## Testing the implementation of the Book Bank

## Aim:

To test the implementation of the book bank

## **Identification of Scenarios:**

- 1. Verify Student Login Functionality
  - Check system behaviour when a valid information is entered in the Login
  - Check system behaviour when invalid information is entered in the Login
- 2. Verify Student Register Functionality
  - Check system behaviour when a valid format is entered to register member
  - Check system behaviour when invalid format is entered to register member
- 3. Verify Add to cart Functionality
  - o Check system behaviour when Book is added to cart after Login
  - Check system behaviour when Book is added to cart before Login
- 4. Verify Search Books Functionality
  - Check system behaviour when an existing book is searched
  - Check system behaviour when a non existing book is searched
- 5. Verify Borrow Book Functionality
  - Check system behaviour when book is borrowed first time
  - Check system behaviour when book is borrowed by same person second time
- 6. Verify Admin Login Functionality
  - Check system behaviour when a valid information is entered in the Login
  - Check system behaviour when invalid information is entered in the Login
- 7. Verify Add Member Functionality
  - Check system behaviour when a valid information is entered to add member
  - Check system behaviour when invalid information is entered to add member
- 8. Verify Remove Member Functionality
  - Check system behaviour when a valid memberID is entered to remove member
  - o Check system behaviour when invalid member ID is entered to remove member
- Verify Add Book Functionality
  - Check system behaviour when a valid information is entered to add a book
  - Check system behaviour when invalid information is entered to add a book
- 10. Verify Remove Book Functionality
  - Check system behaviour when a valid bookID is entered to remove a book
  - Check system behaviour when invalid book ID is entered to remove a book

Test case id	Test scenario	Testing steps	Test cases	Expected outcome	Actual outcome	Pass/Fail
T001	Student Login	<ol> <li>Enter email id and password</li> <li>Email id valid and password checks out, Then route to the main page.</li> </ol>	Email: ross@gmail.com Password: secret  Database Email: ross@gmail.com Password: secret	Login is successful  Rerouted to the main page.	Login is successful  Rerouted to the main page.	Pass
T002	Student Login	<ol> <li>Enter email id and password</li> <li>Email id valid and password checks out, Then route to the main page.</li> </ol>	Email:jane@yahoo.c om Password: secret  Database Email:jane@yahoo.c om Password: secret	Login failed,recheck email and password.  Rerouted to the login page	Login failed,recheck email and password.  Rerouted to the main page	Fail
T003	Student Register	<ol> <li>Enter the details of the student.</li> <li>Click the register button</li> </ol>	ID: U6 Name :Joshua Alexander Password: secret Phone: 89245738 Email:josh@gmail.co m Address:Injambakam	Add the details to the database.  Redirected to the main page.	Add the details to the database.  Redirected to the main page.	Pass
T004	Student Register	<ol> <li>Enter the details of the student.</li> <li>Click the register button</li> </ol>	ID: U6 Name :Joshua Alexander Password: secret Phone: 89245738 Email:josh@gmail.co m Address:Injambakam	Display alert for already existing member	Display alert for already existing member	Fail
T005	Add To Cart	Login into Student     Account      Z.Try to Add a book to cart	Logged in Clicked "Add to Cart"	Book Added to Cart	Book Added to Cart	Pass
T006	Add To Cart	<ol> <li>Don't Login</li> <li>Try to Add a book to</li> </ol>	Logged out Clicked "add to cart"	Alert stating "You need to Login First"	Alert stating "You need to Login First"	Pass

		cart				
T007	Search Book	Enter Valid Book Title name or Author name	Search Field: The Man	Display the man who mistook his wife for a hat	Display the man who mistook his wife for a hat	Pass
T008	Search Book	Enter non-existent Book Title name or Author name	Search Field: Gibberish#12	Display Book not found	Display Book not found	Pass
T009	Borrow Book	Login through student Login     Add books to cart that user doesn't already own     Borrow books	Borrow "Man who mistook his wife for a hat"	Display that the book has been successfully Borrowed	Display that the book has been successfully Borrowed	Pass
T010	Borrow Book	1. Login through student Login 2. Add books to cart that user already owns 3. Borrow books	Borrow "Man who mistook his wife for a hat" again for the second time	Display that the book has been already Borrowed	Display that the book has been already Borrowed	Pass
T011	Admin Login	1.Enter Username and Password  2. Username valid and Password matches, then route to Dashboard of the admin.	Username:admin Password: secret  Database: Username:admin Password: secret	Login successful, rerouted to dashboard	Login successful, rerouted to dashboard	Pass
T012	Admin Login	1.Enter Username and Password  2. Username valid and Password matches, then route to Dashboard of the admin.	Username: jack Password: secret Database : No entry with Jack	Invalid Login, reroute to login page	Invalid Login, alert "Failed"	Pass
T013	Admin Add Member	1.Enter the details of member  2. Click "Register" to add to database	ID: U4 Name: Yash Password: Hello1 Phone: 8877665544 Email: yash@gmail.com Address:Adambakka m Chennai Reg Date: 2020-4-28	Add the details to the database and redirect to the same page	Add the details to the database and redirect to the same page	Pass
T014	Admin Add	1.Enter the details of	ID: U4	Display alert	Add the	Fail
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	Member	member  2. Click "Register" to add to database	Name: Yash Password: Hello1 Phone: 8877665544 Email: yash@gmail.com Address:Adambakka m Chennai Reg Date: 2020-4-28	for already existing member	details to the database and redirect to the same page	
T015	Admin Remove Member	<ul><li>1.Enter the ID of member</li><li>2. Click "Remove" to remove from database</li></ul>	ID: U4	Remove the details from the database and redirect to the same page	Remove the details from the database and redirect to the same page	Pass
T016	Admin Remove Member	<ul><li>1.Enter the ID of member</li><li>2. Click "Remove" to remove from database</li></ul>	ID: U4	Display error for non existing member	Remove the details from the database and redirect to the same page	Fail
T017	Admin Add Book	1.Enter the details of Book  2. Click "Add" to add to database	ID: B11 Title: Never Author: Chetan Bhagat Description: Revolution 2020: Its story is concerned with a love triangle, corruption and a journey of self-discovery. Status: Available Image:never.jpg	Add the details to the database and redirect to the same page	Add the details to the database and redirect to the same page	Pass
T018	Admin Add Book	1.Enter the details of Book  2. Click "Add" to add to database	ID: B11 Title: Never Author: Chetan Bhagat Description: Revolution 2020: Its story is concerned with a love triangle, corruption and a journey of self-discovery. Status: Available Image:never.jpg	Display alert for already existing book	Add the details to the database and redirect to the same page	Fail

T019	Admin Remove Book	<ul><li>1.Enter the ID of member</li><li>2. Click "Remove" to remove from database</li></ul>	ID: B11	Remove the details from the database and redirect to the same page	Remove the details from the database and redirect to the same page	Pass
T020	Admin Remove Book	1.Enter the ID of member  2. Click "Remove" to remove from database	ID: B110	Display error for non existing member	Remove the details from the database and redirect to the same page	Fail

## **Documentation:**

The testing process was simplified and performed keeping the UML use case document as a reference. Apart from the main success scenario this testing was performed on other edge cases as well to find unnoticed bugs in the application. This helped us understand the many edge cases that we did not account for during developing the application and now the team can fix these bugs in order to create a bug free application.