# CI CD Final Project

# **Project Goals**

- Code Usage: Use code from an open-source web application.
- **Install and Document:** Install the application and document its purpose and features.
- **CI/CD Pipeline:** Develop a CI/CD pipeline to build, prepare, enhance, and deploy the application.

# Key Parts of the Project

# Part 1 - Locate, Install, and Document the Application

#### 1. Locate:

- o Find an open-source web application publicly available online.
- Verify that the license allows public access.
- Evaluate the complexity of the web stack and the application's features and technologies.

### 2. Install:

- Clone the application on your machine.
- o Follow the documentation provided by the application owners.
- o Install the required dependencies and provide the necessary environment variables and database connection.
- o Run the application locally.

#### 3. Document:

- Write a summary of the application's general purpose.
- Document the backend API routes and their purposes.
- Document the frontend views with screenshots, possible actions, and authentication requirements.
- Document the database collections/table names and models used.

# Part 2 - CI/CD Pipeline

### 1. Build the Pipeline:

- o Clone the application and create a new GitLab project.
- Add the remote to your repository and push on GitLab.

# 2. Required Stages (for teams of two):

- o Install stage: Setting up, installing node\_modules, etc.
- At least two stages producing artifacts, such as lint, documentation, or test stages.
- o Build stage: Preparing resources for the deployment stage.
- Deploy stage: Deploying the web application on AWS.

## 3. Optional Stages:

- o Lint stage: Output results of linting in an output file.
- Documentation stage: Generate documentation based on code comments and README files.
- o Test stage: Output test results or code coverage reports.