LMS Requirements Document

Vision

As provided by Dr. Bart

"A flexible, user-friendly, and scalable Learning Management System that empowers learners, instructors, and administrators by providing a structured yet adaptable environment for managing programming problems structured around courses, assignments, submissions, and feedback. The LMS will support diverse learning needs, streamline administrative processes, and foster meaningful engagement between all roles in the system."

A unique submission type must be implemented within this system.

Roles

- Learner – *a student who enrolls in a course, completes assignments, and receives grades and feedback*
- Instructor – *a faculty member responsible for creating and managing their own course(s), assignments and enrollments*
- Administrator – *departmental staff with high-level control, responsible for managing users and overall course offerings*

User Stories

The below user stories were formulated with a MVP (minimum viable product) in mind.

Learner

- As a learner, I want to customize my profile information so I am accurately represented to others.
- As a learner, I want to log in and view courses I am enrolled in so I can access and submit assignments.
- As a learner, I want to view my grades within a course so I am aware of my performance.
- As a learner, I want to see assignment deadlines and statuses so I can stay on track with my work.
- As a learner, I want to receive feedback on my assignments so I can improve my work.

- As a learner, I want to be notified of assignment activity (*assignment posted, updated, due soon, assignment graded*) so I can better manage my time.
- As a learner, I want to easily see my assignments across courses in one place so I can manage my tasks more efficiently.
- As a learner, I want to easily be able to reference a course's syllabus, information and announcements so I can answer common questions (*e.g. late submission policy, grading scale*).
- As a learner, I want to submit assignments multiple times before deadline close so I can fix any submission mistakes.
- As a learner, I want to submit assignments in file format so that I can turn in my code.
- As a learner, I want to submit assignments in a unique format (*TBD*).

Instructor

- As an instructor, I want to customize my profile information so I am accurately represented to others.
- As an instructor, I want to create my own courses.
- As an instructor, I want to enroll learners in my courses.
- As an instructor, I want to create and edit assignments for my courses so that learners have all necessary information.
- As an instructor, I want to view all learner submissions for an assignment so that I can provide grades.
- As an instructor, I want to leave feedback on assignments so learners can understand their scores.
- As an instructor, I want to see how many learners have completed my assignments so I can see how they are doing.
- As an instructor, I want to send out announcements to my students so they can stay updated on my communications.

Administrator

- As an administrator, I want to customize my profile information so I am accurately represented to others.
- As an administrator, I want to add, edit, and remove user accounts so I can ensure the right people have access to the system.
- As an administrator, I want to assign roles to users (*learner, instructor, administrator*) so permissions are consistent.
- As an administrator, I want to manage all courses so learners and instructors all fall under the correct courses.