

Project Design Phase

Solution Architecture

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| Date | 23 June 2025 |
| Team ID | LTVIP2025TMID20393 |
| Project Name | Educational Organisation Using ServiceNow |
| Maximum Marks | 4 Marks |

Introduction:

The proposed solution, *Educational Organisation Using ServiceNow*, is designed to address the operational inefficiencies commonly faced by educational institutions. These include manual student registration, fragmented admission workflows, inconsistent academic tracking, and limited administrative visibility. By leveraging ServiceNow's no-code platform, the solution aims to deliver a secure, scalable, and role-based digital system that streamlines institutional processes and enhances stakeholder engagement.

Architecture Overview:

The solution architecture bridges the gap between institutional challenges and ServiceNow's digital capabilities. It utilizes native ServiceNow modules and tools to deliver a modular, maintainable, and user-friendly educational management platform.

Core Components:

User Interface Layer

- Service Portal access for students, parents, teachers, and administrators
- Role-based access control to ensure secure and relevant data visibility

Application Logic Layer

- Flow Designer for automating admission workflows and notifications
- Client Scripts for real-time academic calculations (e.g., total marks, percentage)
- Business Rules for enforcing data validation and automation logic

Data Layer

- Custom tables for storing student profiles, academic records, and admission data
- Defined relationships between student and academic entities
- Secure data access using Access Control Lists (ACLs)

Reporting & Analytics Layer

- Dashboards for administrative insights (e.g., admissions, academic performance)

- Performance Analytics for trend analysis and visual data representation

Notification System[Unable to make it work]

- Email and SMS alerts for admission status updates and academic notifications
- Configurable templates for personalized communication

Data Flow Summary:

- **Registration:** Admin inputs student data → Auto-generated ID → Stored in student table
- **Admission:** Form submission → Workflow triggers verification → Status updated → Notification sent
- **Progress Tracking:** Teacher enters marks → Script calculates total and percentage → Stored in progress table
- **Dashboard:** Admin accesses real-time statistics → Applies filters → Uses insights for decision-making

Development Phases:

Phase 1: Implementation of student registration and login functionality

Phase 2: Integration of admission workflow and notification system

Phase 3: Development of academic progress tracking and calculation logic

Phase 4: Deployment of administrative dashboards and analytics tools

