



LEARNING MANAGEMENT SYSTEM FOR SYS COLLEGE

REQUIREMENT ELICITATION QUESTIONNAIRES

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1. Purpose

This document serves as a foundational reference to understand the expectations, needs, and constraints of each stakeholder group, ensuring that the project requirements are accurately defined and aligned with business objectives. The responses collected will guide the development of a comprehensive and validated set of requirements for successful project execution.

2. Academic Staff

#	STAKEHOLDERS INTERVIEWED	DESIGNATION	DEPARTMENT
1	Dr. Ayesha Rehman	Senior Lecturer	Health Sciences
2	Mr. Imran Ali	Lecturer	Engineering
3	Ms. Sana Qureshi	Senior Lecturer	Arts
4	Mr. Bilal Shah	Lecturer	Social Sciences

Q-1. What LMS features are essential for delivering lectures and managing courses?

Response Summary:

The majority of academic staff emphasized the importance of a centralized platform for course content, student communication, and grading. Key features requested include:

- Structured modules for uploading weekly lectures and readings
- Assignment submission and auto-grading for quizzes
- Real-time announcements and discussion boards
- Calendar integration for lectures and deadlines

Quote:

“We need something that's intuitive, where I can drag-and-drop content and instantly publish updates. Moodle is powerful but feels outdated.”

(Ms. Qureshi)

Q-2. What challenges do you currently face in content sharing and student interaction?

Response Summary:

Challenges fall into three main areas:

- Fragmented systems (emails, Google Drive, physical handouts)
- Lack of student engagement tracking
- Difficulty managing group discussions or forum moderation

Quote:

“There’s no way to know who’s engaging unless I manually track everything. Students often say they didn’t receive the reading, which causes delays.”

(Mr. Ali)

Q-3. Would you benefit from automated attendance, grading, or feedback tools?

Response Summary:

Unanimous support for automation in:

- Marking MCQs and quizzes
- Sending automated reminders for assignments
- Attendance recording (via login tracking or session check-ins)

Quote:

“Marking takes a lot of time — even partial automation for objective assessments would be a huge relief.” *(Dr. Rehman)*

Q-4. How do you currently track student performance and engagement?

Response Summary:

Most use a mix of spreadsheets, email feedback, and gut feeling. There’s no unified view of student participation, making it difficult to identify at-risk students early.

Quote:

“I only notice performance issues after midterm results come in. I’d prefer a dashboard that flags concerns earlier.” *(Mr. Shah)*

Q-5. What integrations would be most helpful (Zoom, Teams, external resources)?

Response Summary:

- Strong preference for Microsoft Teams and Zoom integration for live classes
- Desire for embedding YouTube, PDFs, and Google Docs within modules
- Need for integration with anti-plagiarism tools like Turnitin

Quote:

“A seamless video link with attendance capture would save so much time — currently we’re juggling multiple apps.” **(Ms. Qureshi)**

3. **Department Heads / Academic Managers**

#	STAKEHOLDERS INTERVIEWED	DESIGNATION
1	Dr. Farooq Siddiqui	Head of Science Faculty
2	Prof. Amna Tariq	Head of Social Sciences School
3	Ms. Nida Hassan	Program Coordinator – Engineering

Q-1. How do you monitor course quality across your department?

Response Summary:

Monitoring is currently **manual and inconsistent**. Heads rely on periodic staff meetings, student feedback forms (collected once or twice per term), and sporadic classroom observations. There's a lack of real-time data.

Quote:

“We don’t have consistent insight into how course materials are updated or how students are performing until we run formal evaluations at term-end.”
(Dr. Siddiqui)

Q-2. What data insights would help you improve teaching outcomes?

Response Summary:

Department Heads want dashboards that give:

- Student attendance and engagement metrics by course
- Completion rates for modules and assignments
- Grade distribution and performance analytics by faculty

Quote:

“If I could see real-time insights into dropout risks, low-performing subjects, or disengaged classes, I’d intervene much earlier.” **(Prof. Tariq)**

Q-3. Do you need dashboards or reporting tools within the LMS?

