Features to be Tested

1 User Authentication

- User registration

- User login

- Password reset functionality

- Session management

- Logout functionality

2 User Profile Management

- Profile creation

- Profile editing

- Profile image upload

- Password change

- Location updates

3 Book Management

- Adding new books

- Editing book listings

- Deleting book listings

- Book search functionality

- Book filtering by subject and condition

- Book details view

4 Form Validation

- Registration form validation

- Login form validation

- Book form validation

- Profile edit form validation

5 Security Features

- Password strength requirements

- CSRF protection

- Input sanitization

- File upload restrictions

Type of Testing

Manual Unit Testing – Test each individual component and function in isolation

Manual System Testing – Registration -> Login -> Add Book -> Search -> Borrow Book

Testing Method

Walkthrough of user workflow

Expected vs Actual

Example Test Cases

Add Book Form

ISBN Format Validation
1. User is logged in
2. Navigate to Add Book Page
3. Enter ISBN "0-7475-3269-9"
4. Submit Form with other valid fields
5. Form should be accepted
6. Navigate to Add Book Page
7. Enter ISBN "12345"
8. Submit Form
9. Form should be rejected and display "Invalid ISBN format"

Password Strength

1. Navigate to Register Page
2. Enter password "Password123!"
3. Submit form
4. Form accepts strong password

Unit-Level Tests

UNIT-1 | ISBN Format | Valid ISBN-10 | PASS

1. Navigate to Add Book Page
2. Enter ISBN "0-7475-3269-9"
3. Submit Form with other valid fields
4. Form should be accepted

UNIT-2 | Weak Password | PASS

1. Navigate to Registration
2. Fill out form
3. Enter "password123"
4. Submit Form
5. Form should not be accepted
6. Error message of invalid password should display

UNIT-3 | Strong Password | PASS

1. Navigate to Registration
2. Fill out form
3. Enter "Password123!"
4. Submit form
5. Form should be accepted

UNIT-4 | Add Review | PASS

1. Navigate to Add Review
2. Select 1-5 Rating from Dropdown
3. Add any message in message box
4. Submit Form
5. Form should be accepted

UNIT-5 | Valid Email | PASS

1. Navigate to Registration
2. Fill out form
3. Enter "example@example.com" in Email field
4. Submit form
5. Form should be accepted

System-Level Tests

SYS-1 | Add Book Listing | PASS

1. Log in as user
2. Navigate to Add Book Page
3. Fill in book details and submit
4. Navigate to home page
5. Verify that book appears as most recent submission

SYS-2 | Registering Account | PASS

1. Navigate to Registration page
2. Fill in required fields with valid data
3. Submit registration form
4. Login with credentials
5. Verify successful login

SYS-3 | Borrowing a Book | PASS

1. Log in as user
2. View details of book on recent listings
3. Click borrow book button
4. Navigate to messages
5. Verify automatic message request sent
6. Log out of account
7. Log in as owner of the requested book
8. Navigate to messages
9. Verify automatic message request received
10. Navigate to My Books
11. Approve request
12. Verify borrow request approved alert shows

User Acceptance Tests

UAT-1 | Borrowing Book | Student can easily search for and request to borrow book | PASS

1. As a student, log in to platform
2. Search for book using search bar
3. Filter results by subject and condition
4. Review book details
5. Press borrow book button
6. Navigate to Messages to ensure automatic borrow request has sent

UAT-2 | Student Profile Management | Student can easily manage their profile information | PASS

1. As a student, log in to the platform
2. Update profile information
3. Add profile picture
4. Update location
5. Save changes
6. Verify profile displays correctly