

ACADEMIC CASE STUDY

Learning Management System Analysis

A structured systems-analysis case study examining how user roles, course workflows, privacy needs, and information relationships shape a learning-management environment.

PORTFOLIO SNAPSHOT

- Requirements and workflow analysis
- Use-case and stakeholder mapping
- Feasibility, privacy, and information considerations
- Architecture and data-relationship source material

PROJECT OVERVIEW

From scenario to system view

The academic scenario required a learning-management environment that could support access, course resources, submissions, discussion, grading, and administrative management. The work focused on clarifying what each participant needs from the system and how information should move through the workflow.

OBJECTIVE

Translate a broad learning-management scenario into a clear set of user roles, actions, constraints, and information needs.

WORK COMPLETED

Mapped use cases, reviewed feasibility and privacy considerations, documented workflow needs, and connected the scenario to architecture and data relationships.

Key participants

LEARNER

Access course resources, submit work, participate in discussion, and review feedback.

INSTRUCTOR

Publish resources, moderate discussion, evaluate work, and communicate feedback.

ADMINISTRATOR

Manage courses, user roles, permissions, and platform-level information.

EXTERNAL SERVICE

Exchange files or meeting information with the learning-management environment.

WORKFLOW ANALYSIS

Academic use-case structure

The source work identified the following core actions and the roles associated with each one.

01 Sign in

Authenticate access for learners and instructors.

02 View course resources

Provide access to readings, rubrics, and media.

03 Submit course work

Capture files with validation, versioning, and receipt information.

04 Participate in discussion

Support publishing, responses, and moderation.

05 Manage courses and users

Maintain roles, permissions, and course-level access.

06 Evaluate and grade

Connect rubrics, comments, feedback, and evidence.

What this work demonstrates

- Ability to separate stakeholder needs into clear roles and actions.
- Attention to how permissions, data handling, and workflow steps affect a user-facing system.
- A structured approach to documenting requirements before implementation.

INFORMATION CONSIDERATIONS

Accuracy, privacy, and traceability

INFORMATION QUALITY

Course resources, submissions, comments, grades, and roles need clear ownership and accurate status information.

PRIVACY AND PERMISSIONS

Access should reflect the user role and course context, with appropriate control of submitted work, feedback, and records.

WORKFLOW TRACEABILITY

Submissions, versions, feedback, and follow-up steps benefit from a clear record of what happened and when.

PROFESSIONAL RELEVANCE

This case study demonstrates the ability to organize a complex information scenario, clarify user needs, and document practical considerations before system implementation. Those habits transfer directly to information management, records, documentation, operations, and junior systems-support work.