Silverwood Keep Library

IT Practical Assessment Task 2023

Testing Document

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2023

Hatfield Christian School

Contents

Evaluation of Solution
Achieved:

Members:

- Login as a member
- Can search for books using the genre, ISBN, author, title, or year
- Can reserve a new book by entering its author, title, and ISBN
- Can return their current book
- Can cancel their membership
- Can update their password
- Can view their current book
- Can log out of their account
- Can register as a new member

Employees:

- Log in as an employee
- Can search for books using the ISBN, author, title, or year
- Can delete a book using the ISBN
- Can add a book to the database by entering the title, author, year published, ISBN and genre
- Can add a member using a username, password, and possibly a phone number
- Can delete a member - cancelling their subscription - using their ID
- Can access the member's information, such as phone number, password, and current reserved book
- Can update their password
- Can delete their account

Changes:

1. Members need the ISBN as well, instead of just the author and title of a book to reserve that book.
   a. Reason: The ISBN is the most accurate data as it is unique to the book. When books are entered into the database, they cannot have duplicate ISBNs. However, they can have duplicate book titles or authors. Therefore, the ISBN is required to reserve a book. This avoids anomalies or inaccurate reservations.
2. The member's book is not automatically returned if they attempt to reserve a new book. Instead, they need to manually go return their book first.
   a. Reason: A member could accidentally reserve a book, unaware that they currently have a book out. This could remove their previous reservation, resulting in them possibly forgetting about the previous book.
3. Employees cannot update books. Once a book has been entered, you must delete the book should you need to update any information regarding the book
   a. Reason: Updates on books are unlikely, as validation takes place before a book is entered into the database. Moreover, providing the option to update information on

a book would make the employee home page screen too cluttered, so I decided against it.

4. Provided a third optional field when adding a member i.e., phone number.
    a. Reason: Allows employee to enter the member's details right away, instead of the member having to log in to update their own contact details

5. Option for members to update their contact details
    a. Reason: Should a member's contact details change, or they have yet to input them, they can manually update their own details

6. Member's ID is needed to delete them - no longer option to use their username to remove a member.
    a. Reason: Members could have the same username or similar usernames. Using the member's ID prevents deletion anomalies
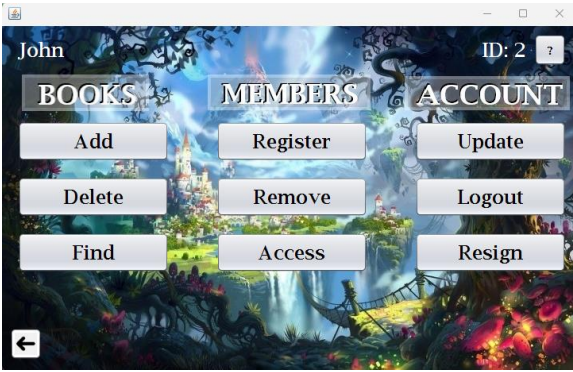
Functional Testing

