

Assignment – Software Engineer (Full Stack)

Task: Build a Student Course Enrollment Management System

Objective

This assignment is designed to assess your ability to build a complete Full Stack web application.

The Goal

Create a web application that allows an admin to view, add, update, and delete student enrollments.

1. Functional Requirements

A. Frontend (User Interface)

- Dashboard: Display list of all students with Name, Email, Course, Status.
- Search by student name and Filter by course.
- Add Student Form with validation (email valid, phone digits).
- Edit/Delete student records.

B. Backend (API)

- Build a RESTful API using Node.js + Express.
- GET /students
- POST /students
- PUT /students/:id
- DELETE /students/:id

C. Database

- Use MongoDB with Mongoose.
- Schema fields: name, email, phone, course, status.

D. Business Logic

- If status is Pending, highlight row or show badge.

2. Technical Requirements

Frontend: React.js, Tailwind/Bootstrap, Hooks, Responsive design.

Backend: Node.js, Express.js, MongoDB, MVC folder structure.

3. Bonus Features

Pagination, Authentication, Docker support.

4. Timeline & Submission

Duration: 3 Days.

Submit via GitHub repo with README + Demo video link.

Evaluation Criteria

Full Stack connectivity, Code quality, Error handling, UI/UX.