Response Summary:

Yes, **dashboards were highlighted as critical**. Stakeholders are looking for:

- Course-level dashboards (student progress, participation)
- Staff-level performance indicators (grading timelines, engagement)
- Reports exportable in Excel or PDF for management reviews

Quote:

“A built-in dashboard that can generate department-level reports without involving IT would drastically improve our academic planning.” (*Ms. Hassan*)

4. **Students**

#	STAKEHOLDERS INTERVIEWED	CLASS	DEPARTMENT
1	Zainab M.	2nd Year	Health Sciences
2	Ali Raza	1st Year	Engineering
3	Fatima Ahsan	Final Year	Arts
4	Hamza Khan	3rd Year	Social Sciences

Q-1. How do you currently access lectures, notes, and assignments?

Response Summary:

Students reported accessing materials through a **mix of emails, WhatsApp groups, Google Drive links, and handouts**. There is no centralized system, which leads to confusion and missed deadlines.

Quote:

“Some lecturers use email, others post on a shared Drive. It’s easy to miss updates because we’re not checking all platforms constantly.” (*Zainab M.*)

Q-2. What would improve your learning experience on a digital platform?

Response Summary:

Students strongly prefer a **single, mobile-friendly platform** where they can:

- View all course content and deadlines in one place
- Track their progress (completed modules, grades)
- Receive clear, timely notifications

Quote:

“Just give us one portal for everything—videos, notes, assignments, grades. It’s stressful juggling 4-5 different tools.” (*Ali Raza*)

Q-3. Are mobile and offline capabilities important to you?

Response Summary:

Yes, especially for students with limited or unreliable internet access at home. Offline viewing of lectures and downloadable resources are seen as highly beneficial.

Quote:

“Sometimes I study during my commute. If I could download lectures ahead of time, that would be a game changer.” (*Fatima Ahsan*)

Q-4. What type of notifications/reminders are helpful (assignments, grades, deadlines)?

Response Summary:

Students want **automated reminders** for:

- Upcoming assignment due dates
- Class cancellations or changes
- Grade updates or feedback posted.
- Preferred channels: **in-app notifications** + **email** or **SMS** as backup.

Quote:

“Push notifications for due dates would keep us on track. Many of us miss deadlines because there’s no system alert.” (*Hamza Khan*)

5. **Administrative Staff**

#	STAKEHOLDERS INTERVIEWED	DESIGNATION	DEPARTMENT
1	Ms. Farah Adeel	Coordinator	Business Dept
2	Mr. Kamran Javed	Records Officer	Admin Dept
3	Ms. Lubna Rafique	Admin Assistant	Admin Dept

Q-1. What repetitive tasks can be automated through LMS (e.g., enrollments, notifications)?

Response Summary:

Staff reported spending a significant amount of time on **manual enrollment**, **sending reminders**, **class roster updates**, and **attendance tracking**. They expressed interest in automating:

- Student enrollment into courses after registration
- Sending batch reminders for document submissions or fee deadlines
- Generating weekly attendance and performance reports

Quote:

“Even a simple reminder for overdue assignments or fee payments saves us dozens of calls each week.” (*Ms. Farah Adeel*)

Q-2. What issues do you face in managing course schedules or student data?

Response Summary:

The team highlighted issues with:

- **Data fragmentation** across Excel files and internal systems
- **Scheduling conflicts** due to lack of real-time updates
- Limited visibility into course completion rates and faculty timetables

Quote:

“Sometimes two classes are booked in the same room because there’s no live calendar sync. We find out only when students show up.” (*Mr. Kamran Javed*)

Q-3. Do you require audit trails or compliance features?

