

Web Development Project

October 23, 2023

1 Backend application

1.1 Use cases

1.1.1 User Authentication

- Allow users to register and log in.
- Implement user roles (admin, instructor, student)

1.1.2 Course Management

- Create, update, and delete courses.
- List all available courses.
- Enroll students in courses.

1.1.3 Student Management

- Create, update, and delete courses.
- List all available courses.
- Enroll students in courses.
- Assign instructors to courses.

1.1.4 Student Enrollment

- Allow students to enroll in courses.
- Display enrolled courses for each student.

2 Frontend Application

2.1 Use Cases

2.1.1 User Authentication

Provide user registration and login functionality.

2.1.2 Dashboard

Display a dashboard with relevant information, such as enrolled courses,...

2.1.3 Course Catalog

- Show a list of available courses with details.
- Allow students to enroll in courses

2.1.4 Course Details

- Show detailed information about a course.
- Display enrolled students and their progress

2.1.5 Student Management

- Provide an admin interface for managing students and instructors
- Allow admins to create, edit, and delete user profiles

2.1.6 Course Management

- Admins and instructors can create, edit, and delete courses.
- Manage assignments and grades

2.1.7 Search and Filtering:

Implement search and filtering options for courses, students, and instructors.

2.1.8 Technical Requirements

- Ensure data security and user authentication.
- Implement REST API endpoints for data access.
- Utilize a database system to store user, course, and enrollment data.
- Test the application thoroughly and ensure robust error handling.