# Test Plan and sample Test Cases for Library Management System

### Introduction

* **Purpose:** This test plan describes the approach, scope, methodology, and resources required for testing the Library Management System (LMS). The system will handle functions like book management, user management, and borrowing/returning books.

### Test Cases

#### User Registration

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| --- | --- | --- | --- |
| No. | Test Case Description | Test Steps | Expected Result |
| 1 | User Registration with existing username | 1. Navigate to User Registration page 2. At the username input enter “johnDoe” | Username is in use please choose another! |
| 2 | Incorrect value for Password and Confirm Password | 1. Navigate to User Registration page 2. At the Password Input Text and Confirm Password Input Text 3. Input 2 different password value | Passwords do not match! |
| 3 | Register with the correct values | 1. Navigate to User Registration page 2. Register with the correct values | User successfully registered |

#### Book Management

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| --- | --- | --- | --- |
| No. | Test Case Description | Test Steps | Expected Result |
| 1 | Add Books into the system | 1. Navigate to Book Management page 2. Enter all the Book details | Books added successfully |
| 2 | Add Book details into the system | 1. Navigate to Book Management page 2. From 1 row of the Book Management clicked on the copies available. 3. If there are 3 copies of the books, add the details with status that is “Available” to the system | Book details added successfully and the number of copies available increases |
| 3 | Update only Available status to Missing | 1. Navigate to Book Management page 2. From 1 row of the Book Management clicked on the copies available 3. Change the Drop-Down List from Available to Missing | Status updated successfully |

#### Borrowing

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| --- | --- | --- | --- |
| No. | Test Case Description | Test Steps | Expected Result |
| 1 | Search for title | 1. Navigate to View Book page 2. Enter the Book title in the “Search by Title” | Books displayed in the table successfully |
| 2 | Borrow Book | 1. Navigate to View Book page 2. From any 1 row of the where the status is Available, clicked on Borrow. | Book borrowed successfully. Button changed from Borrow to Return.  And the status is updated as Borrowed |
| 3 | Return Book | 1. Navigate to View Book page 2. From any 1 row of the where the status is available, clicked on Return. | Book returned successfully. Button changed from Return to Borrow.  And the status is updated as Available |