Skill Test: Simple Project and Issue Tracking Tool

Create a Simple Project and Issue tracking tool. This tool is used to:

- Track projects
- Track issues (bugs/tasks/improvements)
- Assign work
- Log working hours
- Produce basic reports

Roles

- **Manager**
  - Owns projects
  - Can see all data
  - Can create issue
- **Engineer**
  - Can be assigned to issue
  - Can log work on assigned issues

Features

A. Project Management

1. List all Projects
2. View project details:
   1. Project name
   2. manager who owns the project
   3. start & end date
   4. Issues
3. Show project status (in progress/finished/not started)

Rules

- Manager can see all projects
- Engineer can only see project which they're assigned

B. Issues Management

1. List issues per project
2. View issue detail
3. Create new issue
4. Update issue status

Issue has fields:

1. Type (bug/improvement)
2. Status (open/in progress/done)
3. Priority (1 - 5)
4. Assignee
5. Working Hours

Rules

- Only manager can create issue and assign issue to engineer
- Assigned Engineer can update the issue status and spent working hours on the issue

C. Basic Report

1. Show all Issues for the selected project
2. For each issue, show:
    1. Assigned engineer
    2. issue type and status
    3. Total working hour for the issue

Rules

- Both Manager and Engineer can access this feature

Criteria

Mandatory

The test must be done with the following criteria:

- Use Laravel, min version 12

- PostgreSQL, min version 15

- Use Docker. There will be 2 docker containers, 1 for the application and another one for the Database

Optional

- Provide API endpoint

- Using NextJS to serve the frontend/Dashboard

Note Use github/gitlab public repository to contain the project.