FileLoader Component

Framework

JavaScript

Goal

Create a JavaScript app in a TDD manner that uses Jest and test doubles to isolate and test a component that fetches and displays data. Replace real API calls with stubs.

Instructions

1. Create a fileService module with a fetchFile(id) method that returns a Promise
2. Use jest.mock() to stub the fetch call and return controlled data
3. Write a test that shows "Loading..." initially, then displays content after fetch
4. Write a test where fetch fails - verify error message is displayed
5. Use DOM manipulation to update loading states and content
6. Ensure no real HTTP requests are made during testing

Tech & Tools

- jest.mock() for stubbing fetch or service modules
- async/await for handling promises in tests
- DOM manipulation for loading states
- textContent updates for displaying data/errors

What to Test

- "Loading..." appears initially when component loads
- Fetched content is displayed after promise resolves
- Error message appears if fetch fails or returns empty
- Loading indicator disappears after content loads or error occurs