

<1 > - <Login Case>:

Description: Login to the system with a username and password of a user who is a member of the system.

Pre-conditions: The user is a member and has to act on a computer connected to the library system.

Post-conditions: Display system home page.

Data required: User name (String) and Password (String)

<2 > - <Logout Case>:

Description: A user who is a member of the system has to exit the system.

Pre-conditions: Access to the system via a computer connected to the library system.

Post-conditions: Exiting the system and closing the program.

Data required: A data is not connected.

<3 > - <View my Books Case>:

Description: Display the books that a user who is a member of the system gets on the system.

Pre-conditions: Access to the system via a computer connected to the library system.

Post-conditions: Listing books.

Data required: Book name(String), book ID(int), borrowing date(Date) and return date(Date).

<4 > - <Search Books Case>:

Description: Searching for books in the system.

Pre-conditions: Access to the system via a computer connected to the library system. And Enter the name of the desired book.

Post-conditions: Displaying the books found in the search result.

Data required: Book name(String), book ID(int) author of book(String), status of book(bool) borrowing date(Date) and return date(Date).

<6 > - <Self Check-Out Case>:

Description: Borrowing a book from the system.

Pre-conditions: The book to be retrieved from the system has been searched, found and available.

Post-conditions: Displaying books on the main screen.

Data required: Book name(String), book ID(int) author of book(String), status of book(bool) borrowing date(Date) and return date(Date).

<7 > - <Self Return Case>:

Description: To return the borrowed book.

Pre-conditions: Your book is borrowed by someone else. The user does not have any debts.

Post-conditions: Displaying books on the main screen.

Data required: Book name(String), book ID(int) author of book(String), status of book(bool) borrowing date(Date) and return date(Date).

<8 > - <Add name to book waiting list Case>:

Description: Request for the requested book

Pre-conditions: Book borrowed

Post-conditions: Adding the name to the list

Data required: Book name(String), book ID(int) author of book(String), status of book(bool), borrowing date(Date), return date(Date) User Information.

<9 > - <Issue late fine Case>:

Description: Send warnings for upcoming or past books on the date of return.

Pre-conditions: The book has been borrowed and the due date is nearing or past.

Post-conditions: Send warning message to user's mail account.

Data required: Book name(String), book ID(int) author of book(String), borrowing date(Date), return date(Date) User Information.

<10 > - <Self Return Case>:

Description: Notification that the requested book is available.

Pre-conditions: It has been added to the wish list and the book has been returned.

Post-conditions: Send notification message to user's mail account.

Data required: Book name(String), book ID(int) author of book(String), borrowing date(Date), return date(Date) User Information.

<11 > - <Manipulate book Case>:

Description: The administrator adds a new book to the system, updates or deletes existing book information.

Pre-conditions: Entrance into the system as an administrator.

Post-conditions: Book information change.

Data required: : Book name(String), book ID(int) author of book(String), User Information.

<12 > - <Manipulate customer Case>:

Description: The administrator can add a new customer to the system, update or delete existing customer information

Pre-conditions: Login to the system as an administrator

Post-conditions: User information change

Data required: User Information.

<11 > - <Pay fine Case>:

Description: The administrator is required to pay the prices of books with penalty and return them to the library.

Pre-conditions: Entry into the system as an administrator and finding the punishment of the book

Post-conditions: The book is returned to the library and the debt is erased.

Data required: Book name(String), book ID(int) author of book(String), User Information.