Challenge - Library System : JUnit Testing with ArrayLists

Library System Books and Searches -

You have been given source code being developed for part of a book *Library System*. Namely **Book.java** and **LibrarySearch.java**. The developer of the classes has suddenly left the company and has left no documentation. Your manager has reviewed the code and informed you of issues with code clarity, including a lack of comments and some possible defects.   In addition not all the requirements have been implemented. It is your task to implement these, test the classes and raise the coding standards of the classes.

1. Download the code and include in a relevant IDE project.
2. You have been asked to update the code based on the following …
3. Add a new field to **Book**.   Rating : Valid values 1 to 5.
4. Add an **argument based constructor** for the Book class.
5. Apply **validation rules for each of implemented the fields** of Book

ISBN (10 or 13-characters used to identify each specific book)

Author – At least 1 character

Title – At least 1 character

1. To the **LibrarySearch** class implement new searches to enable users to search by **Rating** and **Search by ISBN**.
2. Fully Unit test both classes.

Code to be fixed ....

Book.java (https://canvas.qub.ac.uk/courses/11041/files/1582030/download?wrap=1) ⤓ **(https://canvas.qub.ac.uk/courses/11041/files/1582030/download?download_frd=1)**

LibrarySearch.java (https://canvas.qub.ac.uk/courses/11041/files/1582029/download?wrap=1) ⤓ **(https://canvas.qub.ac.uk/courses/11041/files/1582029/download?download_frd=1)**

Solution .. (includes Test Classes)

Testing Library.zip (https://canvas.qub.ac.uk/courses/11041/files/1582024/download?wrap=1) ⤓ **(https://canvas.qub.ac.uk/courses/11041/files/1582024/download?download_frd=1)**