

Book Management API

Module: Book Management

Purpose: Manage books for buyers, sellers, and admins in an e-commerce bookstore

1. Add a Book

Title: BOOK:SELLER:ADD-BOOK

Description: Allows sellers/admins to add new books

Method: POST

Endpoint: /api/books

Acceptance Criteria:

All mandatory fields must be validated

ISBN must be unique

Price > 0, Stock ≥ 0

Only authenticated sellers/admins can add books

Exceptions & Status Codes:

MethodArgumentNotValidException → 400 Bad Request

DuplicateIsbnException → 409 Conflict

UnauthorizedException → 401 Unauthorized

Success: 201 Created

2. Get All Books

Title: BOOK:PUBLIC:GET-ALL

Description: Retrieve a paginated list of available books

Method: GET

Endpoint: /api/books?page=0&size=10&sort=price,asc

Acceptance Criteria:

Supports pagination, sorting, filtering by price, category, author

Only in-stock books returned

Public API – no authentication required

Exceptions & Status Codes: None

Success: 200 OK

No Content: 204 No books available

3. Get Book by ID

Title: BOOK:PUBLIC:GET-BY-ID

Method: GET

Endpoint: /api/books/{bookId}

Acceptance Criteria:

Validate if bookId exists

Public API – accessible to all

Exceptions & Status Codes:

ResourceNotFoundException → 404 Not Found

Success: 200 OK

4. Update Book

Title: BOOK:SELLER:UPDATE-BOOK

Method: PUT

Endpoint: /api/books/{bookId}

Acceptance Criteria:

Only book owner (seller) or admin can update

Cannot update ISBN

Stock cannot be negative

Must validate that book exists

Exceptions & Status Codes:

MethodArgumentNotValidException → 400 Bad Request

ResourceNotFoundException → 404 Not Found

UnauthorizedException → 403 Forbidden

Success: 200 OK

5. Delete Book

Title: BOOK:SELLER:DELETE-BOOK

Method: DELETE

Endpoint: /api/books/{bookId}

Acceptance Criteria:

Only seller or admin can delete

Soft-delete (flag as inactive)

Exceptions & Status Codes:

ResourceNotFoundException → 404 Not Found

UnauthorizedException → 403 Forbidden

Success: 204 No Content

6. Search Books

Title: BOOK:PUBLIC:SEARCH

Method: GET

Endpoint: /api/books/search?keyword=clean

Acceptance Criteria:

Keyword search case-insensitive

Supports multiple filters (price range)

Exceptions & Status Codes: None

Success: 200 OK

No Content: 204 No books found

7. Get Books by Category

Title: BOOK:PUBLIC:GET-BY-CATEGORY

Method: GET

Endpoint: /api/books/category/{categoryId}

Acceptance Criteria:

Must validate category exists

Exceptions & Status Codes:

ResourceNotFoundException → 404 Not Found

Success: 200 OK

No Content: 204 No books

8. Update Book Stock

Title: BOOK:SELLER:UPDATE-STOCK

Method: PATCH

Endpoint: /api/books/{bookId}/stock

Acceptance Criteria:

Atomic updates in concurrent scenarios

Log every stock update

Exceptions & Status Codes:

ResourceNotFoundException → 404 Not Found

MethodArgumentNotValidException → 400 Bad Request

Exception → 500 Internal Server Error

Success: 200 OK

9. Upload Book Image

Title: BOOK:SELLER:UPLOAD-IMAGE

Method: POST

Endpoint: /api/books/{bookId}/image

Acceptance Criteria:

Validate book exists

Only allowed file formats

Exceptions & Status Codes:

ResourceNotFoundException → 404 Not Found

InvalidFormatException → 400 Bad Request

Success: 200 OK

10. Bulk Import Books

Title: BOOK:ADMIN:BULK-IMPORT

Method: POST

Endpoint: /api/books/import

Acceptance Criteria:

Admin only

Validate file format & content

No duplicate ISBN in file

Exceptions & Status Codes:

UnauthorizedException → 401 Unauthorized

DuplicateIsbnException → 409 Conflict

MethodArgumentNotValidException → 400 Bad Request

Success: 200 OK

11. Get Books by Seller

Title: BOOK:SELLER:GET-MY-BOOKS

Method: GET

Endpoint: /api/books/seller/{sellerId}

Acceptance Criteria:

Seller can only access their own books

Exceptions & Status Codes:

UnauthorizedException → 403 Forbidden

Success: 200 OK

No Content: 204 No books

12. Feature Book

Title: BOOK:ADMIN:FEATURE-BOOK

Method: PATCH

Endpoint: /api/books/{bookId}/feature

Acceptance Criteria:

Admin only

Validate book exists

Exceptions & Status Codes:

UnauthorizedException → 403 Forbidden

ResourceNotFoundException → 404 Not Found

Success: 200 OK

Standard Exceptions Reference

Exception	Status Code	When to Use
MethodArgumentNotValidException	400	Validation error
DuplicateIsbnException	409	Duplicate ISBN
ResourceNotFoundException	404	Book/Category not found
UnauthorizedException	401	User not logged in
ForbiddenException	403	Authenticated but not allowed
InvalidFormatException	500	Wrong file format
Exception		Other server errors