Requirements

- Groups must create an Application that simulates a Library system
- Four important classes: Library, Book, Loan, User
- User is created at the start, give User a name (and/or id).
- A Book has an Author and a Title (and/or id).
- A Library can contain up to 5 Books.
- The User can borrow a Book or return a Book.
- A Loan is created when the User borrows a Book.
- A Loan is removed when the User returns a Book.
- A User can borrow up to 5 Books.
- The application must be able to: 1) Display ALL books, 2) Display AVAILABLE books, 3) Display BORROWED books (and who borrowed / Loan details)
- Use of Java Collections is not allowed. (List, ArrayList, Map, HashMap, Set, HashSet, etc.)
- Java Exceptions + Handling is not allowed (Exception, try-catch)
- Up to the groups on how to implement 5 Books / 5 Loans
- Added base template to follow, feel free to add new classes and add new attributes but DO NOT delete the existing classes.

Scoring

- 10 Points if minimum requirements are done
- +1 Point if group is able to use Interface or Abstract Classes
- +1 Point Input Validation (No Exception Handling)
- +1 Point for clean implementation / elegant solution
- +1 Point for good formatting / display
- -2 Points for using public attributes / Failure to use getters and setters
- -2 Points for incorrect naming convention (variables = camelCase, Class = PascalCase)
- -2 Points for using advanced topics (Java collections / Java Exception handling, any out-of-scope or not discussed previously)