# CS 255 Module Two Assignment

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## Functional Requirements

| **Functional Requirement** | **Rationale for Requirement** | **Source(s), APA format** |
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| User Management | Having a strong user management system is one of the primary LMS needs. This is the process of adding and deleting users and giving them various roles, like learner, instructor, administrator, course creator, and so on. The system would be unable to distinguish between different user types without the user management functions, which could present security problems. | *(LMS Requirements: A Complete Checklist | Coursebox AI, 2024)* |
| Course Creation and Management | The next learning management system requirement is course creation and management. This is so crucial that, according to data, [89% of LMS reviewers](https://www.capterra.com/resources/key-features-of-learning-management-system/) consider it a highly important feature.  (*LMS Requirements: A Complete Checklist | Coursebox AI*, 2024) | *(LMS Requirements: A Complete Checklist | Coursebox AI, 2024)* |
| Assessment and Quizzes | These are required in order to assess your users' level of absorption of the content. | *(LMS Requirements: A Complete Checklist | Coursebox AI, 2024)* |
| Reporting and Analytics | An essential component of LMS tools are reports. By monitoring data like the amount of time spent watching training videos, completion rates, quiz results, and general engagement, they offer comprehensive insights into employee performance. | *(LMS Requirements: A Complete Checklist | Coursebox AI, 2024)* |
| Mobile Accessibility | With [7.41 billion mobile users](https://www.statista.com/statistics/218984/number-of-global-mobile-users-since-2010/) around the world, it becomes necessary that there should be an app for the LMS that can be accessed even on the mobile phone. This enhances learning, as users can learn whenever they feel like it or whenever they have the time. (*LMS Requirements: A Complete Checklist | Coursebox AI*, 2024) | *(LMS Requirements: A Complete Checklist | Coursebox AI, 2024)* |
| Support for Various Formats | Multiple content types should be supported by the LMS you select. These consist of SCORM packages, PDFs, audio, video, and text. The administrators can use this to produce interesting content that suits various learning preferences.  According to a report, [75% of learners](https://financesonline.com/25-essential-learning-management-system-e-learning-statistics-analysis-of-trends-data-and-market-share/#:~:text=75%25%20of%20employees%20prefer%20video%2Dbased%20learning%20over%20reading%20information%20(Designing%20Digitally%2C%202019).) prefer video-based learning, showing how important it is to have an LMS that supports audio and video content for better learning.  (*LMS Requirements: A Complete Checklist | Coursebox AI*, 2024) | *(LMS Requirements: A Complete Checklist | Coursebox AI, 2024)* |
| Support and Training Resources | An LMS still needs support and many training programs, regardless of how user-friendly it is. The more help options you may get during the onboarding and implementation stages, the better. | *(LMS Requirements: A Complete Checklist | Coursebox AI, 2024)* |

## Nonfunctional Requirements

| **Nonfunctional Requirement** | **Rationale for Requirement** | **Source(s), APA format** |
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| Hosting Model | The performance and administration of LMSs are significantly impacted by the hosting model selection. You must decide whether to host the LMS on an internal server or on the cloud. If you choose to use the cloud, you may offer services to a range of people without having to worry about upkeep or outages because an LMS developer will handle everything. | *(LMS Requirements: A Complete Checklist | Coursebox AI, 2024)* |
| Security Compliance | When it comes to sensitive data, such as learner records and personal information, data protection is of utmost importance. Important features like data encryption, safe user authentication, and frequent security upgrades should be included in the LMS you are attempting to use. | *(LMS Requirements: A Complete Checklist | Coursebox AI, 2024)* |
| Reliability and Availability | Reliability and availability are the next LMS needs on the list. The LMS you select should have low downtime, dependable backup and recovery procedures, and efficient system management in the event of difficulties. It should also be incredibly dependable and available anytime a user wants it. | *(LMS Requirements: A Complete Checklist | Coursebox AI, 2024)* |
| Payment Gateways | There should be a dependable payment gateway if you intend to sell subscriptions on the LMS. This type of integration is offered by numerous LMS providers. Therefore, if your company needs one, make sure to get the one with the most secure and optimal features. | *(LMS Requirements: A Complete Checklist | Coursebox AI, 2024)* |
| Integration Capabilities | Determine if the LMS you select can easily integrate with applications such as HR systems, CRM tools, and collaboration platforms like Microsoft Teams or Zoom. | *(LMS Requirements: A Complete Checklist | Coursebox AI, 2024)* |

## Assumptions

| **Assumption** | **Rationale for Requirement** | **Source(s), APA format** |
| --- | --- | --- |
| Use of LMS Standards such as: AICC, SCORM, xAPI, and cmi5. | These guidelines are primarily intended to make sure that all data, including performance or course progress, may be readily transferred across systems without the need for intricate coding. | *(LMS Requirements: A Complete Checklist | Coursebox AI, 2024)* |
| The following are just a few of the LMS's requirements: All the necessary features, including tracking capabilities, course authoring tools, and user management, should be included in the LMS. Mobile accessibility, assessment tools, and reporting and analytics should also be included. The LMS must also have an intuitive interface, security features, and integration possibilities to improve user experience. | An LMS's primary goal is to simplify course administration for users. Users and administrators can arrange everything on what resembles a single platform. Personalized learning experiences are also produced for users by an LMS. Finally, an LMS is an excellent tool for corporate companies to manage compliance training and tracks learning progress. | *(LMS Requirements: A Complete Checklist | Coursebox AI, 2024)* |

## Limitations

| **Limitation** | **Rationale for Requirement** | **Source(s), APA format** |
| --- | --- | --- |
| Self-discipline is necessary for LMS | Time management is the user's or student's responsibility, and it can be quite difficult for someone who lacks self-control. | *(wheelhouse, 2024)* |
| Computer Skills Are Needed for LMS | It is possible that younger generations are more adept at using computers than older generations. Either way, everyone must have some basic computer skills to use the LMS. | *(wheelhouse, 2024)* |
| LMS may require Administrative Fees | All users and administrators must be properly trained to use the LMS in order to lower this cost. | *(wheelhouse, 2024)* |
| LMSs might not be appropriate for every type of learner. | Different students have different learning methods, and there are several kinds of learning management system platforms. | *(wheelhouse, 2024)* |
| Online Access | Access is restricted, if it is available at all, if none of the parties have a dependable internet connection. |  |

**Resources:**

*LMS Requirements: A Complete Checklist | Coursebox AI*. (2024). Coursebox.ai. <https://www.coursebox.ai/blog/lms-requirements>

wheelhouse. (2024, January 5). *What are the Disadvantages of LMS? - Read #1 Learning Management Systems Software Articles | 2022*. [Www.wheelhouse.com](http://Www.wheelhouse.com). <https://www.wheelhouse.com/resources/what-are-the-disadvantages-of-lms-a11055>

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