Response Summary:

Yes, especially for regulatory reporting and quality audits. Desired features include:

- Logs for student activity (logins, submissions, feedback)
- Timestamped history of grade changes or academic warnings
- Exportable reports for accreditation bodies or internal reviews

Quote:

“We’re asked to submit audit trails for exams and attendance every semester. Right now, it’s mostly manual. An LMS with this feature would save weeks of work.” (*Ms. Lubna Rafique*)

6. IT Department

#	STAKEHOLDERS INTERVIEWED	DESIGNATION
1	Mr. Asif Mehmood	IT Manager
2	Ms. Rabia Khalid	Network & Infrastructure Specialist
3	Mr. Hassan Tariq	System Support Engineer

Q-1. What is the current tech stack and integration capability?

Response Summary:

The IT team stated that the college currently uses a **hybrid infrastructure**, with on-prem servers for internal databases (Oracle) and some cloud-based tools. They emphasized the importance of **API compatibility** and **SAML-based Single Sign-On (SSO)** for integration with internal systems like:

- Student Information System (SIS)

- HRMS (Human Resource Management System)
- Microsoft Active Directory

Quote:

“Any LMS we use must integrate with our SIS and AD using open standards, preferably via API or middleware like Zapier or Microsoft Power Automate.”
(**Mr. Mehmood**)

Q-2. What security/authentication protocols need to be supported?

Response Summary:

Security is a top concern. Requirements include:

- Role-based access control (RBAC)
- Multi-Factor Authentication (MFA)
- Support for SAML 2.0 / OAuth2 for SSO
- End-to-end encryption for sensitive data (especially assessments and personal information)

Quote:

“We can't risk data leaks, especially around grades and student PII. The LMS must align with ISO/IEC 27001 and GDPR practices.” (**Ms. Rabia Khalid**)

Q-3. What is your preferred hosting model: on-prem, hybrid, or cloud?

Response Summary:

The team favors a **cloud-based solution** with regional data hosting (ideally within country limits for compliance), but they are open to a hybrid model if it allows more **control over backups and data recovery**.

Quote:

“A managed cloud solution would reduce our overhead, but we'd need admin control and local backups for peace of mind.” (**Mr. Hassan Tariq**)

7. Executives (VPs, Sponsor)

#	STAKEHOLDERS INTERVIEWED	DESIGNATION
1	Prof. Dr. Khalid Zaman	Vice President
2	Ms. Saima Munir	Dean
3	Mr. Faisal Rafiq	Chief Transformation Officer (Project Sponsor)

Q-1. What are the strategic KPIs the LMS must influence?

Response Summary:

Executives outlined the following as high-level strategic KPIs the LMS is expected to directly impact:

- Student retention and course completion rates
- Faculty engagement and content delivery compliance
- Accreditation preparedness and academic audit efficiency
- Student satisfaction scores (via surveys/feedback)
- Reduction in administrative turnaround time (e.g., grading, reporting)
- Uptake of blended/hybrid learning formats

Quote:

“Our LMS must give us the data to track how education delivery translates into outcomes—graduation rates, feedback scores, and teaching consistency.” *(Dr. Zaman)*

Q-2. What is your expected ROI or success criteria for this project?

Response Summary:

Executives expect the ROI to be **multi-dimensional**, not just financial. Success will be defined by:

- **High adoption** among students and academic staff (>85% active use)
- **Operational savings** from automation (e.g., grade reporting, attendance)
- Enhanced institutional reputation (e.g., through digital transformation and audit readiness)
- **Improved student learning outcomes**
- Competitive advantage for marketing and student recruitment

Quote:

“This LMS must position us as a modern institution. ROI means saving time, improving outcomes, and preparing us for the next decade of education.” *(Mr. Rafiq)*

Q-3. How important is scalability and multi-campus support?

