
Data management Process tracking	Grade entry Result viewing	Status checking Progress monitoring

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