

**Project Name: Library**

## Test Case 1

**Test Case ID:** Test\_1

**Test Designed by:** Team

**Test Priority (Low/Medium/High):** High

**Test Designed date:** 13.05.2025

**Module Name:** Authentication

**Test Executed by:** Team

**Test Title:** Verify login with valid credentials

**Test Execution date:** 13.05.2025

**Description:** Test login functionality with valid user credentials

**Pre-conditions:** User account exists in the database with valid username and password

**Dependencies:** Internet connection, login service is up

Step	Test Steps	Test Data	Expected Result	Actual Result	Status (Pass/Fail)	Notes
1	Navigate to login page	N/A	Login form is displayed	Login form displayed correctly	Pass	User interface loaded properly
2	Enter username	reader@gmail.com	Username is accepted	Username accepted	Pass	Field validation works correctly
3	Enter password	Reader@123	Password is accepted	Password accepted	Pass	Password field masks characters as expected
4	Click on “Login” button	N/A	Redirect to reader dashboard	Reader dashboard displayed	Pass	Authentication completed in under 2 seconds
5	Verify user role	N/A	User is logged in with Reader privileges	User has Reader privileges	Pass	Role-based access control verified
6	Check login log	N/A	Authentication attempt is recorded in system logs	Log entry created with timestamp	Pass	Audit trail functionality confirmed

**Post-conditions:**

- User session is created and stored
- User is granted access to reader-specific features
- Login attempt is recorded in system logs

## Test Case 2

**Test Case ID:** Test\_2

**Test Priority (Low/Medium/High):** High

**Module Name:** Library Catalog

**Test Title:** Verify search functionality

**Description:** Verify that users can search for books using the genre keyword

**Test Designed by:** Team

**Test Designed date:** 13.05.2025

**Test Executed by:** Team

**Test Execution date:** 13.05.2025

**Pre-conditions:** At least one book with the title keyword is in the catalog, the user is logged in

**Dependencies:** Search API

Step	Test Steps	Test Data	Expected Result	Actual Result	Status (Pass/Fail)	Notes
1	Go to catalog page	N/A	Search field is shown	Search field displayed with placeholder text	Pass	Interface loads within 1.5 seconds
2	Enter book genre in search box	Horror	List of books match	Book catalog displayed with 5 matching results	Pass	Search is case-insensitive
3	Click on one of the books	"Cujo"	Book details are displayed	Details shown including title, author, publisher, and availability	Pass	All book metadata appears correctly
4	Verify availability information	N/A	Stock availability is shown for each branch	Stock shown: 3 copies at Main Branch, 1 copy at East Branch	Pass	Multi-branch inventory is accurate
5	Check author information	N/A	Multiple authors are correctly displayed	Author "Stephen King" displayed correctly	Pass	Author information is linked to author database
6	Verify publisher information	N/A	Publisher information is displayed	Publisher "Viking Press" displayed	Pass	Publisher information includes founding year

**Post-conditions:**

- User can view informations about books.
- Search history is stored in user session
- Book view is recorded for recommendation algorithm

## Test Case 3

**Test Case ID:** Test\_3

**Test Designed by:** Team

**Test Priority (Low/Medium/High):** Medium

**Test Designed date:** 13.05.2025

**Module Name:** Reservation

**Test Executed by:** Team

**Test Title:** Verify reservation for unavailable book

**Test Execution date:** 13.05.2025

**Description:** Verify that a user can reserve a book that is currently out of stock

**Pre-conditions:** The book exists, but it is currently borrowed by other users.

**Dependencies:** User is logged in

Step	Test Steps	Test Data	Expected Result	Actual Result	Status (Pass/Fail)	Notes
1	Navigate to book detail page	“Cujo”	Book status shows “not available”	Status=Not Available	Pass	Status clearly indicated with red text
2	Click on reserve button	N/A	Reservation form is displayed	Reservation form appears	Pass	Form loads in modal window
3	Confirm reservation	N/A	Reservation is submitted and success message is shown	Reservation succesful	Pass	Confirmation includes estimated availability date
4	Check user profile	N/A	Reservation appears in user's reservation list	Reservation visible in profile	Pass	Shows position in queue (1st)
5	Verify notification settings	N/A	Option to receive notification when book becomes available	Email notification option enabled	Pass	SMS notification also available
6	Check reservation in admin panel	N/A	Reservation is recorded in the system	Reservation recorded with timestamp	Pass	Admin can see all pending reservations

**Post-conditions:**

- Reservation is stored in user profile
- System has updated the waiting list for this book
- Notification trigger is set for when book becomes available
- Book's reservation count is incremented for statistics