Response Summary:

Scalability is considered **critical**. The institution plans to:

- Expand to remote campuses and partner institutions

- Support multiple programs and faculties under a **single unified platform**
- Maintain centralized governance with localized flexibility (e.g., per-campus roles, calendars)

Quote:

“We need a scalable solution. Tomorrow we may onboard a new campus—or even a corporate training wing. The platform should grow with us, not constrain us.” (*Ms. Munir*)

8. Conclusion – Stakeholder Expectations & System Overview

The stakeholder interviews conducted across academic, administrative, technical, and executive roles have collectively shaped a high-level vision for the proposed **Learning Management System (LMS)**. While priorities vary by role, there is a strong, shared demand for a **centralized, user-friendly, scalable platform** that supports modern education delivery and streamlines operations.

8.1 Key Expectations from Stakeholders

- **Academic Staff** seek tools for structured content delivery, assignment management, student performance tracking, and interactive learning features such as quizzes, discussions, and feedback options.
- **Department Heads & Academic Managers** require **dashboards and reporting tools** that provide real-time insights into student progress, faculty engagement, and curriculum effectiveness to support timely academic decisions.
- **Students** want a **mobile-friendly, centralized portal** for accessing all learning materials, tracking progress, receiving timely reminders, and interacting with faculty all in one place, preferably with offline access.
- **Administrative Staff** emphasize the need for **automation of repetitive tasks**, centralized scheduling, easier communication with students, and audit-friendly activity logs.
- **IT Department** demands a **secure, scalable, and integrable system**, supporting SSO, APIs, role-based access, and cloud-hosting options with compliance to security and privacy standards.

- **Executives & Sponsors** expect the LMS to drive **institutional KPIs** such as student retention, teaching effectiveness, and operational efficiency. The system must be **scalable across campuses**, enable data-driven decision-making, and contribute directly to strategic goals like accreditation, digital transformation, and cost optimization.

8.2 High-Level System Requirements Identified

- Unified content management for courses and learning resources
- Student performance analytics and visual dashboards
- Role-based access control for faculty, students, admins, and executives
- Mobile responsiveness and offline access capability
- Automated alerts, reminders, and grading workflows
- Secure integration with Student Information Systems (SIS), Active Directory, and HR systems
- Scalability for multi-campus deployment
- Compliance with educational and data privacy standards

For a detailed mapping of high-level system requirements to stakeholder groups and departments, please refer to **Appendix A: System Requirements Matrix**.

This collective input forms the foundation for the **Business Requirements Document (BRD)**, ensuring the system aligns with institutional goals and stakeholder needs across all levels.

Appendix A

SYSTEM REQUIREMENTS MATRIX

#	REQUIREMENT	STAKEHOLDER GROUP	DEPARTMENT / FUNCTION
1	Centralized course content and learning material management	Academic Staff, Students	Faculty / Academic Affairs
2	Student progress tracking and performance analytics	Faculty, Dept. Heads, Execs	Academic, Quality Assurance
3	Automated assignment submission and grading workflows	Faculty, Admin Staff	Academic Operations
4	Mobile-friendly interface and offline access	Students	Student Affairs / IT
5	Push notifications and alerts for deadlines/grades	Students, Faculty	Academic Affairs / Communications
6	Role-based access control (RBAC)	IT Department, Execs	IT / Information Security
7	Real-time dashboards and academic reporting	Department Heads, Executives	Academic Affairs / Strategic Planning
8	Integration with SIS, HRMS, and Active Directory	IT Department	IT / Infrastructure
9	Cloud-based hosting with backup and scalability	IT Department, Executives	IT / Digital Transformation
10	Audit trails for grades, attendance, and system activity	Admin Staff, QA Officers	Compliance / QA
11	Multi-campus support and scalability	Executives, IT Dept.	Institutional Planning / IT

12	KPI tracking for retention, engagement, and teaching output	Executives, Academic Managers	Strategic Leadership / Inst KPIs
13	Secure authentication (SSO, MFA, SAML)	IT Department	Information Security
14	User training and change management support	Academic Staff, Admin Staff	HR / Professional Development

Table A1: System Requirements Matrix

This matrix outlines the high-level functional requirements identified through stakeholder interviews, mapping each requirement to its corresponding stakeholder group and functional department to ensure traceability and alignment with institutional needs.