# CS 255 Module Two Assignment Template

## Functional Requirements

| **Functional Requirement** | **Rationale for Requirement** | **Source(s), APA format** |
| --- | --- | --- |
| User Authentication and Authorization | Ensuring secure access to the LMS is essential to protect user data and maintain system integrity. Only authorized users should be able to access specific areas based on their roles, such as students, instructors, and administrators. | SelectHub. (2024). LMS requirements. Retrieved from https://www.selecthub.com/lms-requirements/ |
| Course Content Management | An efficient LMS must allow instructors to upload, organize, and manage course materials, including lectures, readings, and assignments. This feature is vital for delivering course content effectively to students. | SaaSworthy. (2024). Moodle vs Canvas LMS vs Brightspace vs Blackboard Learn Comparison. Retrieved from https://www.saasworthy.com/compare/moodle-vs-canvas-lms-vs-brightspace-vs-blackboard-learn |
| Gradebook Management | Instructors need a centralized system to record and manage student grades. This feature helps students track their progress and enables instructors to evaluate performance efficiently. | Software Finder. (2024). Brightspace vs Blackboard. Retrieved from https://www.softwarefinder.com/brightspace-vs-blackboard |
| Discussion Forums | Facilitating interaction between students and instructors is key for an online learning environment. Discussion forums encourage engagement, collaborative learning, and community building. | Online Course Work. (2024). Comparing eLearning Platforms. Retrieved from https://www.onlinecourswork.com/comparing-elearning-platforms/ |
| Assignment Submission and Feedback | Students should be able to submit assignments online, and instructors should provide timely feedback. This functionality streamlines the assessment process and enhances learning outcomes. | SelectHub. (2024). LMS requirements. Retrieved from https://www.selecthub.com/lms-requirements/ |
| Real-Time Communication Tools | Including tools like chat, video conferencing, and messaging enhances communication and allows for real-time interaction, which is crucial for addressing immediate concerns and fostering a connected learning environment. | Overt Software. (2024). Choosing an LMS. Retrieved from https://www.overtsoftware.com/choosing-an-lms/ |

## Nonfunctional Requirements

| **Nonfunctional Requirement** | **Rationale for Requirement** | **Source(s), APA format** |
| --- | --- | --- |
| Scalability | The LMS should handle an increasing number of users and courses without performance issues. Scalability ensures the system can grow with the institution's needs. | SelectHub. (2024). LMS requirements. Retrieved from https://www.selecthub.com/lms-requirements/ |
| Reliability | The system must be dependable with minimal downtime to ensure continuous access to learning resources. High reliability is critical for maintaining user trust and academic continuity. | Online Course Work. (2024). Comparing eLearning Platforms. Retrieved from https://www.onlinecourswork.com/comparing-elearning-platforms/ |
| Usability | The LMS should have an intuitive and user-friendly interface to facilitate ease of use for all users, including those with limited technical skills. Good usability enhances user satisfaction and engagement. | SaaSworthy. (2024). Moodle vs Canvas LMS vs Brightspace vs Blackboard Learn Comparison. Retrieved from https://www.saasworthy.com/compare/moodle-vs-canvas-lms-vs-brightspace-vs-blackboard-learn |
| Performance | The system should provide quick response times and efficient processing to ensure a smooth user experience. High performance is essential for maintaining user engagement and productivity. | Software Finder. (2024). Brightspace vs Blackboard. Retrieved from https://www.softwarefinder.com/brightspace-vs-blackboard |
| Security | Implementing robust security measures, such as encryption and secure login protocols, is crucial to protect sensitive user data and prevent unauthorized access. | SelectHub. (2024). LMS requirements. Retrieved from https://www.selecthub.com/lms-requirements/ |
| Compatibility | The LMS should be compatible with various devices and operating systems (e.g., Windows, macOS, iOS, Android) to ensure accessibility for all users regardless of their preferred technology. | Online Course Work. (2024). Comparing eLearning Platforms. Retrieved from https://www.onlinecourswork.com/comparing-elearning-platforms/ |

## Assumptions

| **Assumption** | **Rationale for Requirement** | **Source(s), APA format** |
| --- | --- | --- |
| Internet Access | It is assumed that all users will have reliable internet access to use the LMS. This assumption is necessary for the functionality of an online learning system. | Overt Software. (2024). Choosing an LMS. Retrieved from https://www.overtsoftware.com/choosing-an-lms/ |
| Basic Technical Skills | It is assumed that users possess basic technical skills to navigate the LMS. This assumption ensures that users can effectively utilize the system's features without extensive training. | SaaSworthy. (2024). Moodle vs Canvas LMS vs Brightspace vs Blackboard Learn Comparison. Retrieved from https://www.saasworthy.com/compare/moodle-vs-canvas-lms-vs-brightspace-vs-blackboard-learn |

## Limitations

| **Limitation** | **Rationale for Requirement** | **Source(s), APA format** |
| --- | --- | --- |
| Budget Constraints | Financial resources may limit the scope of the LMS development and the inclusion of certain advanced features. Budget constraints necessitate prioritizing essential functionalities. | Online Course Work. (2024). Comparing eLearning Platforms. Retrieved from https://www.onlinecourswork.com/comparing-elearning-platforms/ |
| Technical Infrastructure | The existing technical infrastructure of YOUser University may limit the integration and performance of the LMS. This limitation requires careful consideration of system requirements and compatibility. | Software Finder. (2024). Brightspace vs Blackboard. Retrieved from https://www.softwarefinder.com/brightspace-vs-blackboard |