# CS 255 Module Two Assignment

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For this assignment, I will be analyzing the functionality of the Canvas LMS. My wife is a Post-Grad at the School of Nursing at University of Colorado Anschutz, and she uses Canvas as her online learning platform.

## Functional Requirements

| **Functional Requirement** | **Rationale for Requirement** | **Source(s), APA format** |
| --- | --- | --- |
| Manage Courses | * The System should display all of the student user’s courses on the main page. * The system should have functionality for pinning or favoriting courses that the user wants to show on the front page |  |
| Order Course Materials | * System should provide access to the online bookstore where students can order their course materials |  |
| Show Updates | * Announcements from professors and from the school administrators should be accessible through an update alert system. * Users should have the option to receive texts or emails when there are new alerts. |  |
| Manage Student Schedule | * A robust calendar system should be available for students to use to track their course work and manage their time. * This calendar system should have the ability to auto populate course work deadlines. |  |
| Groups | * A system for managing class groups should be available to students. This will provide a simple way for students in groups to share work and communicate with each other. |  |
| Custom Dashboard |  |  |

## Nonfunctional Requirements

| **Nonfunctional Requirement** | **Rationale for Requirement** | **Source(s), APA format** |
| --- | --- | --- |
| Scalability. The System must scale for new users. | * As the amount of students using the system increases, the database and cloud services used should be able to handle the traffic from new students without affecting performance. | Dennis, A., Wixom, B., & Tegarden, D. (2012). *Systems analysis and design with UML, 4th Edition*. John Wiley & Sons. |
| Security. Sso and https | * The system should have different levels of secure access, and should include the following user types: Student, Teacher, Administrator and Technical Support | Dennis, A., Wixom, B., & Tegarden, D. (2012). *Systems analysis and design with UML, 4th Edition*. John Wiley & Sons. |
| Performance. | * The LMS should be capable of loading course data in 3000 ms or less. * Scheduled updates should occur in a method in which the system is available to users 24/7/365. | Dennis, A., Wixom, B., & Tegarden, D. (2012). *Systems analysis and design with UML, 4th Edition*. John Wiley & Sons. |
| Usability in a web browser or a mobile application. | * The System should be accessible from multiple web browser platforms, as well as availability as a mobile application | Dennis, A., Wixom, B., & Tegarden, D. (2012). *Systems analysis and design with UML, 4th Edition*. John Wiley & Sons. |
| Functionality | * The system should back up data after every user session. * The system should function on all Operating systems, including Windows, MacOS and Linux. | Dennis, A., Wixom, B., & Tegarden, D. (2012). *Systems analysis and design with UML, 4th Edition*. John Wiley & Sons. |
| Cultural and Political | * The LMS should be adaptable to the needs of students from different cultures, giving them the ability to perform their school tasks, taking into consideration their locale and specific cultural differences. * The system should not have any issues performing for anyone based on any difference in political situation. | Dennis, A., Wixom, B., & Tegarden, D. (2012). *Systems analysis and design with UML, 4th Edition*. John Wiley & Sons. |

## Assumptions

| **Assumption** | **Rationale for Requirement** | **Source(s), APA format** |
| --- | --- | --- |
| Students will be logging onto the system and submitting coursework from many locations at all hours of the day. | * Students should have the ability to submit work at any time and should have their current time zone reflected in their account. * If the student travels to a different time zone and submits work, this new time zone should be accounted for. |  |
| IT assistance is available to students | * The LMS needs to have a method for students to submit tickets for help with a technical issue. |  |

## Limitations

| **Limitation** | **Rationale for Requirement** | **Source(s), APA format** |
| --- | --- | --- |
| Language barriers | * Students may have difficulty communicating with each other or the instructor if they are from different cultures with different first languages. |  |
| Student to instructor communication | * It could be difficult for the LMS to have a method for real time communication between the instructor and student, as they may be logged in and working at different times. It will be up to the student and instructor to open communication to each other via email or zoom conversations. |  |