

# **HACETTEPE UNIVERSITY**

# Computer Engineering BBM487 Software Engineering Laboratory

# Library Book Loan System Test Cases

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## **User's Test Cases:**

## 1 – Login Test Case:

# 1.1 Member Login Test Case:

<u>Description</u>: This is the system login test. Users enter their username and passwords and they enter. If they give a wrong username or password system creates a warning window and system goes back to beginning.

Pre-conditions: Opening the program.

Post-conditions: System directs to Member Operations page.

Data required: Username and password.

## 1.1 Librarian Login Test Case:

<u>Description</u>: This is the system login test. Users enter their username and passwords and they enter. If they give a wrong username or password system creates a warning window and system goes back to beginning.

Pre-conditions: Opening the program.

Post-conditions: System directs to Librarian Operations page.

Data required: Username and password.

## 2 - Logout Test Case:

# 2.1 Member Logout Test Case

<u>Description</u>: This is the system logout test. Users click to logout button and system goes back to login screen.

Pre-conditions: Users must be in Member Operations screen.

<u>Post-conditions</u>: Leaving the system. Data required: No data required.

## 2.2 Librarian Logout Test Case

<u>Description</u>: This is the system logout test. Users click to logout button and system goes back to login screen.

<u>Pre-conditions</u>: Users must be in Librarian Operations screen.

<u>Post-conditions</u>: Leaving the system. <u>Data required</u>: No data required.

## 3 - Sign Up Test Case:

# 3.1. Username Already Exist Sign Up Test Case:

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<u>Description</u>: This is a test for sign up with a username that is previously registered. After user fills the form, clicks Sign Up button, and system gives a warning.

Pre-conditions: User must open the sign up form.

Post-conditions: System gives a warning page and display "Username Already Exist." message.

Data required: Username

## 3.2. Passwords Do Not Match Sign Up Test Case:

<u>Description</u>: This is a test for written in the password box and confirm password box don't match, when user fills the sign up form. After user fills the form and clicks Sign Up button and system gives a warning.

Pre-conditions: User must open the sign up form.

Post-conditions: System gives a warning page and display "Passwords do not match" message.

Data required: Password

# 3.3. Successfully Sign Up Test Case:

<u>Description</u>: This is a test for successfully sign up. When user fills the form and sign up, system directs user to login screen.

<u>Pre-conditions</u>: User must open the sign up form. Post-conditions: System directs user to login screen.

Data required: Name, Surname, Username, Password, E-Mail, Turkish Identity Number and Address.

#### 4 - Make Reservation Test Case:

<u>Description</u>: This is a test for making a reservation for a book.

Pre-conditions: The member must be in Waiting List screen.

Post-conditions: System must add the member into waiting list.

Data required: Book name, author name or book code.

## 5 - Cancel Reservation Test Case:

<u>Description</u>: This is a test for canceling a reservation. Member goes to My Reservation tab page. Select book line from listed reservation and cancel it by clicking Cancel Reservation button.

Pre-conditions: The member must be in the My Reservation tab page.

<u>Post-conditions</u>: Reservation must be canceled.

Data required: Book line.

## 6 - Search Book Test Case:

<u>Description</u>: This is the searching a book test. It checks whether the book is in the system.

Pre-conditions: The member must open searching interface.

<u>Post-conditions</u>: The properties of the book must be entered.

<u>Data required</u>: Book name, author name or book code.

# 7 - Self Check Out Test Case:

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#### 7.1 Self Check Out If Book Available:

Description: This is a test for borrowing the book that exists in the system.

Pre-conditions: The member must search the book.

Post-conditions: System displays message "Check out succeed."

Data required: Book name, author name or book code.

#### 7.2 Self Check Out If Book Not Available:

Description: This is a test for borrowing the book that exists in the system.

Pre-conditions: The member must search the book.

Post-conditions: System directs member to the Make Reservation.

<u>Data required</u>: Book name, author name or book code.

#### 8 - Self Return Test Case:

<u>Description</u>: This is a test for returning a book that is taken before. If book is successfully returned, system displays message "Self Return succeed."

Pre-conditions: The member must open My Books tab page.

