

Library system design

| | Books | Members | Borrowings |
|------------------------|---|---|--|
| Endpoints | GET /books - get all books GET /books/{id} - get book by id POST /books – add a book PUT /books/{id} – update a book DELETE /books/{id} – delete a book | GET /members - get all members GET /members/{id} - get member by id POST /members – add a member PUT /members/{id} – update a member DELETE /members/{id} – delete a member | GET /borrowings – get all borrowings GET /borrowings /{id} – get borrowing by id POST /borrowings – create borrowing PUT /borrowings /{id}/return – Return book |
| Requests | Create Update Delete Search / List Check if book is available for borrowing | Create Update Delete Get list of his borrowings | Create borrowing Mark as closed (return) Check the status of borrowing |
| DTOs | "id": 123, "title": "Clean Code", "author": "Robert Martin", "year": 2008, "category": "Programming", "available": true | "id": 55, "name": "John Doe", "email": "john@example.com" | "id": 900, "bookId": 123, "memberId": 55, "borrowDate": "2025-11-25", "returnDate": null |
| Required fields | title author year category | name email | bookId memberId |