Use case specification

1. Borrow Book

- Pre-Conditions

  None.

- Post-Conditions

  If the use case is successful, borrowing records must be created and stored in the system, the book's state should be updated to "borrowed"; if necessary, delete the reserving records. Otherwise, the state of the system is not changed.

- Flow of Events

  When the borrower wants to borrow physical books from the library, the use case starts.

  1. Basic Flow

     1) A borrower comes to the book-borrowing machine.

     2) The borrower is checked whether he is valid or not. (Is he a valid teacher or student?)

     3) If OK, the borrower scans in the book's BookNo.

     4) The book is checked whether the book is available or not. (reserved or only internal?)

     5) IF OK, a borrowing record is created and stored in the system.

     6) The book's state is updated to "borrowed".

2. Alternative Flow

1) If the borrower is invalid, message is displayed and the use case is over.

2) IF the book is reserved by others or only available internally, message is displayed and the use case is over.