Thanks for the detailed description—your system already has a solid foundation. Here's a complete set of API endpoints that will round out your library management system and give you a solid backend project for practice:

📘 Book Management

| Method | Endpoint | Description |
| --- | --- | --- |
| POST | /books | Add a new book to the library |
| PATCH | /books/{bookId} | Update book info (e.g., title, author, quantity) |
| PATCH | /books/quantity/{bookId} | Update quantity (trigger will auto-update status) |
| GET | /books | Get all books |
| GET | /books/available | Get all books with status AVAILABLE |
| GET | /books/search?query= | Search books by title, author, genre, or ISBN |
| GET | /books/{bookId} | Get specific book by ID |
| DELETE | /books/{bookId} | Delete a book |

👤 User Management

| Method | Endpoint | Description |
| --- | --- | --- |
| POST | /users | Register a new user |
| PATCH | /users/{userId} | Update user info |
| GET | /users | List all users |
| GET | /users/{userId} | Get specific user |
| PATCH | /users/ban/{userId} | Manually ban a user |
| PATCH | /users/unban/{userId} | Manually unban a user |
| GET | /users/status/{status} | Get users by status (ACTIVE or BANNED) |
| GET | /users/credits/low | Get users with low credit (e.g., <= -5) |

🔄 Borrow/Return Management

| Method | Endpoint | Description |
| --- | --- | --- |
| POST | /borrow | Borrow a book (insert into BORROW\_RECORD, reduce book quantity) |
| PATCH | /return/{borrowId} | Return a book (update return date, update user credit, update book quantity) |
| GET | /borrow | Get all borrow records |
| GET | /borrow/active | Get all books currently borrowed |
| GET | /borrow/user/{userId} | Get all books borrowed by a user |
| GET | /borrow/overdue | Get all overdue borrow records |

⚙️ Background Tasks

| Method | Endpoint | Description |
| --- | --- | --- |
| POST | /cron/decrement-credits | Cron-like endpoint that you can trigger daily to reduce credit for overdue books |

You can simulate this with a @Scheduled method in Spring later or use a cron job if hosted.

💡 Bonus Ideas

* Authentication system (later): login, roles (admin vs user).
* Borrow limits: max number of books per user.
* Genre filtering: /books/genre/{genre}.
* Book recommendations: based on user's previous borrow history.