

# Project Design Phase-II

## Solution Requirements (Functional & Non-functional)

Date: 1 NOVEMBER 2025

Team ID: NM2025TMID07474

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"><li>• Registration using institutional email ID.</li><li>• Secure login through Single Sign-On (SSO).</li><li>• Password reset and recovery via email.</li><li>• Account activation through OTP verification.</li></ul>                     |
| FR-2   | Student and Staff Information Management | <ul style="list-style-type: none"><li>• Maintain records of students and staff including personal, academic, and contact details.</li><li>• Enable editing, updating, and deletion of records by authorized users.</li><li>• Role-based access for data management.</li></ul> |
| FR-3   | Course and Curriculum Management         | <ul style="list-style-type: none"><li>• Admin can create and update course structures.</li><li>• Faculty can upload learning materials and assignments.</li><li>• Students can enroll and access assigned courses.</li></ul>  |
| FR-4   | Attendance and Performance Tracking      | <ul style="list-style-type: none"><li>• Track student attendance records.</li><li>• Generate automated performance reports.</li><li>• Provide dashboards for quick academic progress view.</li></ul>  |
| FR-5   | Incident and Service Request Management  | <ul style="list-style-type: none"><li>• Allow students and staff to raise technical or administrative issues.</li><li>• Auto-assign incidents to responsible departments.</li><li>• Notify users upon resolution.</li></ul>   |
| FR-6   | Communication and Notification System    | <ul style="list-style-type: none"><li>• Send announcements to students, staff, or departments.</li><li>• Integrate email and in-app notifications.</li><li>• Maintain communication history for auditing.</li></ul>   |
| FR-7   | Feedback and Survey Management           | <ul style="list-style-type: none"><li>• Collect feedback from students on courses and faculty.</li><li>• Generate reports for institutional improvement.</li><li>• Conduct surveys for academic evaluation.</li></ul>   |
| FR-8   | Dashboard and Reporting                  | <ul style="list-style-type: none"><li>• Provide analytics dashboards for administrators.</li><li>• Generate visual and tabular reports for attendance, performance, and incident trends.</li></ul>  |

# 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.  |
| 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.     |