# CS 255 Module Two Assignment Template

## Functional Requirements

| **Functional Requirement** | **Rationale for Requirement** | **Source(s), APA format** |
| --- | --- | --- |
| Course Management | Students must have access to past and future course information to track progress toward degree completion.  Students must be able to add, drop, or withdraw from courses to account for changes in student lives or schedule | Eubanks, M. (2018, April 18). *Learning Management System Requirements.* From California Department of Human Resources: https://www.calhr.ca.gov/Documents/LMS%20Functional%20and%20Non\_Functional%20Requirements.docx  Hawley, M. (2024, July 3). *What Is a Learning Management System(LMS)?* From reworked: https://www.reworked.co/digital-workplace/what-is-a-learning-management-system/ |
| Mobile Friendly | Students must have access to the system and its features via mobile friendly browser-based interface or mobile application to increase mobility and access to courses while traveling | Eubanks, M. (2018, April 18). Learning Management System Requirements. From California Department of Human Resources: https://www.calhr.ca.gov/Documents/LMS%20Functional%20and%20Non\_Functional% |
| Messaging | Students and Instructors must have the ability to communicate with each other to ask and answer questions regarding classwork, or to inform about late or missing assignments.  Students must have the ability to communicate with each other through discussion forum to complete classwork, or to assist each other with questions. | Eubanks, M. (2018, April 18). Learning Management System Requirements. From California Department of Human Resources: https://www.calhr.ca.gov/Documents/LMS%20Functional%20and%20Non\_Functional% |
| Notifications | Instructors must be able to send reminder notifications to students to increase compliance.  Students must receive notifications when course work has been graded to keep classwork on track. | Hawley, M. (2024, July 3). What Is a Learning Management System(LMS)? From reworked: https://www.reworked.co/digital-workplace/what-is-a-learning-management-system/ |
| Document Management | Students must be able to upload and manage coursework documents when required. | Hawley, M. (2024, July 3). What Is a Learning Management System(LMS)? From reworked: https://www.reworked.co/digital-workplace/what-is-a-learning-management-system/ |
| Course Calendar | Must display course schedule, term start and end dates, project due dates, and test dates to increase student compliance with classwork. | Hawley, M. (2024, July 3). What Is a Learning Management System(LMS)? From reworked: https://www.reworked.co/digital-workplace/what-is-a-learning-management-system/ |

## Nonfunctional Requirements

| **Nonfunctional Requirement** | **Rationale for Requirement** | **Source(s), APA format** |
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| Security | System must require unique sign-on for each student and administrator to protect against unwanted changes to student or system information. | Dalbey, J. (n.d.). Non-functional Requirements. From calpoly: https://users.csc.calpoly.edu/~jdalbey/SWE/QA/nonfunctional.html |
| Usability | Learning environment must be easy to use and navigate so the user experience is positive.  Access to help must be available through FAQ page, or by calling a help line. | Dalbey, J. (n.d.). Non-functional Requirements. From calpoly: https://users.csc.calpoly.edu/~jdalbey/SWE/QA/nonfunctional.html |
| Availability | Users must be notified of downtime due to system maintenance. System downtime should be limited to only the system(s) under maintenance. Students must always have access to course materials as students will need to work on schoolwork outside of jobs and caring for family. | Dalbey, J. (n.d.). Non-functional Requirements. From calpoly: https://users.csc.calpoly.edu/~jdalbey/SWE/QA/nonfunctional.html |
| Performance | Pages and coursework must load quickly and accurately to reduce user frustration. | Dalbey, J. (n.d.). Non-functional Requirements. From calpoly: https://users.csc.calpoly.edu/~jdalbey/SWE/QA/nonfunctional.html |
| Scalability | System must scale to support any number of users without significant impact on performance to provide all users access to classwork | Dalbey, J. (n.d.). Non-functional Requirements. From calpoly: https://users.csc.calpoly.edu/~jdalbey/SWE/QA/nonfunctional.html |
| Legal | System must ensure user data is protected in accordance with the law.  System must flag use of unauthorized copyright material. | Dalbey, J. (n.d.). Non-functional Requirements. From calpoly: https://users.csc.calpoly.edu/~jdalbey/SWE/QA/nonfunctional.html |

## Assumptions

| **Assumption** | **Rationale for Requirement** | **Source(s), APA format** |
| --- | --- | --- |
| Resources required to host system will be available when needed | It is assumed the server hardware will be available for use when the project is complete due to the hardware always having been available in the past. | Usmani, F. (2024, July 29). Assumptions and Constraints in Project Management. From PM Study Circle: https://pmstudycircle.com/assumptions-and-constraints-in-project-management/ |
| Programming staff is well trained and able to complete assigned duties. | It is assumed all programming staff has the necessary knowledge to complete the project on time and within budget due to this being the case during past projects. | Usmani, F. (2024, July 29). Assumptions and Constraints in Project Management. From PM Study Circle: https://pmstudycircle.com/assumptions-and-constraints-in-project-management/ |

## Limitations

| **Limitation** | **Rationale for Requirement** | **Source(s), APA format** |
| --- | --- | --- |
| Budget | Money can be a constraint on a project as the budget available will limit the number of programmers ablet to be put on the project, as well as the quality of the hardware and software that can be purchased. | Usmani, F. (2024, July 29). Assumptions and Constraints in Project Management. From PM Study Circle: https://pmstudycircle.com/assumptions-and-constraints-in-project-management/ |
| Time | Deadlines can be a constraint on a project as too tight of a deadline could result in less than acceptable work being produced, or in parts of the project being cut due to time. | Usmani, F. (2024, July 29). Assumptions and Constraints in Project Management. From PM Study Circle: https://pmstudycircle.com/assumptions-and-constraints-in-project-management/ |