# Library

# Use-Case: Scan Book

## Brief Description

Tests that a borrower who is not restricted is able to borrow a book.

## Actors

* 1. Borrower

## Pre-Conditions

* 1. The program has been started and initialised.
  2. The “Borrow” button has been pressed.
  3. The Borrower has swiped in and is not restricted.
  4. The “Scanning” panel is active.
  5. The “Scanner” is active.

## Normal Flow

The use case begins when the Borrower has logged into the system.

Normal is when the borrower has yet to reach their loan limit.

|  |  |
| --- | --- |
| Actor | System |
| 1 Borrower scans the book to be borrowed or enters the book number and presses “Scan Book” | 2 System remains on the “Scanning” panel. |
|  | 3 The Book scanner remains enabled. |
|  | 4 The scanned Book’s details are displayed. |
|  | 5 The new loan for the borrower is added to the Pending Loans list. |

The use case ends.

## Alternate Flows

* 1. When the book is not found.

The use case begins when the Borrower has logged into the system.

|  |  |
| --- | --- |
| Actor | System |
| 1 Borrower scans the book to be borrowed or enters the book number and presses “Scan Book” | 2 System remains on the “Scanning” panel. |
|  | 3 The Book scanner remains enabled. |
|  | 4 “Book not found” error is displayed. |

The use case ends.

* 1. When the book is not available.

The use case begins when the Borrower has logged into the system.

|  |  |
| --- | --- |
| Actor | System |
| 1 Borrower scans the book to be borrowed or enters the book number and presses “Scan Book” | 2 System remains on the “Scanning” panel. |
|  | 3 The Book scanner remains enabled. |
|  | 4 “Book not available” error is displayed. |

The use case ends.

* 1. When the book is already scanned.

The use case begins when the Borrower has logged into the system.

|  |  |
| --- | --- |
| Actor | System |
| 1 Borrower scans the book to be borrowed or enters the book number and presses “Scan Book” | 2 System remains on the “Scanning” panel. |
|  | 3 The Book scanner remains enabled. |
|  | 4 “Book already scanned” error is displayed. |

The use case ends.

* 1. When the borrower reaches their loan limit.

The use case begins when the Borrower has logged into the system.

|  |  |
| --- | --- |
| Actor | System |
| 1 Borrower scans the book to be borrowed or enters the book number and presses “Scan Book” | 2 System shows the “Confirming Loans” panel. |
|  | 3 The Book scanner becomes disabled. |
|  | 4 The final “Pending Loan” list is displayed. |
|  | 5 The Cancel button is enabled. |
|  | 6 The Reject button is enabled. |

The use case ends.

## Subflows

* 1. None

## Key Scenarios

* 1. Borrower has yet to reach their loan limit.
  2. Borrower reaches their loan limit.
  3. Book is not found.
  4. Book is not available.
  5. Book is already scanned.

## Post-conditions

* 1. Borrower has yet to reach their loan limit.
     1. System remains on the “Scanning” panel.
     2. The Book scanner remains enabled.
     3. The scanned Book’s details are displayed.
     4. The new loan for the borrower is added to the Pending Loans list.
  2. Borrower reaches their loan limit.
     1. System shows the “Confirming Loans” panel.
     2. The Book scanner becomes disabled.
     3. The final “Pending Loan” list is displayed.
     4. The Cancel button is enabled.
     5. The Reject button is enabled.
  3. Book is not found.
     1. System remains on the “Scanning” panel.
     2. The Book scanner remains enabled.
     3. “Book not found” error is displayed.
  4. Book is not available.
     1. System remains on the “Scanning” panel.
     2. The Book scanner remains enabled.
     3. “Book not available” error is displayed.
  5. Book is already scanned.
     1. System remains on the “Scanning” panel.
     2. The Book scanner remains enabled.
     3. “Book already scanned” error is displayed.

## Special Requirements

* 1. That the test be repeatable, so multiple books can be scanned to the pending list.