

**Objective: Build a To-do List Web API with .NET, using clean architecture principles. If possible, add a basic React frontend to interact with the API.**

**Requirements:**

**Web API (Backend):**

- Endpoints: Implement a RESTful API with endpoints for managing a To-do List (Create, Read, Update, Delete).
- Swagger: Add Swagger (OpenAPI) documentation to the API to provide an interactive interface and detailed documentation of each endpoint.
- Clean Architecture: Structure the solution with layers such as Core, Application, Infrastructure, and API to maintain separation of concerns.
- Data Storage: Use a lightweight database (SQLite or in-memory) for storing to-do items.
- Validation: Ensure input validation (e.g., to-do item content cannot be empty).
- Unit Tests: Cover core business logic with unit tests.

**Frontend (Good to have):**

React UI: If implemented, create a basic React frontend to:

- Display a list of to-dos.
- Add, update, and delete to-dos items.
- API Integration: Ensure the frontend interacts with the backend API using HTTP requests.
- User Experience: Create a simple and functional UI design for the user to manage to-dos.