HACETTEPE UNIVERSITY

DEPARTMENT OF COMPUTER ENGINEERING

BBM 487 SOFTWARE ENGINEERING LAB

SOFTWARE TEST RESULT REPORT

Özdeş Öztürk 21228635

Ekin Kandemir 21228434 Kadir Bulut 21228137



BBM 487 Software Engineering Lab. Group 7- Library Book Loan System	Group #7
Software Test Result Report	Date: 14/05/2017

Library Book Loan System(LBLS) Software Test Result Report

1 Purpose and Scope

This document consists of our individual work based on the tests we applied on the constructed software including various use cases. Information will be given about these test processes as well as the obtained results. When we started working on and shaping our project, we defined the most basic requirements and expected results in order to have a better understanding of what to expect during further work. Therefore, we pursued our tests based on these requirements for every single use case.

We also defined these use cases by drawing several diagrams that indicates every single scenario of these cases so we had a better understanding of what to expect during the test process. Hence, our main purpose while doing these tests was primarily checking whether the project meets these expectations based on the defined requirements. On the other hand, we also wanted to detect the bugs that we could not be able to detect during the implementation and design process so that we would enable the project to reach a higher quality and accuracy level.

2 References

The references we will be using in our test process as well as while preparing this document are our Software Vision Plan document, Project Plan document, Test Cases Document, System Wide Requirements document and Software Design Description that we previously prepared and shared.

3 Software Test Results

The following table shows the obtained results for the defined test cases that measure the accuracy of the implemented use cases. It shows whether the defined test scenario gives the expected output.

BBM 487 Software Engineering Lab. Group 7- Library Book Loan System	Group #7
Software Test Result Report	Date: 14/05/2017

Test Case #	Use Case Being Tested	Test Scenario	Does it Work ?
1	Login	user enters to the system with a valid username and password that was already saved in the system. After entering valid inputs, the home page is opened.	Yes
2	Login	user enters an invalid value that was not already saved in the system. In this case, the user should encounter an error message.	Yes
3	Logout	when user wants to log out, login page should be shown after logging out from the main page	Yes
4	Adding a Book	the properties of the book is entered, afterwards, the book with the entered properties should be added to the system with a success message displayed by the system	Yes
5	Adding a Book	when a book is added with the same properties as an already existing book in the system, the system does not display an error message, but increases the number of this already existing book by the given number of quantity	Yes
6	Adding a Book	when a book is trying to be added, the user cannot be able to enter NULL as input. In that case, there has to be an error message is displayed	Yes
7	Updating a Book	the valid inputs are entered by the user to the section of properties that the user wants to change. A success message is displayed afterwards.	Yes
8	Updating a Book	during the update operation, if the previous value is changed by a NULL input, the system displays an error message indicating that the related area cannot be empty.	Yes
9	Deleting a Book	the delete button is presses when the user wants to delete a book from the system. A message appears indicating that the delete operation is completed.	Yes
10	Searching a Book	the user enters a text to the search box,	Yes

BBM 487 Software Engineering Lab. Group 7- Library Book Loan System	Group #7
Software Test Result Report	Date: 14/05/2017

		afterwards, every single book containing that text appears as a list.	
11	Searching a Book	when the text entered to the search box does not match with any of the books in the system, system displays an error message indicating that there is not such a book.	Yes
12	Searching a Book	when the user enters NULL as input to the search box, an error message is displayed indicating that the search box cannot be empty	Yes
13	Adding a Member	The information of the new member is entered and the new member is created. A success message is displayed.	Yes
14	Adding a Member	If the user is trying to add a member which already exists in the system with the exact same user name, then the system displays a warning message	Yes
15	Deleting a Member	If the user clicks the delete button for a particular member, then the information of that particular member is removed from the system and a message is appeared.	Yes
16	Updating the information of a Member	When the user clicks on the update button and updates the information of a particular member, the changes are saved and a success message is displayed.	Yes
17	Viewing the Books	When the user clicks on Show Books section in the main page, the existing books are displayed as a list	Yes
18	Borrowing a Book	When the user clicks on the Borrow button near a book(which was not borrowed before), the system will ask for a confirmation by asking the user whether they would like to borrow that particular book. When the user confirms, a success message is displayed.	Yes
19	Borrowing a Book	if borrow operation is trying to be done for an already borrowed book, an error message is displayed by indicating that particular book is already borrowed. and the user is added to the waiting list.	Yes
20	Borrowing a Book	if a user tries to borrow a book that they	Yes

