

Project Design Phase

Solution Requirements (Functional & Non-functional)

Date	1 November 2025
Team ID	NM2025TMID03588
Project Name	Educational Organization using ServiceNow
Maximum Marks	4 Marks

Functional Requirements:

FR No.	Functional Requirement	Sub Requirement
FR-1	User Registration and Authentication	<ul style="list-style-type: none"> • Registration using institutional email ID. • Secure login through Single Sign-On (SSO). • Password reset and recovery via email. • Account activation through OTP verification.
FR-2	Student and Staff Information Management	<ul style="list-style-type: none"> • Maintain records of students and staff including personal, academic, and contact details. • Enable editing, updating, and deletion of records by authorized users. • Role-based access for data management.
FR-3	Course and Curriculum Management	<ul style="list-style-type: none"> • Admin can create and update course structures. • Faculty can upload learning materials and assignments. • Students can enroll and access assigned courses.
FR-4	Attendance and Performance Tracking	<ul style="list-style-type: none"> • Track student attendance records. • Generate automated performance reports. • Provide dashboards for quick academic progress view.
FR-5	Incident and Service Request Management	<ul style="list-style-type: none"> • Allow students and staff to raise technical or administrative issues. • Auto-assign incidents to responsible departments. • Notify users upon resolution.
FR-6	Communication and Notification System	<ul style="list-style-type: none"> • Send announcements to students, staff, or departments. • Integrate email and in-app notifications. • Maintain communication history for auditing.
FR-7	Feedback and Survey Management	<ul style="list-style-type: none"> • Collect feedback from students on courses and faculty. • Generate reports for institutional improvement. • Conduct surveys for academic evaluation.
FR-8	Dashboard and Reporting	<ul style="list-style-type: none"> • Provide analytics dashboards for administrators. • Generate visual and tabular reports for attendance, performance, and incident trends.

Non-Functional Requirements:

NFR No.	Non-Functional Requirement	Description
NFR-1	Usability	The interface should be intuitive and easy to use, providing a consistent experience for students, faculty, and administrators.
NFR-2	Security	Implements robust authentication, role-based access control, and encryption for sensitive data ensuring system confidentiality and integrity.
NFR-3	Reliability	Ensures continuous service availability and data consistency even under high user load or during maintenance operations.
NFR-4	Performance	All database transactions and automation workflows should execute efficiently with minimal response times.
NFR-5	Availability	System should be accessible 24/7 on the ServiceNow platform with minimal downtime and quick recovery options.
NFR-6	Scalability	The solution must support growth in users, data, and modules without affecting performance or availability.
NFR-7	Maintainability	Code should be modular, well-documented, and easy to update for new functionalities or enhancements.
NFR-8	Auditability	All system activities including record creation, updates, and deletions must be logged to ensure compliance and traceability.
NFR-9	Accessibility	The system should comply with accessibility standards, supporting users with disabilities through screen readers and keyboard navigation.