

Date: 01/11/2025

Time ID: NM2025TMID06892

Project Name :**Education Organisation using ServiceNow**

Maximum Marks: 2 Marks

Project Design Phase

Solution Architecture

1. Goals

The primary goal of the **Solution Architecture** is to automate and enhance academic and administrative processes in educational institutions using **ServiceNow**, ensuring improved efficiency, accuracy, and user experience.

Below are the key goals:

Goal	Description
Automation	Eliminate manual request handling by using automated workflows within ServiceNow.
Efficiency	Reduce turnaround time for student and faculty requests and enhance service delivery.
Accuracy	Ensure all academic or administrative requests are routed to the correct department automatically.
Scalability	Design a flexible system that can handle an increasing number of users and requests.
Integration	Seamlessly connect with existing educational tools such as student portals, HR systems, and email servers.
Visibility	Provide real-time dashboards for administrators to monitor institutional performance and workload.

Goal	Description
Security & Compliance	Protect sensitive data through authentication, encryption, and role-based access control.

2. Key Components

Component	Description
Request Intake Module	Collects student and staff requests through forms, chatbots, and portals within ServiceNow.
Categorization Engine	Classifies requests into academic, technical, or administrative types for proper routing.
Workflow Automation Engine	Uses predefined rules and ServiceNow Flow Designer to automate task assignment and approvals.
User Database	Stores user information including profiles, roles, and previous request history.
Notification & Alert System	Sends real-time notifications and updates on request status and approvals.
Performance Dashboard	Displays analytics on service requests, response time, and departmental efficiency.
Integration Layer	Connects ServiceNow with other educational management systems and communication tools.
Security Layer	Provides access control, authentication, and data protection for all ServiceNow transactions.

3. Development Phases

Phase	Objective	Key Activities	Deliverables
Phase 1: Requirement Analysis	Identify existing manual challenges and define system goals.	Conduct stakeholder meetings, collect feedback, and finalize scope.	Requirement Specification Document

Phase	Objective	Key Activities	Deliverables
Phase 2: System Design	Create architecture diagrams and data flow models.	Develop design blueprints and define workflow logic.	Design Blueprint, Data Flow Diagram
Phase 3: Development	Build and configure ServiceNow modules for workflow automation.	Develop frontend forms, backend workflows, and database tables.	Working Prototype
Phase 4: Testing & Validation	Ensure system accuracy and security.	Conduct unit, integration, and performance testing.	Test Report, QA Approval
Phase 5: Deployment	Deploy solution for real-time use.	Configure system in production and provide training.	Deployed Application
Phase 6: Monitoring & Maintenance	Continuously track system performance and implement updates.	Gather feedback, monitor dashboards, and refine automation.	Maintenance Logs, Performance Reports

Solution Architecture Design

The **Education Organisation using ServiceNow** architecture integrates multiple layers of automation, security, and analytics.

It includes a **student and faculty portal** as the frontend, a **workflow automation engine** for backend processing, and a **secure database** for managing user and request data.

The architecture enables seamless integration with institutional systems like ERP, HR, and email platforms.

Dashboards and reports provide real-time insights into performance, efficiency, and user satisfaction — ensuring transparency and operational excellence across the organization.