Use Case: Borrow Book

21 CST H3Art h03yqin16@foxmail.com

Scope: Library Management System

Level: User-goal

Primary Actor: Library Member **Stakeholders and Interests:**

- **Library Members:** Want a simple, intuitive process to search for, borrow, and return books.
- Librarians: Need to manage book availability and inventory accurately.
- **Library System Administrators:** Ensure that the system is functioning efficiently, with accurate records of transactions.

Preconditions:

- Library member must be registered in the system with a valid membership.
- Book must be available in library inventory.
- System must be online and operational.

Success Guarantee (Postconditions):

Member successfully borrows the book, and system updates both the inventory and the member's borrowing records.

Main Success Scenario:

- 1. Library member logs into library management system.
- 2. Member searches for a book by title, author, or genre.
- 3. System displays available books that match search criteria.
- **4.** Member selects desired book to borrow.
- **5.** System checks if the book is available.
- **6.** Member confirms borrowing transaction.
- **7.** System updates book's status to "borrowed" and logs the transaction under the member's account.
- **8.** System provides member with a due date for returning the book.
- **9.** Member receives a confirmation of the borrowing, which is accessible in their account.

Extensions (Alternative Flows):

- 2a. No matching books found:
- 1. System informs member that no books match their search criteria.
- 2. Member can either modify their search or cancel the borrowing process.
- 5a. Book is already borrowed by another member:
- 1. System informs member that book is unavailable and offers an option to place a hold on the book.
- 2. Member can confirm placing book on hold or search for another title.
- 7a. System error during the borrowing transaction:
- **1.** System notifies member of the error and provides options to retry or contact support.

Special Requirements:

- System must support multiple users borrowing books simultaneously.
- All borrowing records must be securely stored and retrievable by both system administrators and members.
- System must handle high traffic during peak times (e.g., semester starts).

Miscellaneous:

- Accessible features, such as screen readers and enlarged text options, must be available for visually impaired members.