# CS 255 Module Two Assignment Template

## Functional Requirements

| **Functional Requirement** | **Rationale for Requirement** | **Source(s), APA format** |
| --- | --- | --- |
| User Account Management | Allowing users to create, edit, and remove their accounts is a crucial function in the LMS. | Colman, H. (2023, August 31). *Learning Management System Requirements: an Ultimate Checklist*. Explore the eLearning World With Us. https://www.ispringsolutions.com/blog/lms-requirements/ |
| Content Management | An LMS needs to make it easy for users to create, store, and organize content. | Colman, H. (2023, August 31). *Learning Management System Requirements: an Ultimate Checklist*. Explore the eLearning World With Us. https://www.ispringsolutions.com/blog/lms-requirements/ |
| Course Administration | It allows instructors to create and oversee courses, set schedules, establish grading criteria, and track student progress. | Colman, H. (2023, August 31). *Learning Management System Requirements: an Ultimate Checklist*. Explore the eLearning World With Us. https://www.ispringsolutions.com/blog/lms-requirements/ |
| Communication Tools | The LMS should have features like discussion boards, chat rooms, and messaging systems to allow students, instructors, and peers to communicate in real time and at their own pace. | Colman, H. (2023, August 31). *Learning Management System Requirements: an Ultimate Checklist*. Explore the eLearning World With Us. https://www.ispringsolutions.com/blog/lms-requirements/ |
| Assessment and Grading | The LMS should offer diverse assessment options like quizzes, exams, assignments, and discussions, simplifying grading and ensuring consistency. | Colman, H. (2023, August 31). *Learning Management System Requirements: an Ultimate Checklist*. Explore the eLearning World With Us. https://www.ispringsolutions.com/blog/lms-requirements/ |
| Reporting and Analytics | It's essential for instructors and administrators to access data for monitoring both student performance and system usage. | Colman, H. (2023, August 31). *Learning Management System Requirements: an Ultimate Checklist*. Explore the eLearning World With Us. https://www.ispringsolutions.com/blog/lms-requirements/ |

## Nonfunctional Requirements

| **Nonfunctional Requirement** | **Rationale for Requirement** | **Source(s), APA format** |
| --- | --- | --- |
| Usability and User Experience | Instructors and administrators must have access data to monitor student performance and system usage. | *Non-functional Requirements: Examples, Types, How to Approach*. (2020, February 12). AltexSoft. https://www.altexsoft.com/blog/non-functional-requirements/ |
| Scalability | The system should handle a growing number of users, courses, and resources without significant performance degradation. | *Non-functional Requirements: Examples, Types, How to Approach*. (2020, February 12). AltexSoft. https://www.altexsoft.com/blog/non-functional-requirements/ |
| Security and Data Privacy | The LMS needs strong security with authentication, encryption, and access control to safeguard sensitive data and adhere to data privacy rules. | *Non-functional Requirements: Examples, Types, How to Approach*. (2020, February 12). AltexSoft. https://www.altexsoft.com/blog/non-functional-requirements/ |
| Accessibility | It's crucial to make the system accessible to all users, including those with disabilities. | Chatee, S. (2020, October 16). *Non-functional Requirement Types*. SQA Consulting | Transformation - Security - Automation - AML Compliance. https://sqa-consulting.com/non-functional-requirement-types/ |
| Reliability and Availability | The LMS must be dependable to avoid disrupting the learning process. It achieves this by implementing redundancy and failover mechanisms to ensure uninterrupted access. | *Non-functional Requirements: Examples, Types, How to Approach*. (2020, February 12). AltexSoft. https://www.altexsoft.com/blog/non-functional-requirements/ |
| Performance and Speed | The LMS needs to be responsive to ensure students can access resources and engage in discussions without delays. | *Non-functional Requirements: Examples, Types, How to Approach*. (2020, February 12). AltexSoft. https://www.altexsoft.com/blog/non-functional-requirements/ |

## Assumptions

| **Assumption** | **Rationale for Requirement** | **Source(s), APA format** |
| --- | --- | --- |
| Adequate Bandwidth | We assume that most students will have good internet access, allowing them to use the LMS effectively. | International Journal of Education and Development using Information and Communication Technology (IJEDICT), 2022, Vol. 18, Issue 1, pp. 7-26 |
| User Proficiency | We're assuming that users, both students and instructors, are comfortable with computers and digital tools, so we can add advanced features without making them difficult to use. | International Journal of Education and Development using Information and Communication Technology (IJEDICT), 2022, Vol. 18, Issue 1, pp. 7-26 |

## Limitations

| **Limitation** | **Rationale for Requirement** | **Source(s), APA format** |
| --- | --- | --- |
| Limited Offline Access | The LMS might not work offline, posing limitations for students with occasional internet issues. | *What are the Disadvantages of LMS? - Wheelhouse*. (2022, July 1). https://www.wheelhouse.com/resources/what-are-the-disadvantages-of-lms-a11055 |
| Browser Compatibility | The LMS may only work perfectly with some web browsers, even though we'll try to support many. If this happens, it could affect the system's user-friendliness. | *What are the Disadvantages of LMS? - Wheelhouse*. (2022, July 1). https://www.wheelhouse.com/resources/what-are-the-disadvantages-of-lms-a11055 |