

Practical Experiment 2:

Functional and Security Testing of Facebook Login Module

Objective:

To perform **functional testing** and **basic security testing** on the Facebook login page, ensuring the login process works correctly and handles incorrect inputs securely.

Software Requirements:

- Facebook Login Page (<https://www.facebook.com>)
- Web Browsers: Chrome, Firefox, Edge
- Manual Testing Tools: Notepad or Excel

Hardware Requirements:

- A computer/laptop with stable internet access

Test Scenario:

When a user tries to log in using the Facebook login form:

- The system should validate the email/phone and password fields.
- On valid credentials, user should be logged in.
- On invalid credentials, proper error messages should be shown.
- Empty inputs should be handled gracefully.
- Password should be masked.

Test Steps:

1. **Open Facebook Login Page**
 - Launch a browser and go to [facebook.com](https://www.facebook.com)
2. **Test Valid Login**
 - Enter a valid email/phone number and valid password
 - Click on “Log In” button
3. **Test Invalid Login**
 - Enter valid email and invalid password
 - Enter invalid email and valid password

- Leave both fields empty
- 4. **Test Field Validations**
 - Check if empty fields throw errors
 - Check for password masking (input should be hidden)
 - Check maximum and minimum character limits
- 5. **Security Observation (UI-level)**
 - Ensure password is not visible
 - “Show Password” option (if present) should toggle masking
 - Error messages should not disclose security details (e.g., “wrong password” vs. “wrong username”)
- 6. **Cross-Browser Testing**
 - Test login behaviour on Chrome, Firefox, Edge

■ Test Case Document

Test Case ID	Scenario	Input	Expected Result	Actual Result	Status
TC_FB_001	Valid Login	Valid email and password	Login successful, dashboard loaded		
TC_FB_002	Invalid Password	Valid email, invalid password	“Incorrect password” message shown		
TC_FB_003	Empty Fields	No input	Error messages shown below fields		
TC_FB_004	Password Masking	Enter password	Characters should appear as dots/bullets		
TC_FB_005	Security Message Check	Wrong email and password	Generic error message		
TC_FB_006	Cross-browser Compatibility	Open in multiple browsers	Consistent login experience in each browser		

✓ Expected Outcome:

- The Facebook login form should handle all inputs properly.
- Users should not be able to log in with wrong credentials.
- No sensitive information should be leaked through error messages.
- Password must remain hidden unless "show" option is chosen.

■ Conclusion:

This experiment helps students understand functional and UI-level security testing in real-world login systems. It gives hands-on experience with user validation, error handling, and secure input behaviour.

