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

Admin User Stories

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