

Movie Collection Manager

Section: C1+C2

Time: 40 minutes

Implement a Movie Collection Manager in Java. The system stores details about multiple movies, including genre, rating, and availability for rental. The program allows the user to perform commands to search for movies by title and rent movies if copies are available.

Requirements:

1. **Classes to Implement:**
 - `Movie`
 - `MovieCollection`
 - `Main`
2. **Movie Input:** Input details for each movie, including `title`, `genre`, `rating` (out of 10), `total copies`, and initial `rented copies`. Ensure that rating doesn't exceed this range [0,10], and the number of rented copies is at most the total copies. Display an error message if these conditions don't match, and take the input again for that movie.
3. **Commands:**
 - **Search:** Allow the user to search for a movie by title and display its details.
 - **Rent:** Allow the user to rent a movie by title. Increase the rented copies if available and display a success or error message accordingly.
4. **Availability Calculation:** Calculate the number of available copies based for each book. Update this information on every rental.

Sample I/O: <https://pastebin.com/TGA6LgkR>

Notes:

- Store each movie's information in an array within the `MovieCollection` class.
- Use the `MovieCollection` class to manage searching and displaying movie details.
- Use appropriate getters and setters to access and modify class fields.

Submission Instructions:

Create a folder named with your student ID and include only the .java files. Zip the folder and submit it as follows:

```
2305010/  
├── Movie.java  
├── MovieCollection.java  
└── Main.java
```

Submit the file as 2305010.zip.