# CS 255 Module Two Assignment

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07/07/2023

## Functional Requirements

| **Functional Requirement** | **Rationale for Requirement** | **Source(s), APA format** |
| --- | --- | --- |
| User Management | The ability to manage user accounts, user registration, authentication, profile management, and different user roles (i.e., administrators, instructors, and learners with appropriate permissions) | (*MoodleDocs*, n.d.) |
| Course Management | The ability to manage courses, including course creation, organization, and scheduling. This would include instructors uploading course documents, presentations, videos, and quizzes. | (*MoodleDocs*, n.d.), (Mardinger, 2020), (*10 Must Have Learning Management System (LMS) Features*, n.d.) |
| Communication | The LMS should facilitate communication between instructors and learners in the form of discussion forums, messaging systems, and announcement boards. |  |
| Progress Tracking and Reporting | The LMS should allow instructors and learners to monitor progress and scores. | (*MoodleDocs*, n.d.) |
| Compatibility | The LMS should be compatible with different devices and platforms to ensure accessibility. | (*Guide to Non-Functional Requirements: Types and Examples | Insight | Box UK*, n.d.) |
| Administration and Management | The LMS should provide administrative features for managing user accounts, courses, permissions, and settings. It should also include the ability for administrators to maintain the LMS, perform backups, and manage system updates. | (*MoodleDocs*, n.d.) |

## Nonfunctional Requirements

| **Nonfunctional Requirement** | **Rationale for Requirement** | **Source(s), APA format** |
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| Performance | The LMS should respond and perform efficiently, even under high user loads. The system should be able to handle concurrent user interactions without significant delays. | (*Open Source & Commercial LMS - Learn the Pros and Cons*, 2019) |
| Usability and User Experience | The LMS should be user-friendly, intuitive, and easy to navigate for administrators, instructors, and learners. The interface should be visually appealing and support multiple languages. | (*10 Must Have Learning Management System (LMS) Features*, n.d.), (Mardinger, 2020) |
| Scalability | The LMS should be designed to handle increasing users and courses as the system grows. Scaling resources such as hardware, servers, and bandwidth should accommodate the increased demands on the system. | (*Guide to Non-Functional Requirements: Types and Examples | Insight | Box UK*, n.d.), (*Open Source & Commercial LMS - Learn the Pros and Cons*, 2019), appstate |
| Interoperability | The LMS should support interoperability with other educational systems, tools, and APIs. | (*ELearning Compliance with LMS Open Standards | Open LMS*, n.d.), (*Open Source & Commercial LMS - Learn the Pros and Cons*, 2019) |
| Maintenance and Support | The system should have a maintenance plan in place, schedule regular updates, fix bugs, and enhance features. Technical support channels such as email, chat, or help desks should be available to address user issues. | (*Guide to Non-Functional Requirements: Types and Examples | Insight | Box UK*, n.d.), (*Commercial LMS*, n.d.) |
| Security | The LMS should ensure that user data is secured and confidential. Protection from unauthorized access, encryption protocols, and security assessments should be maintained and continued. | (*Guide to Non-Functional Requirements: Types and Examples | Insight | Box UK*, n.d.) |

## Assumptions

| **Assumption** | **Rationale for Requirement** | **Source(s), APA format** |
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| Internet Connectivity | A reliable internet connection is required for learners and instructors to access the LMS and its content. |  |
| User devices | Access to appropriate devices for learners and instructors to access the LMS. |  |

## Limitations

| **Limitation** | **Rationale for Requirement** | **Source(s), APA format** |
| --- | --- | --- |
| Accessibility for Inclusivity | Ensuring full inclusivity for users with disabilities can be challenging. |  |
| User Proficiency | User resistance to change, lack of digital literacy skills, or inadequate training can hinder full system utilization and acceptance. |  |

References

*10 Must Have Learning Management System (LMS) Features*. (n.d.). Skillbuilder.ca. https://skillbuilder.ca/blog/10-must-have-lms-features

*Commercial LMS*. (n.d.). Www.appstate.edu. Retrieved July 8, 2023, from http://www.appstate.edu/~mckeemb/corporate.html

*eLearning Compliance with LMS Open Standards | Open LMS*. (n.d.). Www.openlms.net. https://www.openlms.net/blog/education/what-are-open-standards-and-does-your-lms-meet-them/

*Guide to Non-Functional Requirements: Types and Examples | Insight | Box UK*. (n.d.). Www.boxuk.com. https://www.boxuk.com/insight/guide-to-non-functional-requirements-types-and-examples/

Mardinger, R. (2020, June 18). *Top 24 LMS Features: The complete list*. Docebo. https://www.docebo.com/learning-network/blog/lms-features/#subhead

*MoodleDocs*. (n.d.). Docs.moodle.org. https://docs.moodle.org/402/en/Main\_page

*Open Source & Commercial LMS - Learn the Pros and Cons*. (2019, July 30). Find an LMS. https://www.findanlms.com/explore/pros-and-cons-of-open%20source-and-commercial-lms/

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