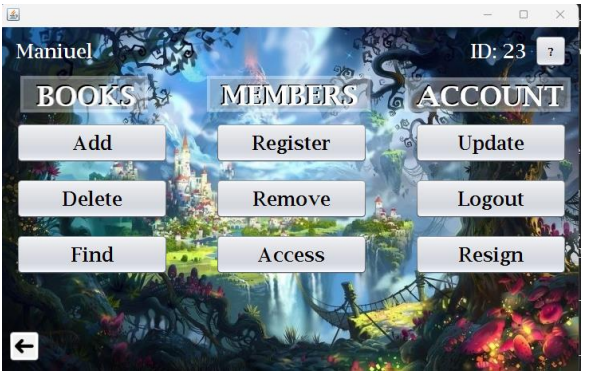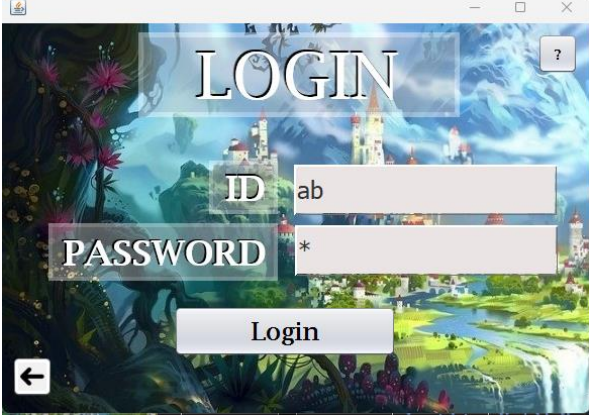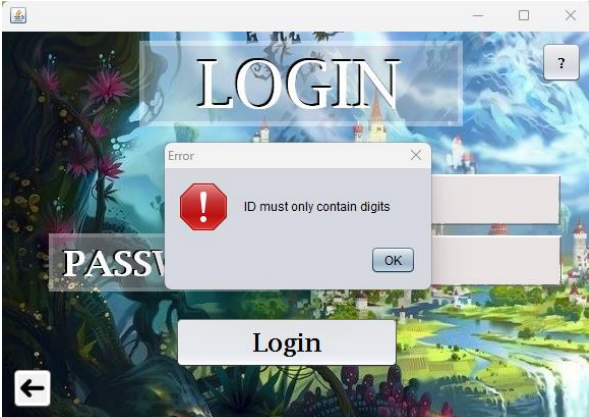|	Function	15/08/2023 Tested by: Joshua Smith	14/08/2023 Tested by: Bradley Smith
Members	Log in as a member	Works	Works
	Search for books using the genre, ISBN, author, title, or year	Works	Works
	Reserve a new book by entering its author, title, and ISBN	Works	Works
	Return a book as a member	Works	Works
	Update their password	Works	Works
	View their current book	Works	Works
	Log out of their account	Works	Works
	Cancel their membership	Works	Works
	Register as a member	Works	Works
Employee	Log in as an employee	Works	Works
	Search for books using the ISBN, author, title, or year	Works	Works
	Delete a book using the ISBN	Works	Works
	Add a book to the database by entering the title, author, year published, ISBN and genre	Works	Works
	Add a member using a username, password, and possibly a phone number	Works	Works

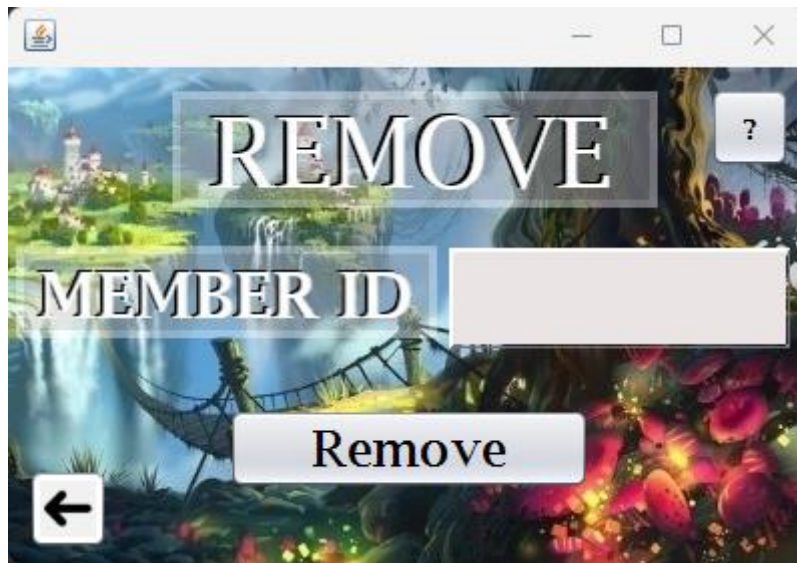|			
	Delete a member - cancelling their subscription - using their ID	Works	Works
	Access the member's information, such as phone number, password, and current reserved book	Works	Works
	Update their password	Works	Works
	Delete their account	Works	Works

Test Plan and Result

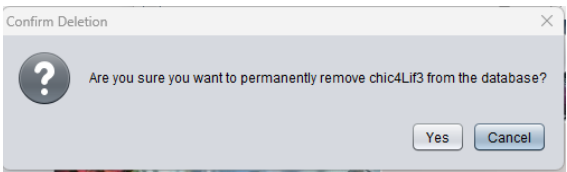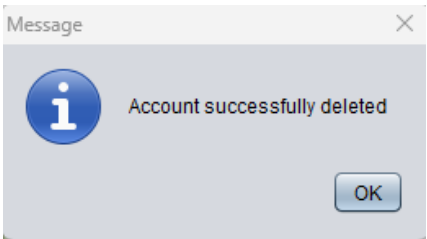First input value: Testing logging in as an employee.

