Project Planning Phase Report

Project Title:

Educational Organisation Using ServiceNow

Category:

ServiceNow System Administrator

Skills Required:

ServiceNow, JavaScript, Data Analysis, REST API, Workflow Automation

1. Introduction

Effective project planning is essential for ensuring on-time delivery, efficient resource management, and successful execution of software solutions.

The **"Educational Organisation Using ServiceNow"** project aims to automate and simplify educational administrative operations — including student admissions, record management, and progress tracking — through workflow automation and client scripting.

This phase outlines the **timeline, resources, milestones, risk management**, and **execution strategy** to ensure smooth development, deployment, and documentation of the project.

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2. Objectives of Project Planning

- To define a structured roadmap for executing all project phases.

- To allocate human and technical resources effectively.

- To set achievable milestones and deliverables for each phase.

- To identify potential risks and establish mitigation plans.

- To ensure project execution aligns with defined scope, cost, and timeline.

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3. Project Scope

In Scope:

- Automating the **admission process** using ServiceNow custom tables.

- Creating a **student progress module** that calculates results automatically.

- Designing **form layouts** and **client scripts** for efficient data entry.

- Implementing **process flows** to track admission statuses.

Out of Scope:

- Integration with external LMS or ERP systems.

- Mobile version or SMS notification system.

- Full-scale production deployment across multiple schools.

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4. Project Deliverables

Sl. No	Deliverable	Description
1	Requirement Specification Document	Detailed list of functional and non-functional requirements.
2	System Design Document	Architecture, data flow, and workflow designs.
3	Database & Tables	Salesforce, Admission, and Student Progress tables.
4	Client Scripts & Process Flows	Automation for data population, calculations, and workflow transitions.
5	Testing Reports	Unit, integration, and performance testing results.
6	Final Project Report	Consolidated project documentation with screenshots.

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5. Work Breakdown Structure (WBS)

Phase	Task	Duration
1. Requirement Analysis	Identify requirements and scope	1 Week
2. System Design	Define architecture, database, and workflows	1 Week
3. Implementation	Develop tables, forms, and scripts	2 Weeks
4. Integration	Connect scripts and workflows for automation	2 Weeks

5. Testing	Perform functional and performance testing	1 Week
6. Deployment	Deploy project in developer instance	1 Week
7. Documentation	Prepare reports and GitHub submission	1 Week

Total Estimated Duration: 9 Weeks

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6. Gantt Chart (Project Schedule)

Phase	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9
Requirement Analysis	■								
System Design		■							
Implementation			■	■					
Integration				■	■				
Testing					■				
Deployment						■			
Documentation							■	■	

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7. Resource Planning

A. Human Resources

Role	Responsibility
Project Manager	Plan, track, and coordinate development.
ServiceNow Administrator	Configure tables, forms, and process flows.
Backend Developer	Implement client scripts and data automation logic.

Tester/QA Engineer	Conduct functionality and performance testing.
Documentation Lead	Prepare project documentation and reports.

B. Hardware Resources

- Laptop/PC with minimum 8GB RAM and Intel i5 Processor.

- Stable internet connection.

C. Software Resources

- ServiceNow Developer Instance

- JavaScript (Client Scripting)

- JMeter (Performance Testing)

- Postman (API Testing)

- Visual Studio Code

- Google Docs / MS Word for reports

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8. Risk Analysis and Mitigation Plan

Risk ID	Risk Description	Impact	Likelihood	Mitigation Plan
R1	Errors in client script logic	High	Medium	Test scripts independently before deployment.
R2	Table linking issues in ServiceNow	High	Low	Validate reference fields before data entry.
R3	Integration or process flow misconfiguration	Medium	Medium	Use version control (update sets) to track changes.

| R4 | Limited dataset for testing | Medium | Medium | Create mock student data for validation. |
| R5 | Time overruns due to debugging | Medium | High | Allocate buffer time and parallelize tasks. |

9. Cost Estimation

Item	Estimated Cost (INR)
Developer Tools (Software Licenses)	5,000
Cloud Resources (Optional)	3,000
Documentation & Reporting	2,000
Miscellaneous Expenses	1,000
Total Estimated Cost	**₹11,000**

(Note: Uses free ServiceNow Developer Instance; no additional licensing cost.)

10. Communication Plan

Activity	Frequency	Mode of Communication
Team Meetings	Weekly	Google Meet / Microsoft Teams
Progress Tracking	Bi-Weekly	ServiceNow Dashboard Reports
Code Updates	Continuous	GitHub Repository
Client Review (Faculty Evaluation)	Monthly	Presentation / Demonstration
Documentation Updates	Continuous	Shared Google Drive / Docs

11. Quality Assurance Plan

Quality Parameters

1. **Code Quality:** All scripts reviewed and tested for efficiency.

2. **Form Validation:** Mandatory fields and proper data formats enforced.

3. **Workflow Testing:** Admission and progress flows verified through all states.

4. **Performance Metrics:** Response time ≤ 3 seconds.

5. **User Interface Consistency:** Standardized layout across all forms.

Testing Approach

- Unit Testing for individual modules.

- Integration Testing for workflow and data exchange.

- User Acceptance Testing (UAT) for overall functionality.

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12. Milestones and Deliverables

Milestone	Description	Due Date
M1	Completion of Requirement Analysis	Week 1
M2	Approval of System Design	Week 2
M3	Development of Tables and Scripts	Week 4
M4	Integration with Process Flows	Week 6
M5	Testing Completion	Week 7
M6	Deployment and Final Documentation	Week 9

13. Expected Outcomes

- A fully functional educational management system in ServiceNow.

- Automated workflows for student admission and progress evaluation.

- Accurate and real-time result calculation using client scripts.

- Reduced manual effort through data-driven automation.

- Comprehensive reports and dashboards for decision-making.

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14. Conclusion

The **Project Planning Phase** provides a structured roadmap for the successful execution of the **Educational Organisation Using ServiceNow** project.

By defining the scope, resources, timeline, and risks, this plan ensures efficient progress through all subsequent phases — design, implementation, and testing.

With clear deliverables and a strong focus on quality and efficiency, this project will deliver a robust and scalable educational management platform built entirely within the ServiceNow environment.