

Exercise 4 Solution Online Library by Munawar

Exercise 4

Solution

You have to implement a library using Java Class Library.

Methods: add Book, Issue Book, return Book. Show available book.

Properties Array to store the available Books.

Array to secure the issued book

Source Code

Solution

```
import javax.swing.plaf.synth.SynthTextAreaUI;
import java.util.Scanner;
import java.util.Random;

class Library{
    String[] books;
    int no_of_books=0;
    Library(){
        this.books=new String[100];
        this.no_of_books=0;
    }
    void addBook(String book){
        this.books[no_of_books]=book;
        no_of_books++;
        System.out.println(book+" Has been Added !");
    }
    void ShowAvailableBooks(){
        System.out.println("Available Books Are :");
        for (String book: this.books) {
            if(book==null){
                continue;
            }
            System.out.println("*"+book);
        }
    }
    void IssueBook(String book){
        for (String b: this.books) {
            for (int i = 0; i < this.books.length; i++) {
                if (this.books[i].equals(book)) {
                    System.out.println("The book has been issued");
                    this.books[i] = null;
                }
            }
        }
    }
}
```

```

        return;
    }
}
    System.out.println("*" + book);
}
    System.out.println("This book is not exist...");
}

    void ReturnBook(String book){
        addBook(book);
    }
}

public class Main {
    public static void main (String [] args) {

        Library mLibrary=new Library();
        mLibrary.addBook("This is a book");
        mLibrary.addBook("C++");
        mLibrary.addBook("Python");
        mLibrary.addBook("Scratch");
        mLibrary.ShowAvailableBooks();
        mLibrary.IssueBook("C++");
        mLibrary.addBook("Django by Munawar");
        mLibrary.ShowAvailableBooks();
        mLibrary.ReturnBook("C++");
        mLibrary.ShowAvailableBooks();

    }
}

```

Thank You