Date	30/10/2025
Time id	NM2025TMID07726
Project name	Education organization using servicenow
Maximum mark	4 marks

Solution requirements (functional and non-functional)

Functional Requirements

Functional Area	Requirement ID	Functional Requirement Description	Target User(s)	ServiceNow Module(s)
IT Service Management (ITSM)	ITSM-001	The system shall provide a self-service portal for students, faculty, and staff to report IT incidents (e.g., WiFi issues, software problems) and submit service requests (e.g., software installation, new equipment).	Students, Faculty, Staff	Service Portal, Incident Management, Request Management
	ITSM-002	The system shall automatically route IT incidents to the appropriate support team (e.g., network team, help desk) based on pre-defined criteria (e.g.,	IT Agents, IT Managers	Incident Management, Assignment Rules

		category, location).		
	ITSM-003	The system shall track the lifecycle of all IT assets (laptops, lab equipment, software licenses) from procurement to retirement.	IT Asset Managers, Procurement Staff	IT Asset Management (ITAM)
HR Service Delivery (HRSD)	HRSD-001	The system shall provide a centralized portal for employee HR services, including onboarding, benefits inquiries, and leave requests.	Faculty, Staff, HR Staff	Employee Service Management (ESM), HRSD
	HRSD-002	The system shall manage the onboarding workflow for new hires (faculty and staff), ensuring all necessary tasks (e.g., IT setup, building access, payroll) are completed	HR Staff, New Hires, IT Staff	HRSD, Workflow Automation

		by relevant departments.		
Campus Facilities	FM-001	The system shall allow users to report facility maintenance requests (e.g., broken lights, water leaks, classroom issues) via the self-service portal.	Students, Faculty, Staff	Facilities Service Management, Custom App
	FM-002	The system shall enable the scheduling and booking of campus facilities and equipment, such as lecture halls, meeting rooms, and lab equipment.	Faculty, Staff, Students	Facilities Service Management, Workplace Service Delivery
Educational Operations	EDU-001	The system shall provide a dedicated portal for students to access information regarding course catalogs, schedules, grade inquiries, and	Students	Education Operations, Service Portal

		announcements.		
	EDU-002	The system shall manage library operations, including book issuance, returns, and fine tracking.	Library Staff, Students	Custom Application, ITAM (for non-IT assets)
	EDU-003	The system shall provide dashboards for faculty and staff to monitor student progress and manage assignments/assessments.	Faculty, Staff	Education Operations, Custom App
Data & Reporting	DR-001	The system shall provide real-time dashboards and reports on key performance indicators (KPIs) such as incident resolution times, service adoption rates, and asset utilization.	Managers, Admins, Stakeholders	Reporting & Analytics

| | DR-002 | The system shall ensure data privacy and security compliance with educational regulations (e.g., FERPA in the US). | |

Non-Functional Requirements

Category	Non-Functional Requirement Description	Specific/Measurable Criteria
Performance	The system must be responsive under typical and peak user loads.	Key pages (e.g., login, service catalog, knowledge base) should load within **3 seconds** for **90%** of users under a load of **5,000 concurrent users**.
Scalability	The system must be able to accommodate an increasing number of users and data over time without performance degradation.	The system shall support up to **20,000 concurrent users** (students, faculty, staff) and a **30% annual increase** in data volume without significant degradation of performance for the next **3 years**.
Availability/Reliability	The system needs to be available consistently during specified hours, with minimal unplanned downtime.	Minimum target availability of **99.9%** during standard operational hours (e.g., 6 AM to 10 PM, 7 days a week), excluding periods of planned

		maintenance. Planned downtime should not exceed **X hours per month** (e.g., 2 hours).
Security	The system must protect sensitive student and employee data from unauthorized access or breaches.	The application must use encryption protocols for all sensitive data transmission and storage. User access must be controlled via robust authentication and authorization (e.g., role-based access control, MFA integration with existing campus systems). All unauthorized access attempts must be logged for audit purposes.
Usability/Accessibility	The system should be intuitive and easy to use for a diverse user base (students, faculty, IT staff), including those with disabilities.	The system should be compliant with relevant web accessibility standards such as **WCAG 2.1 Level AA**. The average time for a new user to complete common tasks (e.g., submitting an IT ticket, finding a knowledge article) should not exceed **5 minutes** after minimal training.
Maintainability	The system should be easy to update, fix, and enhance over its lifecycle.	A fix for a high-priority issue should be deployable within **4 hours**. System modifications should follow internal coding standards and utilize modular architecture to reduce ripple effects of changes.

Compatibility/Interoperability	The system must seamlessly integrate and operate with other core educational systems (e.g., Student Information System, LMS, Active Directory).	The ServiceNow system must integrate with the existing Student Information System via defined APIs/file transfers to import/export student and course data accurately. It must function correctly on all standard campus browsers (Chrome, Firefox, Safari, Edge) and operating systems (Windows, macOS).
Compliance	The system must adhere to relevant educational, data privacy, and other regulatory standards.	The system must comply with data protection and privacy regulations relevant to educational institutions (e.g., FERPA, GDPR if applicable). Data retention policies must be strictly enforced.
Recoverability	In case of a system failure or disaster, data must be restorable within a defined timeframe.	