Test Plan for ToDo Web Application

Version: 1.0

Application URL: http://localhost:3000/

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1. Objective:

This test plan aims to verify the core functionality of the ToDo web application, including user authentication and ToDo operations (Add, Edit, Delete). The goal is to ensure that the system behaves as expected under valid and invalid inputs.

2. What is Being Tested:

- a. Login Functionality:
 - i. Invalid email/password scenarios
 - ii. Successful login with valid credentials
- b. ToDo Management:
 - i. Add a new ToDo
 - ii. Prevent adding empty ToDo
 - iii. Edit existing ToDo
 - iv. Delete a ToDo item

3. Test Coverage Areas:

Feature	Covered Test Cases
Login Functionality	TC_0001, TC_0002, TC_0003
Add ToDo	TC_0004, TC_0005
Edit ToDo	TC_0006
Delete ToDo	TC_0007

Positive Scenarios: Valid login, adding, editing, and deleting tasks **Negative Scenarios:** Invalid credentials, adding empty ToDo

4. Tools Used:

- a. Browser (Chrome) Manual test execution.
- b. Postman and Newman For API testing if endpoints are available.
- c. Java (Selenium & TestNG) and maven For automating UI test cases in future phases.
- d. Excel and word For organizing test cases and tracking results.

5. How to Run the Tests:

- a. Launch a browser and go to http://localhost:3000/
- b. Follow the Test Steps outlined in each test case (TC 0001 to TC 0007)
- c. Observe the Actual Result and compare it with the Expected Result
- d. Mark the Status as Pass or Fail

6. Assumptions:

- a. The application is hosted and available at http://localhost:3000/
- b. A test user account with valid credentials (user@test.com / User123) is active
- c. Test environment remains stable during test execution
- d. UI elements (Login Icon, ToDo input field, buttons) are correctly labeled and functional

7. Limitations:

- a. No backend/API validation unless endpoints are exposed
- b. No cross-browser or mobile testing included in current scope
- c. Tests are conducted only in a local development environment
- d. No load/performance testing is covered in this plan

8. Summary:

This plan ensures coverage of core business workflows for login and ToDo operations. It is suitable for manual testing during development or as a base for future automation using tools like Selenium and TestNg.