

Neighborhood Library

Student Workshop 2w

Version 7.0 Y

Project Description

You will build an application for your Neighborhood Library. The library is a free service to anyone in your neighborhood and is based on the honor system. Anyone can check out a book, they just enter their name and the application will track who checked it out.

Create a new GitHub.com repository named `neighborhood-library`.

Remember: When creating a new Java project, create a new git repository and commit your changes often! Don't forget to push to github.com. Always create the Github repository before creating a new Java project.

Read all of the project requirements before you begin to code. Use your notebook to design and plan your project.

Remember to commit and push your code frequently

Requirements

- Create a `Book` class with appropriate getters, setters, constructors and methods. The class should have the following properties:
 - Properties
 - `id: int`
 - `isbn: String`
 - `title: String`
 - `isCheckedOut: boolean`
 - `checkedOutTo: String`
 - Methods
 - `checkout(name)`
 - `checkin()`
- Use an array to hold an inventory of at least 20 books of your choice
- When a book is checked out
 - the `books checkedOutTo` variable should be set to the name provided
 - the `isCheckedOut` variable should be set to true
- When a book is checked in
 - the `books checkedOutTo` variable should be set to ""
 - the `isCheckedOut` variable should be set to false

Screens

- **The Store Home Screen** - The home screen should display a list of options that a user can choose from.
 - Show Available Books
 - Show Checked Out Books
 - Exit - closes out of the application
- **Show Available Books** - Displays a list of all books that are not currently checked out. Display the Id, ISBN and Title of the book.
 - Prompt the user to either select a book to check out, or exit to go back to the home screen
 - If the user wants to check out a book, prompt them for their name
 - Then check out the book
- **Show Checked Out books** - This displays a list of all the books that are currently checked out. Display the Id, ISBN, Title and Name of the person who has the book checked out. Prompt the user to
 - **C** - to Check In a book
 - **X** - to go back to the home screen
- **Check In a book** - Prompt the user for the ID of the book they want to check in.
 - Check in the book with the specified id
 - Go back to the home screen

What Makes a Good Workshop Project?

- **You should:**

- Have a clean and intuitive user interface (give the user clear instructions on each screen)

- **You should adhere to best practices such as:**

- Create a Java Project that follows the Maven folder structure
- Create appropriate Java packages and classes
- Class names should be meaningful and follow proper naming conventions (PascalCase)
- Use good variable naming conventions (camelCasing, meaningful variable names)
- Your code should be properly formatted easy to understand
- use Java comments effectively

- **Make sure that:**

- Your code is free of errors and that it compiles and runs

Your GitHub Repo must be set to public visibility

- Include a README.md file that describes your project and includes screen shots of
 - * your home screen
 - * your products display screen
 - * one calculator page that shows erroneous inputs and an error message.