

Project Design Phase-II

Solution Requirements (Functional & Non-functional)

Date: 4 NOVEMBER 2025
Team ID: NM2025TMID00181
Project Name : Educational Organisation Using ServiceNow
Maximum Marks: 4 Marks

Functional Requirements:

Following are the detailed functional requirements of the proposed Educational Organisation Management System developed using ServiceNow.

| FR No. | Functional Requirement (Epic) | Sub Requirement (Story / Sub-Task) |
|--------|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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. |

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| 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:

Following are the detailed non-functional requirements ensuring performance, security, and maintainability of the system.

| 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. |

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| 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. |