

User Stories

Student User Stories

1) View Modules

As a student,
I want to view my enrolled modules and see all the details associated with them.

Acceptance Criteria:

- The student can see all enrolled modules
- The student can click on a module and see a detailed description of it

2) View Assignments

As a student,
I want to view and download the assignment instructions so that I know what I need to do.

Acceptance Criteria:

- The student can select an assignment from a list in a module
- The system allows file downloads

3) Submit Assignments

As a student,
I want to submit my assignment for a module,
so that my code can be automatically marked.

Acceptance Criteria:

- The student can select an assignment from a list in a module
- The system allows file uploads
- The submission is stored and queued for auto-marking
- The student is notified once marking is complete

4) View Feedback and Marks

As a student,
I want to see my marks and feedback after submitting my assignment.
so that I can understand how I performed and improve.

Acceptance Criteria:

- The system displays marks out of a total score
- Feedback includes test results, terminal output and comments
- Students can view previous submissions and their respective feedback

Tutor User Stories

1) View Student Submissions

As a tutor,

I want to view student submissions for an assignment,
so that I can assist students with their issues.

Acceptance Criteria:

- Tutors can access a list of student submissions for modules they are assigned to
- Each submission shows the student's name, timestamp, and status
- Tutors cannot modify the student's code or marks

2) View Terminal Output

As a tutor,

I want to see the terminal output of a student's submission,
so that I can better understand what went wrong and provide help.

Acceptance Criteria:

- Tutors can view the console output (stdout/stderr) from a student's code execution
- Output includes test results and any runtime errors
- Tutors cannot rerun or modify the execution

3) Compare Terminal Output

As a tutor,

I want to be able to compare a student's output to the memo output in an easy to manage fashion

Acceptance Criteria:

- Tutors can view the student output next to the memo output to compare them easily

Lecturer User Stores

1) Manage Assignments

As a lecturer,

I want to create an assignment in a module,
so that students can submit their work for marking.

Acceptance Criteria:

- The lecturer can choose the module and create a new assignment
- Students linked to the module can see the new assignment

2) Submit Assignment Code

As a lecturer,

I want to upload my assignment code solution,

So that the system can automatically generate a testing framework for student marking.

Acceptance Criteria:

- The lecturer can upload memo zipped code
- The lecturer can upload makefile zipped code
- The lecturer can upload main zipped code
- The lecturer can upload a config file

3) Edit Mark Allocator

As a lecturer,

I want to edit the generated mark allocator so that I can specify how many marks get allocated for specific correct code implementation.

Acceptance Criteria:

- The Mark Allocator gets generated and displayed for the lecturer
- The Mark Allocator can be edit and saved

4) Choose Testing Algorithm

As a lecturer,

I want to choose between RNG, Code Coverage or GATLAM algorithm, so that the appropriate testing framework is generated for student submissions.

Acceptance Criteria:

- The lecturer is presented with the three algorithm options when creating an assignment
- The system applies the selected algorithm to generate the testing framework

5) Detect Plagiarism

As a lecturer,

I want to view plagiarism reports for assignments, so that I can identify and address cheating among students.

Acceptance Criteria:

- A plagiarism report is available for each assignment after student submissions
- The report highlights matching submissions and a similarity score

1) Access All Tools

As an admin,

I want access to all features available to students, tutors and lecturers, so that I can manage and oversee the entire system.

Acceptance Criteria:

- Admins can view and manage all modules, users, assignments, and submissions

2) Manage User Permissions

As an admin,

I want to change the roles and permissions of any user, so that I can ensure correct access levels are assigned.

Acceptance Criteria:

- Admins can view a list of all users with their current roles
- Admins can change a user's role

3) Manage Modules

As an admin,

I want to create modules, so that I can assign new lecturers to them

Acceptance Criteria:

- Admins can create modules and assign lecturers to them