Technical Task Assignment

Role: Full Stack Intern
Company: Joineazy
Deadline: Saturday, 1st November 2025, by 11:30 AM.

Task 2 – Full Stack: Student, Group & Assignment Management System

Objective:
Design and develop a **role-based full-stack web application** that enables students to form their own groups, manage members, and confirm assignment submissions — while professors manage assignments and track group progress.

This task evaluates your ability to design modular systems, manage data relationships, build secure APIs, and create a user-friendly, responsive interface.

Problem Context

At **Joineazy**, students collaborate in groups to complete assignments.

- **Professors (Admins)** post assignments and share **OneDrive submission links**.
- **Students** form their own groups, add group members, and confirm submission once they've uploaded their work externally.
- Professors then monitor each group's submission status and overall progress through a unified dashboard.

Core Functional Scope

Student Role

- Register and log in.
- Create a new **group** and invite/add members (via student email or ID).
- View all **assignments** posted by professors.
- Access **OneDrive submission links** for each assignment.
- Confirm submission via a **two-step verification** ("Yes, I have submitted" → confirm).
- Track the **group's progress** visually using progress bars or completion badges.

Admin (Professor) Role

- Create, edit, and view **assignments** (title, description, due date, OneDrive link).
- Assign work to all students or specific groups.
- Track **group-wise and student-wise submission confirmations**.
- View analytics on submission completion and group performance (basic charts or summary counts).

Technical Requirements

- **Stack:** React.js + Tailwind CSS, Node.js + Express + PostgreSQL, Docker, HTML.
- **Authentication:** JWT-based (Student / Admin roles)

Deliverables

- **GitHub Repository:**
  - Clean, modular codebase with clear commit history
  - Separate folders for frontend & backend
- **Working Demo:**
- **Documentation (README.md):**
  - Overview of implementation
  - Setup & run instructions
  - API endpoint details
  - Database schema & relationships (ER diagram preferred)
  - Architecture overview (frontend + backend + DB flow)
  - Key design and deployment decisions

Be prepared to demo your project and explain your design, architecture, and deployment choices during the technical interview.

SUBMISSION INSTRUCTIONS:

- **Deadline**:Saturday, 1st November 2025, by 11:30 AM..
- **Submission Format**: A PDF file containing:
  - GitHub repository link
  - Working demo video link
- **Filename Convention**: Your file should be named as follows: ***FullName-TaskNo***

  Example: If your name is Siddhartha Thonti and you have Task No. 5, the filename should be **SiddharthaThonti-Task5**.pdf.

- **Submission Link: https://forms.gle/vCAoW8JFkwXT4vHE8**

We will evaluate your submission based on the work you've done. Don't give up, and submit whatever you have accomplished so far.

Next Steps

If your submission meets the expectations, you will be invited to Round 2, which will be a short live interview to walk through your work and discuss the technical aspects.

Important Notes

We value commitment and responsibility. Please ensure that:

- The task is completed and submitted within the stipulated time.
- Your solution is original, well-documented, and easy to understand.
- You are prepared for a follow-up discussion if you are shortlisted.

We look forward to your submission! All the best!