

TEST REPORT DOCUMENT

For

Library Information System

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1. DATABASE CREATION:

1.1 Test Suite Setup:

- **Pass:** The Test Suite will be submitted along with a sample database to be run while the localhost is in action. The sample database consists of:
 - 4 Users
 - 300 Books
 - Admin

1.2 Example Books

id	title	author	publisher	issued_code	reserve_d_code	available	reserved	category	ISBN	cupboard	rack	position
3	Switching and Finite Automata Theory	Zvi Kohavi	Cambridge	0	0	TRUE	FALSE	9	3	0	0	3
17	Let us C	Byron Gottfried	Tata McGraw-Hill	0	0	TRUE	FALSE	9	17	0	1	7
36	Software Engineering at Google	Titus, Manshreck And Wright	O Reilly	0	0	TRUE	FALSE	9	36	0	3	6

1.3 Users

id	username	name	code	email	password	dept	type	max_books	active_no	reserve_no
1	22CS30026	Gayathri Anant	22CS30026	gayathri@email.com	123	CS	1	2	0	0
2	22CE10030	John Doe	22CE10030	john@email.com	123	CE	2	4	0	0
3	22MI10010	Kristie Doe	22MI10010	kris@email.com	123	EC	3	6	0	0
4	22ME10010	Mark Mirogo	22ME10010	mark@email.com	123	ME	4	10	0	0

2. USER MANAGEMENT:

2.1 Creating New User:

- **Pass:** Able to create new users with provided data.
- **Pass:** Unable to create a new user with 22CS30026 as code.
- **Pass:** Unable to create user with an invalid email id (email not of type abc@email.com)

2.2 Existing User Login:

- **Pass:**

User name = 22CS30026

Password=123

Login is Successful

- **Pass:** If the user code does not exist, login is unsuccessful
- **Pass:** If the user password does not match, login is unsuccessful

2.3 User Profile Viewing:

- **Pass:** User Profile is displayed upon login with options to view user status, make requests, and logout. The details viewed:

Gayathri Anant
Name: Gayathri Anant
Code Number: 22CS30026
Email: gayathri@email.com
User Status
Logout
Make Request

2.4 Status and Notification Page Access:

- **Pass:** User able to access status page. Able to view user details, book status, and dues.

2.5 Book Procurement and Submission Request:

- **Pass:** User able to make book procurement request. Requests visible to the admin on admin's login.

2.6 Report of Book Missing from Shelf:

- **Pass:** User able to make book not in shelf request. Requests visible to the admin on admin's login.

3. ADMINISTRATION:

3.1 Admin Login:

- **Pass:** Admin is able to login by providing valid credentials.
- **Pass:** Not able to login if credentials invalid.

3.2 User Login:

- **Pass:** Admin is able to login by providing valid credentials.
- **Pass:** Not able to login if credentials invalid.

3.3 Add, Remove, and Edit User:

- **Pass:** The logged in admin can add a new user, remove an existing user, or edit the details of an existing user. The new user added must have a unique user code. The admin can edit only the name, email, password, and notifications of the existing user.
- **Pass:** The new user to be added does not have a unique user code
- **Pass:** The new user to be added does not have a valid mail ID
- **Pass:** The credentials of the user to be removed or edited do not match
- **Pass:** The admin tries to edit fields other than the name, email, password, and notifications of the user.

3.4 Add, Remove, and Edit Book:

- **Pass:** The logged in admin can add a new book, remove a book, or edit the details of an existing book. All the details of the book can be modified by the admin.
- **Pass:** The book to be deleted or modified does not exist (The ISBN is not valid).

3.5 Book Transaction: Issue Book for User:

- **Pass:** If a user has not crossed his/her maximum books limit and the book is available and not reserved by another user, the book is issued to that user.
- **Pass:** If the user has crossed his/her maximum book limit, books are not issued.
- **Pass:** If the book is already issued by some other user, books are not issued.
- **Pass:** If a book is reserved by some other user, the book is not issued.

3.6 Book Transaction: Reserve Book for User:

- **Pass:** If a user has not crossed his/her maximum books limit and the book is not available and not reserved by another user, the book is reserved for that user.
- **Pass:** If the user has crossed his/ her maximum book limit, the book is not reserved.
- **Pass:** If the book has not been issued by any user, the book is not reserved.
- **Pass:** If a book is reserved by some other user, the book is not reserved.

3.7 Book Transaction: Return Book for User:

- **Pass:** If the user has issued the book, the book can be returned.

3.8 Notification to Users for Overdue Books:

- **Pass:** If the user has issued a book and the due date to return has passed.
- **Pass:** If the user has not issued any book.
- **Pass:** If the due date has not passed.

3.9 Notification to Users for Maximum Reserve Date Passed:

- **Pass:** If the user has issued a book and the maximum date of reserve has passed.
- **Pass:** If the user has not reserved any books.
- **Pass:** If the maximum date of reserve has not passed.

3.10 Fine Generation While Sending Notifications:

- **Pass:** If the user has issued a book and the due date of return has passed and the user has not returned the book yet.
- **Pass:** User has not issued the book.
- **Pass:** User has returned the book before the due date has passed.
- **Pass:** Admin has not sent a notification since the due date has passed for a particular user.

3.11 Fine Generation While Returning Books:

- **Pass:** If the user has issued a book and the due date of return has passed and the user has not returned the book yet.
- **Pass:** User has not issued the book.
- **Pass:** User has returned the book before the due date has passed.
- **Pass:** User has yet not returned the book.

3.12 Transaction Search by User ID:

- **Pass:** User exists and able to view transaction details.
- **Pass:** If user does not exist.
- **Pass:** If the user has not made any transactions so far.

3.13 Transaction Search by Book ISBN:

- **Pass:** Book ISBN exists and able to view transaction details.
- **Pass:** If the book ISBN does not exist.
- **Pass:** If the book has not been issued once before.

3.14 Auto Suggestion based on Recent Issued Books:

- **Pass:** The user exists, and he/she has issued at least 5 books in the past and the current date must be less than his/her last date of validity. Able to view auto suggestions.
- **Pass:** If the user does not exist.

- **Pass:** If the user has issued less than 5 books in the past.
- **Pass:** If the user has crossed his/her maximum date of validity.

3.15 Auto Suggestion based on Department:

- **Pass:** The user exists, and he/she has issued less than 5 books in the past and the current date must be less than his/her last date of validity. Able to view auto suggestions.
- **Pass:** If the user does not exist.
- **Pass:** If the user has issued more than or equal to 5 books in the past.
- **Pass:** If the user has crossed his/her maximum date of validity.

3.16 Display of Recently Added Books:

- **Pass:** There are books to display in the library, and the database has at least 8 unique books. Able to view.
- **Pass:** There are no books in the library to display.
- **Pass:** The library database has less than 8 unique books. In this case, all the books in the database with unique name, author, and publisher are displayed.