# CS 255 Module Two Assignment Template

## Functional Requirements

| **Functional Requirement** | **Rationale for Requirement** | **Source(s), APA format** |
| --- | --- | --- |
| Easy to use interface | This is important so that the students can easily access their courses and complete their required work for the term | Patterson, D. (2020). *Easy to Use LMS - Great Design & UI - Enable LMS for Online Training*. Learning Light. Retrieved 14 September 2020, from https://www.learninglight.com/enable-lms-ui-design/. |
| Available on iOS and Android | This will ensure greater accessibility and promise greater success as a student can do their work in more ways in more places | Rowan, A. (2020). *Choosing A Mobile-Friendly LMS For Successful Mobile Learning Implementation - eLearning Industry*. eLearning Industry. Retrieved 14 September 2020, from https://elearningindustry.com/mobile-friendly-lms-successful-mobile-learning-implementation-choosing. |
| RBAC | Roles will keep data secure and make sure that only the users with the correct roles can access resources that are needed by each role. | Zhang, E. (2020). *What is Role-Based Access Control (RBAC)? Examples, Benefits, and More*. Digital Guardian. Retrieved 14 September 2020, from https://digitalguardian.com/blog/what-role-based-access-control-rbac-examples-benefits-and-more. |
| Interacts with existing university architecture | This will make sure that grades are correctly passed to university resources. | Casteel, S. (2020). *The ultimate LMS implementation plan that actually works!*. Docebo. Retrieved 14 September 2020, from https://www.docebo.com/blog/lms-implementation-plan/. |
| Student reporting | Students should be able to access their status for the term. | Pappas, C. (2020). *8 LMS Reports EVERY eLearning Professional Needs To Check - eLearning Industry*. eLearning Industry. Retrieved 14 September 2020, from https://elearningindustry.com/lms-reports-elearning-professional-needs-check. |
| Ability to interact with teachers | Teachers and students should be able to have open communication between each other to ensure any questions are answered about a topic or an assignment. | Savvidis, P. (2020). *What Is a Learning Management System (LMS)? - Webanywhere*. Webanywhere. Retrieved 14 September 2020, from https://www.webanywhere.com/2018/06/20/what-is-a-learning-management-system-lms/. |

## Nonfunctional Requirements

| **Nonfunctional Requirement** | **Rationale for Requirement** | **Source(s), APA format** |
| --- | --- | --- |
| Affordable | This is important for the university as we need to make money to provide for our students. Also if it is affordable for us, the savings could potentially be passed to the students. | *5 Best Employee Training & Development LMS Systems in 2020*. Business.org. (2020). Retrieved 14 September 2020, from https://www.business.org/hr/employees/best-employee-training-and-development-lms-systems/. |
| Scalable | There needs to be minimal performance hit when many users are using our system. We will otherwise have poor user experience. | De Angelis, D. (2020). *LMS Scalability: What You Need To Know! - eLearning Industry*. eLearning Industry. Retrieved 14 September 2020, from https://elearningindustry.com/lms-scalability-what-you-need-to-know. |
| Minimal Downtime | Similar to the rationale for our system being scalable, downtime will cause poor user experience and should be avoided. Also if the system is down, our students cannot complete their work. | *Open LMS - Moving your Moodle to Open LMS SaaS*. Open LMS. (2020). Retrieved 14 September 2020, from https://www.openlms.net/moodle-users/. |
| Easy to set up | The implementation needs to be easy to set up as we would like it to be used as quickly and as cheaply as possible. Time is money. | *Best LMS Software of 2020 - Digital.com*. Digital.com. (2020). Retrieved 14 September 2020, from https://digital.com/lms-software/. |
| Fast | Again, a slow system creates poor user experience. More importantly, should the users have bad experience with our system, they will leave and possibly choose another university | *15 Best Learning Management Systems (LMS of the Year 2020)*. Softwaretestinghelp.com. (2020). Retrieved 14 September 2020, from https://www.softwaretestinghelp.com/learning-management-system/. |
| Secure | We must protect our users’ information. If we do not, users face real threats to their lives outside of our system. | Andriotis, N. (2020). *The Five Most Essential LMS Security Features - TalentLMS Blog*. TalentLMS Blog. Retrieved 14 September 2020, from https://www.talentlms.com/blog/five-essential-lms-security-features/. |

## Assumptions

| **Assumption** | **Rationale for Requirement** | **Source(s), APA format** |
| --- | --- | --- |
| User logs in with known username/password | This is the first line of defense against keeping our users information secure. |  |
| Resources are accessed online and thus user has dedicated, regular internet access. | Our entire business model is about educating online. With that we can assume our users have internet |  |

## Limitations

| **Limitation** | **Rationale for Requirement** | **Source(s), APA format** |
| --- | --- | --- |
| System will not work without internet | Should our user lose internet for some reason they will be unable to access our system and therefore could cause poor grade |  |
| System is 3rd party and will not keep track of other University statistics such as student balances or student bookstores. | The university has many other statistics that need to be tracked other than grades, users, and classes. Our system will not track those other resources |  |