BBM 487 Software Engineering Lab. Group 7- Library Book Loan System	Group #7
Software Test Result Report	Date: 14/05/2017

		already borrowed, the system displays an error message indicating that particular book was already borrowed by that user	
21	Borrowing a Book	if a user already has three books borrowed and tries to borrow the fourth book, the system displays an error message indicating that a user cannot borrow more than three books at the same time	Yes
22	Returning a Book	if a user clicks on Return Button, a screen displays asking the user for confirmation, when the user confirms, success message is displayed and the book is returned.	Yes
23	Returning a Book	when a book is successfully returned, it is borrowed by the other user who wanted to borrow it before and added to the waiting list. Returned book goes to the first available user in the waiting list	Yes
24	Waiting List	if a user tries to borrow a book that they already borrowed, they are added to the waiting list. If the waiting list already consists of 10 members, then an error message is displayed indicating that the number of the members in the waiting list cannot exceed 10	Yes

After defining the test cases and indicating whether after the test the related use case works as expected, we wanted to give a deeper description for these test cases and added the input, expected output, obtained output and the final result which indicated whether the expected and obtained outputs match. The following table gives these deeper information about every single use cases and their test scenarios in order to detect if this project gives the accurate results for the possible inputs entered by the user. The test cases are in the exact same order with the defined test cases in the above table.

BBM 487 Software Engineering Lab. Group 7- Library Book Loan System	Group #7
Software Test Result Report	Date: 14/05/2017

Test Case #	Input	Expected Output	Obtained Output	Expected and Obtained Output Match?
1	valid username and password that was already saved in the system	View of the Main Page	View of the Main Page	Yes
2	an invalid username or password	Error Message	Error Message	Yes
3	User presses the log out section	Back to the Login Page	Back to the Login Page	Yes
4	Properties of the Book to the related text boxes(Book Name, Author, Quantity etc.)	Success Message	Success Message	Yes
5	Properties same with an already existing book to the related text boxes	Increased number of books in the quantity section	Increased number of books in the quantity section	Yes
6	NULL input when trying to add a new book	Error Message indicating that the related textbox cannot be empty	Error Message indicating that the related textbox cannot be empty	Yes
7	new values to the textboxes that the user wants to make a change	Success Message indicating that the related properties are successfully updated	Success Message indicating that the related properties are successfully updated	Yes
8	a NULL input to the text box during update operation	warning message indicating that the related area cannot be empty	warning message indicating that the related area cannot be empty	Yes
9	Delete Button is pressed for a Book	message indicating that the delete operation is completed	message indicating that the delete operation is completed	Yes
10	text to search in the list of books	a list containing every single book that includes the input text	a list containing every single book that includes the input text	Yes
11	text that does not match with any of	an error message indicating that there is	an error message indicating that Page 5 of 7 such a book	Yes

BBM 487 Software Engineering Lab. Group 7- Library Book Loan System	Group #7
Software Test Result Report	Date: 14/05/2017

	the books in the system	not such a book.		
12	a NULL input to the search box	an error message indicating that the search box cannot be empty	an error message indicating that the search box cannot be empty	Yes
13	information of the new member	success message indicating that the member is added	success message indicating that the member is added	Yes
14	username that already exists in the system	a warning message indicating that a user with the same name already exist	a warning message indicating that a user with the same name already exists	Yes
15	Delete Button is pressed for a member	a message indicating that the particular member is removed from the system	a message indicating that the particular member is removed from the system	Yes
16	new values to the textboxes that the user wants to make a change	Success Message indicating that related changes are done	Success Message indicating that related changes are done	Yes
17	Clicking on Show Books section	a list consisting of the existing books	a list consisting of the existing books	Yes
18	clicking on Borrow Button for a Book that is not already borrowed and clicking on confirm button on the displayed screen	Success Message indicating that the book is borrowed	Success Message indicating that the book is borrowed	Yes
19	clicking on Borrow Button for a Book that was already borrowed	Error Message indicating that particular book is already borrowed	Error Message indicating that particular book is already borrowed	Yes
20	clicking on Borrow Button for a Book that was already borrowed from the same user who tries to borrow again	Error Message indicating that particular book was already borrowed by that user	Error Message indicating that particular book was already borrowed by that user	Yes
21	clicking on Borrow	error message indicating	error message indicating that a	Yes

BBM 487 Software Engineering Lab. Group 7- Library Book Loan System	Group #7
Software Test Result Report	Date: 14/05/2017

	Button for a Book when the same user already has three borrowed books	that a user cannot borrow more than three books at the same time	user cannot borrow more than three books at the same time	
22	clicking on Return Button for a Book and clicking on confirm button on the displayed screen	success message indicating that particular book is returned	success message indicating that particular book is returned	Yes
23	successful return operation	no output(borrowed book is added to the first available person in the waiting list)	no output(borrowed book is added to the first available person in the waiting list)	Yes
24	clicking on Borrow Button for a Book that was already borrowed and waiting list already consists of 10 members	error message indicating that the number of the members in the waiting list cannot exceed 10	error message indicating that the number of the members in the waiting list cannot exceed 10	Yes