

Project 3

You will need to write five classes for this project:

Library.java
Media.java
Book.java
Movie.java
Member.java

Here is a description of what each class should do:

Library.java

- Have an ArrayList of media items
- Have an ArrayList of library members
- Provide a way for media items to be checked out and checked in

Media.java

- This will be a super class of Book.java and Movie.java
- Will need to have an ID for each media item
- Will need to have a title for each media item
- Will need to have a status (“checked out” or “available”) for each media item
- Will need to keep track of how many times each media item has been checked out

Book.java

- This is a sub class of Media.java
- Will need to have a parameter for the author’s name
- Will need to have a parameter for the number of pages
- Will need to have a toString method in the following example format:

Book(The Stand, Stephen King, 823 pages, available)

Movie.java

- This is a sub class of Media.java
- Will need to have a parameter for the director's name
- Will need to have a parameter for the length (minutes) of the movie
- Will need to have a toString method in the following example format:

Movie(The Force Awakens, J.J. Abrams, 135 minutes, available)

Member.java

- Will need to have a parameter for the member name
- Will need to have a parameter for the member ID
- Will need to keep track of which media items the member currently has checked out (use an ArrayList)
- Will need to have a toString method in the following example format:

Member(Casey Bowman, ID = 42, [The Hobbit, Batman Begins])

The project is due before the final exam starts on August 1st.

The project is worth 100 points.