# CS 255 Module Two Assignment Template

## Functional Requirements

| **Functional Requirement** | **Rationale for Requirement** | **Source(s), APA format** |
| --- | --- | --- |
| Multimedia Content | Multimedia content allows users to learn with visual aids, videos, text, audio, and interactive games. LMS must have the ability to attach files, view presentations, and upload recorded lectures and videos. | (Kvartalnyi & Kvartalnyi, 2023) |
| Mobile Learning | Mobile versions of the LMS make learning more accessible as well as portable. Making reviewing and submitting LMS content available on more than just a computer. | (Kvartalnyi & Kvartalnyi, 2023) |
| Single sign-on | Single sign-on makes logging in for students quicker and easier by allowing just one click to sign in and get started. | (Log, 2021) |
| Social learning | LMS should allow students and teachers the ability to communicate with each other for an enhanced learning experience, teamwork, and questions that may need to be answered. | (Kvartalnyi & Kvartalnyi, 2023) |
| Analytics and reports | Instructors and professors can keep track of the progress of materials, groups, and users with reports. They can use them to analyze their content and improve where needed for continual growth for their students. | (Colman, 2023) |
| User and course management | LMS needs the ability to register users (or the users register themselves). Administrator roles need to be assigned for the management of the courses such as content, assignments, quizzes, etc. | (Colman, 2023) |

## Nonfunctional Requirements

| **Nonfunctional Requirement** | **Rationale for Requirement** | **Source(s), APA format** |
| --- | --- | --- |
| Usability | LMS should be adaptable and scalable to any device’s screen size without missing any functionality. This will make the LMS user-friendly, so the user is more likely to use it. | (Kvartalnyi & Kvartalnyi, 2023) |
| Maintainability | The system needs to be maintainable to avoid downtime for the system so everyone can access it as needed | (Functional and Non Functional Requirements (UPDATED 2023), 2023) |
| Reliability | The LMS needs to be reliable for the users to ensure all the content and applications are available when needed. | (Functional and Non Functional Requirements (UPDATED 2023), 2023) |
| Supportability | The software needs to be serviceable by technical support to monitor and identify any technical issues in the system as well as support the users with any technical issues they may be encountering. | (Functional and Non Functional Requirements (UPDATED 2023), 2023) |
| Adaptability | LMS needs to be adaptable to any operating system so that users can access it no matter what device they are using. | (Functional and Non Functional Requirements (UPDATED 2023), 2023) |
| Performance | The LMS needs to perform well under a multitude of circumstances. It shouldn’t lag or lose content when there are multiple users on at the same time. | (Functional and Non Functional Requirements (UPDATED 2023), 2023) |

## Assumptions

| **Assumption** | **Rationale for Requirement** | **Source(s), APA format** |
| --- | --- | --- |
| Self-paced learners | Educators assume that their learners have adopted a self-paced routine to get through all the material and complete assignments, discussions, tests, etc. on the deadline presented. | (Three Assumptions That May Hamper Online Learner Engagement – Edge Education, 2020) |
| Learner’s buy-in | There is an assumption that the learners appreciate the importance and value of what they will be learning. | (Three Assumptions That May Hamper Online Learner Engagement – Edge Education, 2020) |

## Limitations

| **Limitation** | **Rationale for Requirement** | **Source(s), APA format** |
| --- | --- | --- |
| Engagement | Using LMS can limit the amount of engagement the learner has with the materials and educator. | (Beerc, 2009) |
| Customization | LMS are not customizable for different instruction needs or to be aimed at a specific audience. | (Jones, 2009) |

**References**

Kvartalnyi, N., & Kvartalnyi, N. (2023, March 9). Key LMS requirements You should be aware | Inoxoft. *Inoxoft |*. https://inoxoft.com/blog/learning-management-system-requirements-checklist-for-your-business/#:~:text=Functional%20Requirements%20of%20LMS%201%20Gamification%20Let%E2%80%99s%20just,significant%20LMS%20requirements.%20. . .%205%20Social%20learning%20

Colman, H. (2023). Learning Management System Requirements: an Ultimate Checklist. *Explore the eLearning World With Us*. https://www.ispringsolutions.com/blog/lms-requirements/

Log, B. (2021). Top 10 weightiest LMS Functional Requirements. *HuskyJam*. <https://huskyjam.com/blog/lms-functional-requirements/>

*Functional and non functional requirements (UPDATED 2023)*. (2023, June 22). Software Testing Help. <https://www.softwaretestinghelp.com/functional-and-non-functional-requirements/>

*Three assumptions that may hamper online learner engagement – Edge Education*. (2020, September 4). <https://edgeeducation.com/three-assumptions-that-may-hamper-online-learner-engagement/>

Beerc, A. (2009, March 25). *Limitations of the LMS.* Col’s  Weblog. <https://beerc.wordpress.com/2009/03/15/limitations-of-the-lms/>

Jones, D. (2009, August 23). *LMS characteristics and limitations*. Moved To. https://davidtjones.wordpress.com/2009/08/23/lms-characteristics-and-limitations/