

Phase 2: Requirements Analysis

Functional Requirements

REQ-01: The system shall allow the Librarian to log in using a username and password.

REQ-02: The system shall allow the Librarian to add a new book with details: Title, Author, ISBN, And Quantity.

REQ-03: The system shall prevent a member from borrowing a book if they already have 3 books currently borrowed.

REQ-04: The system shall record the 'Issue Date' automatically when a book is borrowed.

REQ-05: The system shall allow the Librarian to search for books by entering keywords from the Title or Author name.

2. Non-Functional Requirements

NFR-01 (Performance): The system must retrieve search results within 2 seconds for a database of up to 1,000 books.

NFR-02 (Usability): The user interface must be in English and require no more than 3 clicks to reach the "Borrow Book" screen.

3. Use Case: Borrow Book

Actor: Librarian

Pre-condition: Member is registered and has fewer than 3 books borrowed.

Main Flow:

1. Librarian selects "Issue Book" from the menu.
2. Librarian enters Member ID.
3. System verifies Member exists and is eligible.
4. Librarian enters Book ISBN.
5. System checks stock availability.
6. System records the loan and updates the book stock.
7. System displays "Success" message.