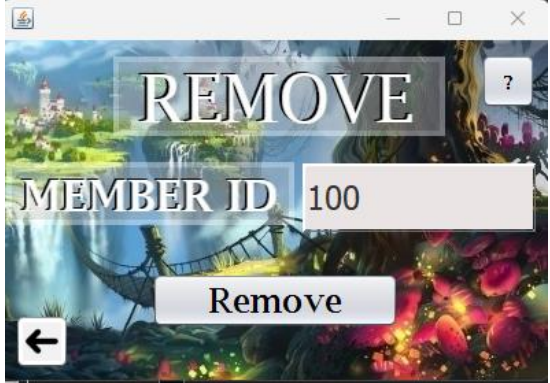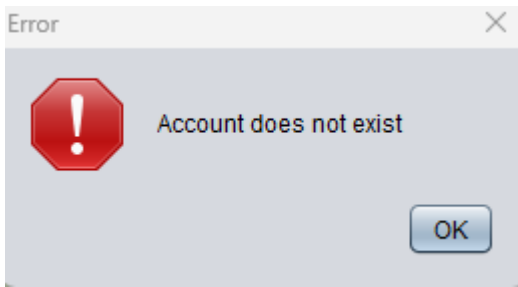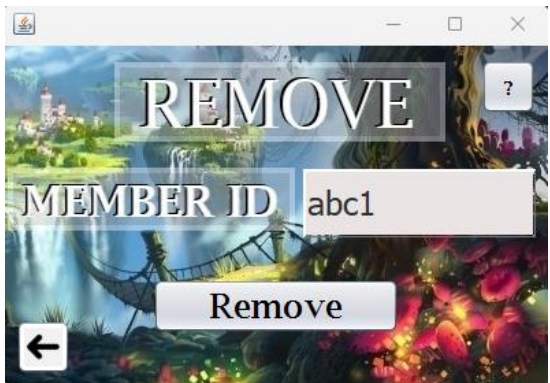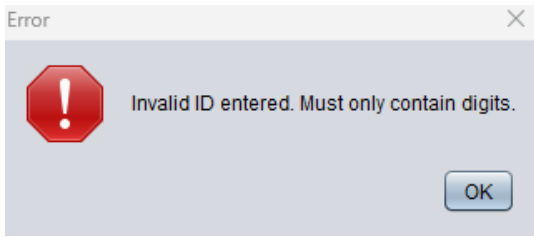| Input data	Variable Used	Expected output	Actual output
Common data	ID: 2 Password: "LoveReadinG4"	The input is valid and the account exists in the database. **Result**: Switch to Employee Home page screen, change Name and ID on home page to employee's information	Before: After: **Correct Result Achieved**

Extreme data	ID: 23 Password: "0ktyFR&zb"	The input is extreme as it is the maximum ID value that exists, however, the input is still valid and the account exists **Result:** Switch to Employee Home page screen, change Name and ID on home page to employee's information	Before: After: **Correct Result Achieved**
Erroneous data	ID: "ab" Password: "a"	The input is invalid as the ID must only contain digits **Result:** Display an error message informing the user that the ID entered is invalid	Before: After: **Correct Result Achieved**

Second input value: Deleting a member as an employee.

Input data	Variable Used	Expected output	Actual output
Common data	Member ID: 13	Valid input **Result:** Display a message confirming if the employee wants to delete the member. Displays username of member matching the ID entered. If 'Yes' is selected, a message confirming the deletion is displayed	Before: After: **Correct Result Achieved**

Extreme data	Member ID: 100	The user does not exist **Result:** Display a message saying that this account does not exist	Before: After: **Correct Result Achieved**
Erroneous data	Member ID: "abc1"	Invalid input **Result:** Display message informing user that their input was invalid as the ID can only contain digit	Before: After: **Correct Result Achieved**