Post-conditions: System displays message "Self Return succeed".

Data required: No data required.

## 9 - View My Books Test Case:

<u>Description</u>: This is a test for viewing the book. Members see the books they have taken before.

<u>Pre-conditions</u>: The member must open My Books tab page.

Post-conditions: The system must list books that member has.

Data required: No data required.

## 10 – Pay Fine Test Case:

Description: This is a test for paying fine. Members list their fine waiting to be paid and they can pay it by clicking Pay Fine button.

<u>Pre-conditions</u>: Members must list their fine by clicking View My Fine button.

<u>Post-conditions</u>: Pay must be paid. Data required: No data required.

## 11 - Communication with the Librarian Test Case:

<u>Description</u>: This is a test for member communicates with the librarian.

<u>Pre-conditions</u>: The member must be login.

<u>Post-conditions</u>: Member see librarians' contact addresses. Data required: Book name, author name or book code.

## Librarian's Test Cases:

## 3 – Manipulate Book Test Case:

#### 3.1 Insert Book Test Case:

<u>Description</u>: This is a test for manipulating book. Librarian can insert a book by entering book information.

Pre-conditions: The member must be in Manipulate Book screen.

Post-conditions: System must display the message "Book Inserted".

<u>Data required</u>: Book name, book author, book category and book code.

## 3.2 Update Book Test Case:

<u>Description</u>: This is a test for manipulating book. Librarian can update a book by changing book information.

Pre-conditions: The member must be in Manipulate Book screen.

Post-conditions: System must display the message "Book Updated".

<u>Data required</u>: Book name, author name, book category or book code.

#### 3.3 Delete Book Test Case:

Description: This is a test for manipulating book. Librarian can delete a book by selecting line of the book.

Pre-conditions: The member must be in Manipulate Book screen.

<u>Post-conditions</u>: System must display the message "Book Deleted".

Data required: No data required.

## 4 - Manipulate Member Test Case:

### 4.1. List Members Test Case:

<u>Description</u>: This is a test for librarian listing members of the system. If librarian wants to see all member, librarian clicks to List Member tab page and clicks on the List Member button.

<u>Pre-conditions</u>: The librarian must be in Manipulate Members screen.

Post-conditions: The system must list all members.

<u>Data required</u>: No data required.

# 4.2. Making Members Deactive Test Case:

<u>Description</u>: This is a test for deactiving a member from the system. If librarian wants to deactive a member, librarian selects member line and clicks on the Deactive Member button.

Pre-conditions: The librarian must be in Manipulate Members screen.

Post-conditions: The system must make the member deactive.

Data required: No data required.

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## 4.3. Making Members Active Test Case:

<u>Description</u>: This is a test for activating a member from the system. If librarian wants to make active a member, librarian selects line and clicks on the Active Member button.

Pre-conditions: The librarian must be in Manipulate Members screen.

Post-conditions: The system must make the member active.

<u>Data required</u>: No data required.

#### 4.4. List Books Borrowed Test Case:

<u>Description</u>: This is a test for listing books borrowed. If librarian wants to see all books that borrowed, clicks to List Borrowed Books tab page and clicks on the Show Books Borrowed button.

<u>Pre-conditions</u>: The librarian must be in Manipulate Members screen.

Post-conditions: The system must list books borrowed.

Data required: No data required.

#### 4.5. List Fine Test Case:

<u>Description</u>: This is a test for listing fine. If librarian wants to see all fine, clicks to List Fine tab page and clicks on the Show Fines button.

Pre-conditions: The librarian must be in Manipulate Members screen.

Post-conditions: The system must list members' fine.

<u>Data required</u>: No data required.

# **System's Test Cases:**

## 1 - Notify of Book Being Available Test Case:

<u>Description</u>: This is a test for checking if book available.

Pre-conditions: Book must be check out.

Post-conditions: The member must receive the mail from the system.

Data required: No data required.

## 2 - Issue Late Fine Test Case:

<u>Description</u>: This is a test for calculating fine to pay. <u>Pre-conditions</u>: Book must be return to the system. <u>Post-conditions</u>: The system calculates fine to pay. Data required: Book return date, end date of the book