

TUTORIAL 3

3.Prepare a detailed test report with test cases, results, and bug report for a tested module.

Test Report: Login Module

1. Module Name:

Login Module

2. Objective:

To verify and validate the functionality, error handling, input validation, and user authentication of the login module in a web-based application.

3. Environment Details:

Parameter	Value
Application URL	http://localhost/login-app
OS	Windows 10
Browser	Google Chrome v116
Database	MySQL 8.0
Server	XAMPP (Apache 3.3.0, PHP 8+)

4. Test Scenarios Covered:

1. Valid login with correct credentials
2. Invalid login with wrong password
3. Login attempt with blank fields
4. Login with unregistered user

5. SQL Injection attack prevention
6. Field validations (email format)
7. Redirect after login
8. Session management after login/logout

5. Test Cases and Results

TC ID	Test Scenario	Input Data	Expected Result	Actual Result	Status
TC01	Login with valid credentials	Email: user@test.com Password: Abc@123	User redirected to dashboard	As expected	Pass
TC02	Login with wrong password	Email: user@test.com Password: wrongpass	Error: "Invalid credentials"	As expected	Pass
TC03	Login with blank fields	Email: [blank] Password: [blank]	Error: "Fields cannot be empty"	No validation shown	✗ Fail
TC04	Login with unregistered email	Email: fake@test.com Password: anypass	Error: "User not found"	As expected	Pass
TC05	SQL Injection attempt	Email: ' OR '1'='1 Password: --	Error or block input	Redirected to dashboard	✗ Fail
TC06	Invalid email format	Email: usertest.com Password: 1234	Error: "Invalid email format"	As expected	Pass
TC07	Redirect to dashboard after login	Valid credentials	Redirect to dashboard.php	As expected	Pass
TC08	Login session created	Login → navigate dashboard	User session started	Session maintained	Pass

TC09	Logout destroys session	Click Logout	Session destroyed → Redirect to login	As expected	Pass
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6. Summary of Test Results

Total Test Cases	Passed	Failed	Pass %
9	7	2	77.7%

7. Bug Reports

Bug Report 1

Field	Description
Bug ID	BUG-LOGIN-001
Title	No error message shown when login fields are blank
Module	Login
Severity	Medium
Steps to Reproduce	1. Go to Login page 2. Leave Email and Password empty 3. Click Login
Expected Result	Show error: "Fields cannot be empty"
Actual Result	Page refreshes with no message
Status	Open

Bug Report 2

Field	Description
Bug ID	BUG-LOGIN-002
Title	SQL Injection not blocked

Module	Login
Severity	High
Steps to Reproduce	1. Email: ' OR '1'='1 2. Password: -- 3. Click Login
Expected Result	Input sanitized, error shown
Actual Result	User logged in (unauthorized access)
Status	Open

8. Conclusion and Recommendations

- **Pass Rate: 77.7%, Needs Improvement**
- Input validations and SQL injection protection must be implemented properly.
- UI/UX should include client-side and server-side validations.
- High-priority bugs must be fixed before moving to production.

9. Student Submission Guidelines:

Students must submit:

- **Test Report (in PDF or Word)**
- **Test Case Table (Excel preferred)**
- **Bug Report(s)**
- **Screenshots (optional)**
- Optional: Fix and demonstrate the bugs (for bonus marks)