# CS 255 Module Two Assignment Template

## Functional Requirements

| **Functional Requirement** | **Rationale for Requirement** | **Source(s), APA format** |
| --- | --- | --- |
| The system will allow students to check grades, rubrics, assignments, learning modules and schedules. | This is fundamental to the online learning experiences; students need to access and interact with the system to gain knowledge and to know what is expected of them and duo assignment |
| The system will allow teachers to send announcements, grade assignments, send students messages and add additional resources | This is fundamental to the online learning experience, teachers need to grade assignments, speak to students, and send out information in mass. |  |
| The system will allow users to upload and download content | Students need to be able to download content from the modules, rubrics, and any additional resources so they may print them, store them, or access them offline or from a different computer. Students and teachers need to be able to upload content, assignments, audio, video, PowerPoints, etc. for assignments and projects expectations/completion. |  |
| The system will provide teachers and students the ability to create groups, collaborate and manage groups | The ability to create and manage groups will allow for more formal-type group assignments , enhancing the learning experiences for students |  |
| The system will allow administrators, academic advisors, and counselors to assign courses and make assignment extensions | Administrators need to be able to manage a student’s academic situation and any extenuating circumstances can be managed by more than just teachers. |  |
| The system will allow administrators to change class requirements, materials, modules, and rubrics. | Administrators need to be able to modify specifics pertaining to each course, whether it be a course updates, overhaul, removal, etc. |  |

## Nonfunctional Requirements

| **Nonfunctional Requirement** | **Rationale for Requirement** | **Source(s), APA format** |
| --- | --- | --- |
| The system will operate through the internet on Desktop/laptop browsers and on mainstream mobile devices for students | The system needs to be accessible from mobile and desktops to give students the flexibility and opportunity to learn how they want to. |  |
| The System will need to accommodate thousands of concurrent users at the same time | Hundreds of courses, with hundreds of classes and hundreds of students require for the system to operate the same regardless of how many users are currently making requests to the system. The operation of the system should not change based on current user numbers. |  |
| Teachers, Students, and Administration will need to have specific roles with role specific functions. | Roles are necessary to ensure students, alumni and administrators all have separate but specific engagement with the system. Also, to ensure the safety of data. |  |
| The system will need to be able to integrate multimedia(videos and pictures) and external html resources | Not all resources come from the school so being able to imbed and externalize these resources is a necessity, considering how many sources there are for academic information. |  |
| The system must be secure and protected from external and internal influence. | The system needs to be tight, to prevent cheating, information being leaked, or courses being changed with malicious intent. |  |
| The system will run from a web service, cloud-based server platform allowing or remote access of users and administrators. | Having a web-based client, server architecture would allow for users to run the website locally and allow the server to run smoothly without needing to allocate resources for each user independently. This also allows for multiple different platforms to integrate and operate seamlessly. The idea is to have a platform that works great on desktop and mobile. |  |

## Assumptions

| **Assumption** | **Rationale for Requirement** | **Source(s), APA format** |
| --- | --- | --- |
| The system will have a 100% uptime | Users should be able to access the system at any time and day. This is expected of anything that lives on the internet. If this school provides services to students worldwide then it needs to be able to accommodate them regardless of their time zone. |  |
| Any web browser will be able to access the website. | We want any modern computer and browser configuration to be able to access the services provided by the website and anytime. A Seamless experience with on demand access. |  |

## Limitations

| **Limitation** | **Rationale for Requirement** | **Source(s), APA format** |
| --- | --- | --- |
| Only one session is allowed per user | To prevent cheating, and to ensure assignments, materials and grades are being accessed by the correct user. |  |
| Slower internet speeds see a graphically reduced versions of the website | Allows for users in lower income area to access the same materials and gain the same education regardless of their current situation. |  |

#### Sources: **1. Brightspace. (2022). Retrieved 22 May 2022, from https://www.d2l.com/brightspace/**

#### **2. Canvas LMS | K-12. (2022). Retrieved 22 May 2022, from https://www.instructure.com/k12/products/canvas/canvas-lms**

#### **3. Features - MoodleDocs. (2022). Retrieved 22 May 2022, from https://docs.moodle.org/400/en/Features**