

Borrow_book Function

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Algorithm
1. Start
2. REMARK: Function initialization; def borrow_book()
3. set book = find_book()
4. if book not found, display "Book not found"
5. if book not available, display "Book already borrowed"
6. set book['available'] = False
7. borrower = borrower name and email
8. due_date = current date + the loan period
9. REMARK: Add the book to the borrowed_books array.
10. Stop

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Pseudocode
BEGIN
    COMMENT: Initialization of function borrow_book
    book = find_book() COMMENT: setup the book variable
    IF not book: DISPLAY: "Book not found"
    RETURN False
    IF not book['available']: DISPLAY: "Book is already borrowed."
    RETURN False
    book availability = False
    borrower = borrower_name and email
    due_date = current_date + loan_period
    COMMENT: Add the book to the borrowed_books array
    DISPLAY: "Book borrowed successfully"
    RETURN True
END
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Return Book Function

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Algorithm
1. Start
2. REMARK: Initialization fo the return_book() function
3. set book = find_book()
4. if book not found, display "Book not found"

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5. if book not available, display "Book already borrowed"
6. set book availability = True
7. REMARK: remove the borrower
8. REMARK: remove the due_date
9. FOR: Loop through the borrowed_books array
10. if the user isbn == isbn in borrowed_books
11. REMARK: remove the book from borrowed_books
12. REMARK: break out of the loop
13. Stop
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Pseudocode

BEGIN

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    COMMENT: Initialization fo the return_book() function
    book = find_book()
    If book not found: DISPLAY "Book not found"
    If book not available: DISPLAY "Book already borrowed"
    book availability = True COMMENT: Change book status
    COMMENT: remove the borrower
    COMMENT: remove the due_date
    FOR: Loop through the borrowed_books array
    If the user isbn == isbn:
    COMMENT: remove the book from borrowed_books
    COMMENT: break out of the loop
    DISPLAY: "Book 'book['title']' return by book['borrower']"
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END

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