**WebCMS**

WebCMS is a LMS designed and used internally for UNSW CSE courses. WebCMS is a browser based LMS that allows unauthenticated users to only see course announcement page and other pages require an authenticated user with correct enrolment access to the course.

**Features:**

Enrolment:

* WebCMS can receive enrolment updates from myUNSW.
* Various customizable roles can be assigned to individuals (Lecturers, Students, Tutors, Course Admin)
* Enrolment into multiple courses (Switching between courses can be done through navbar at the top of the page)

Course Page Feed:

* Main Page for each course contains course specific Notices / Announcements. These notices automatically triggers an email notification to all enrolled in the course as well.
* On the right panel, WebCMS provides a view of upcoming due dates for Quiz or Assignment Items that have a due date assigned.
* On the left panel, WebCMS provides a static navbar for users to navigate the various categories of content (Lectures, Labs, Staff, Course Work etc)
* Course Admins can also set course theme color which is propagated for all the navigational panels on the platform as well as the buttons. This helps students differentiate between the courses they are enrolled in.

Email Notifications:

* Email Notifications are triggered automatically on various conditions. These are customizable for each course. Generally, course wide notices always triggers email notifications.
* Students have functionality to “subscribe” to their posts (comments, replies, forum posts) which will automatically trigger notifications if there has been a new reply to their posts. This feature can be toggled in the settings menu.

Quiz System:

* This feature allows course admin to setup multiple choice questions as well as short answer questions on the platform.
* Course Admins can set a due date & Time for quizzes. Once past the due date & Time, the quiz automatically locks and no longer accepts a submission.
* Once quiz due date is past, it can be set up with answers and results are automatically calculated into the gradebook section.
* Display Due Date and Quiz Link on Course Page

Assignment System:

* Create Assignment with tabs (generally: Specification, Make Submission, Check Submission, Collect Submission)
* Format Specification or embed pdf document.
* Submission functionality provides a user interface to interact with CSE give command line tools for the specific assignment.
* Allows users to upload files into give system using file explorer “browse” interface.

Display Content (Used for Lectures, Tutorials, Quiz, Assignment)

* Has Code Markup, allowing content writers to differentiate between code sections and text sections
* Many formatting options (Headings, font-size, spacing etc)
* Add Links to download files or to external sites

PDF viewer component:

* A component that allows users to view pdf files while on the platform.
* There is an option to view in browser which opens it in a new browser tab

Gradebook

* Gradebooks are specific to courses
* Gradebook function will trigger sturec retrieval from CSE give command line tools to retrieve the marks which have been given to the marked assignments or quizzes.

Comments on Pages:

* Allow Replies to each comment. This function helps students get personalized responses from other students as well as course admin.
* Comments can be added to specific pages, thus providing context for the question.

Profile Pages:

* Users are able to edit their profile names, email, tags and add description about themselves.
* This public profile is available to be view by any WebCMS user and it will also detail the role (i.e. Course Admin, Lecturer)

Search Functionality for different Courses on WebCMS

* Users can search for the courses that are on WebCMS
* There is an instance of a course for the specific term

Linking to external pages

* Links to external pages open in new tab

Embedded Videos

* Video links opened can open within the platform with the open to view in browser which will open up a new tab

**Some Missing Features**

WebCMS is a capable and user friendly LMS. However, when compared to other Learning Management Systems (LMS), WebCMS is missing a couple of important integrated functionalities which will increase student engagement / experience especially in the post – covid era with online learning.

Reference Websites and Reports / Past Thesis Papers