

Library System

2022.01.05

Requirements Statement



- Consider a small library system with the following transactions:
 - 1. Check out a copy of a book/ Return a copy of a book.
 - 2. Add a copy of a book to/ Remove a copy of a book from the library.
 - 3. Get the list of books by a particular author or in a particular subject area.
 - 4. Find out the list of books currently checked out by a particular borrower.
 - 5. Find out what borrower last checked out a particular copy of a book.
- There are two types of users: staff users and ordinary borrowers.
- Transactions 1, 2, 4 and 5 are restricted to staff users, except that ordinary borrowers can perform transaction 4 to find out the list of books currently borrowed by themselves.
- The system must also satisfy the following constraints:
 - 1. All copies in the library must be available for check-out or checked out.
 - 2. No copy of a book may be both available and checked out at the same time.
 - 3. A borrower may not have more than a pre-defined number of books checked out at one time.

Upload/Submit



- Please zip your source code and design upload to the e-learning system:
- Deadline: 2022/01/19 (<u>=</u>) 23:59
- Please write your main function in "Main.java"
- We will test your program by running the following script:
 - unzip [your_zip_file]
 - cp [sample_input_file] [your_folder]
 - cd [your_folder]
 - javac *.java
 - java Main [sample_input_file]
- Your design should be done using class diagram and saved it in pdf format.