

Date: 01/11/2025

Time ID: NM2025TMID06892

Project Name :**Education Organisation using ServiceNow**

Maximum Marks: 2 Marks

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## Project Design Phase

### Solution Architecture

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

<b>Goal</b>	<b>Description</b>
<b>Security &amp; Compliance</b>	Protect sensitive data through authentication, encryption, and role-based access control.

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## 2. Key Components

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

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## 3. Development Phases

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

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