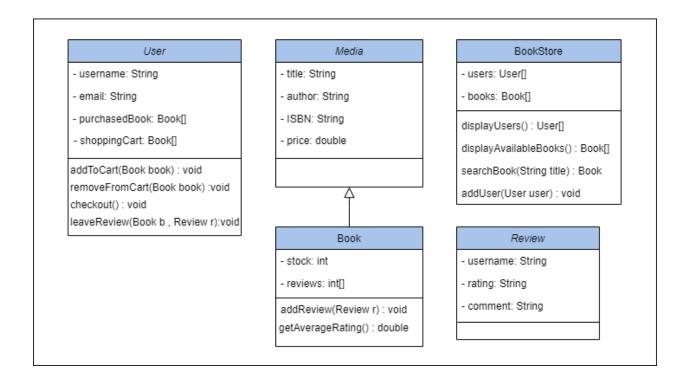


Lab 3

1. Build an Online Bookstore with the following class structure:



1. Media Class:

- Properties: title, author, ISBN, and price.
- Methods: getters and setters for all properties.

2. Book Class:

- Inherits from Media.
- Additional properties: quantity in stock and a list of reviews.
- Methods:
 - addReview(Review review): Adds a review to the book's list of reviews.
 - **getAverageRating()**: Calculates and returns the average rating based on reviews.

3. User Class:

- Properties: username, email, a list to keep track of books they've purchased, and a shopping cart.
- Methods:
 - addToCart(Book book): Adds a book to the user's shopping cart.
 - **removeFromCart(Book book)**: Removes a book from the user's shopping cart.
 - **checkout()**: Completes the purchase of the books in the user's cart, updating the user's purchased books and reducing book quantities in stock.
 - leaveReview(Book book, Review review): Allows a user to leave a review for a book.

4. Review Class:

• Properties: username, rating, and comments.

5. Bookstore Class:

- Properties: a list of available books and a list of users.
- Methods:
 - addUser(User user): Adds a user to the list of users.
 - **searchBook(String title)**: Searches for a book by title and returns it if found.
 - **displayAvailableBooks()**: Displays a list of available books in the store.
 - **displayUsers()**: Displays a list of registered users.

Instructions:

- 1. Implement the above class structure with proper properties, constructors, getters, and setters.
- 2. Create instances of several books and users, utilizing inheritance where appropriate.
- 3. Add books to the bookstore's available books list and register users.
- 4. Allow users to add books to their shopping cart, remove books, and complete purchases.
- 5. Allow users to leave reviews for books and calculate the average rating for each book.
- 6. Display the list of available books and registered users after each operation.