

Project Overview

Build a full-stack application with separate frontend and backend components, including a database. Use TypeScript for both the frontend and backend.

Frontend Requirements

- **Do Not Use:** View-rendering libraries or frameworks (e.g., React, Vue, Svelte, JSX).
- **Allowed:** Any other type of packages.
- **Technologies:** TypeScript, HTML, CSS.

Backend Requirements

- **Authentication and User Management:** Implement user registration, login, and role-based access control.
- **CRUD Operations:** Implement Create, Read, Update, and Delete operations for various entities.
- **Database:** Use PostgreSQL with migration and seed scripts.
- **Technologies:** Node.js with TypeScript.

Technologies to be Used

- **Frontend:** TypeScript, HTML, CSS.
- **Backend:** Node.js with TypeScript.
- **Database:** PostgreSQL with migration and seed scripts.

Submission

Project Proposal Submission

Follow these steps for your project proposal submission:

1. **Project Proposal:** Use the [provided template](#) to create a project proposal. Make sure it includes:
 - Project Title
 - Project Description
 - Key Features
 - Technology Stack
 - Database Schema
 - Example Screenshots
 - Additional Notes (if any)
2. **Submit the Proposal:** Once your proposal is ready, submit it [here](#).

Final Project Submission

Follow these steps for your final project submission:

1. **Project Submission Form:** Submit your project through [this form](#) by Friday, August 2, 12 PM.
2. **Code Freeze:** Ensure all code is finalized and no further changes are made before Monday, August 5.

Additional Guidelines

1. **Project Scope:** Ensure your project has a clear and achievable scope within the given timeframe.
2. **Code Quality:** Follow best practices, including clear variable names, comments, and documentation.
3. **Version Control:** Use Git for version control. Make regular commits and include a README file with setup instructions.

Evaluation Criteria

Your project will be evaluated based on:

1. **Problem Solving:** Ability to identify and solve problems effectively.
2. **Code Quality:** Clean, readable, and well-documented code.
3. **Final Product:** Functionality, design, and usability of the application.
4. **Communication and Presentation:** Clarity and effectiveness of your proposal, documentation, and final presentation.

Quick Links

Proposal Template: [link](#)

Proposal Submission: [link](#)

Project Submission: [link](#)

FAQ

Can UI libraries be used for frontends?

- Yes, as long as the libraries do not use React or any other DOM manipulation libraries.

Can we use any CSS frameworks?

- Yes, you can use CSS frameworks like Bootstrap, Tailwind, etc.

Are there any restrictions on backend frameworks?

- No, you can use any Node.js framework, though Express is a popular choice.

Can we use ORMs for database interactions?

- Yes, you can use ORMs like Sequelize or TypeORM for database interactions.

Is there a specific format for the project proposal?

- Yes, follow the template provided, which includes sections like Project Title, Description, Key Features, etc.

What is the deadline for project submission?

- The project must be submitted by the end of the two-week period.

How will the projects be evaluated?

- Projects will be evaluated based on problem-solving, code quality, final product, and communication/presentation.

Can we use third-party APIs?

- Yes, you can integrate third-party APIs if they add value to your project.

What if we encounter difficulties during the project?

- Reach out for help early. Mentors and peers are available to assist you.