Neighborhood Library

Workbook 2's Workshop

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 project named `neighborhood-library` and clone it to your `workshop's` directory.

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 (at **minimum** twice a day).

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.
  - ALSO make sure to include one interesting piece of code and a description of WHY it is interesting to you.