Assignment: Building a Feature-rich Todo Application

Objective:

Create a Todo application showcasing your frontend and backend skills, as well as your ability to solve problems creatively. While Rust is not mandatory, its use is welcome if you are familiar with it. The primary focus should be on using Node.js or Python for the backend, and integrating it with a frontend developed in TypeScript, and Next.js as specified in the architectural design.

Requirements:

Frontend:

- Technology Stack: Javascript, TypeScript, ReactJs, Next.js 13, Tailwind CSS and Vanilla CSS.
- Features:
 - Responsive UI.
 - Real-time updates when a ToDo item is added, edited, or deleted.
 - User authentication using OAuth2/OpenID.
 - Error handling and user feedback.

Backend:

- **Technology Stack**: Node.js or Python.
- Features:
 - RESTful API or GraphQL to handle CRUD operations for ToDo items
 - Real-time updates using Firebase notifications or an alternative real-time technology.
 - OAuth2/OpenID for secure user authentication.
 - Error handling and logging.

Additional Challenges (Optional):

- Integrate a third-party API to add a unique feature to the application.
- Implement background processing for a feature, for example, sending daily summary emails.
- Dockerise your application.

Evaluation Criteria:

- Problem-solving ability.
- Code quality, readability, and maintainability.
- Adherence to best practices in frontend and backend development.
- Effective use of version control.
- How well the application aligns with the specified architecture design.
- Bonus: Usage of Rust in any part of the project.

Submission:

- A repository link to your version-controlled codebase.
- A deployed version of the application.
- A brief document explaining your design choices and any challenges faced during development.

Duration:

• 72 Hours

This task is designed to evaluate a candidate's proficiency in the specified technologies, as well as their problem-solving skills, by not only implementing the core requirements but also potentially tackling additional challenges.

UX Design:

Use below US design for ToDo App:

- 1. Add Task should ne in modal with required fields (Title, Status, Description, Start Date, End Date).
- 2. Give delete/edit option when we click on 3 dots.
- 3. Task will shft automatically changed
 - 1. Current date is less than start date then In Complete
 - 2. Current date is between start & end date then On Going
 - 3. Current date is less than end date then Completed
- 4. No Need to apply drag & dop as mention in Framer.

