

REPLIQ Junior Backend Developer Practical Test(Documentation)

The Library Management API facilitates the management of a library system where users (members) can view, borrow, and return books, while administrators can manage the collection of books. The system implements JWT authentication and role-based access control to ensure secure access.

Authentication and Authorization

For authentication, both admin and user uses JWT.

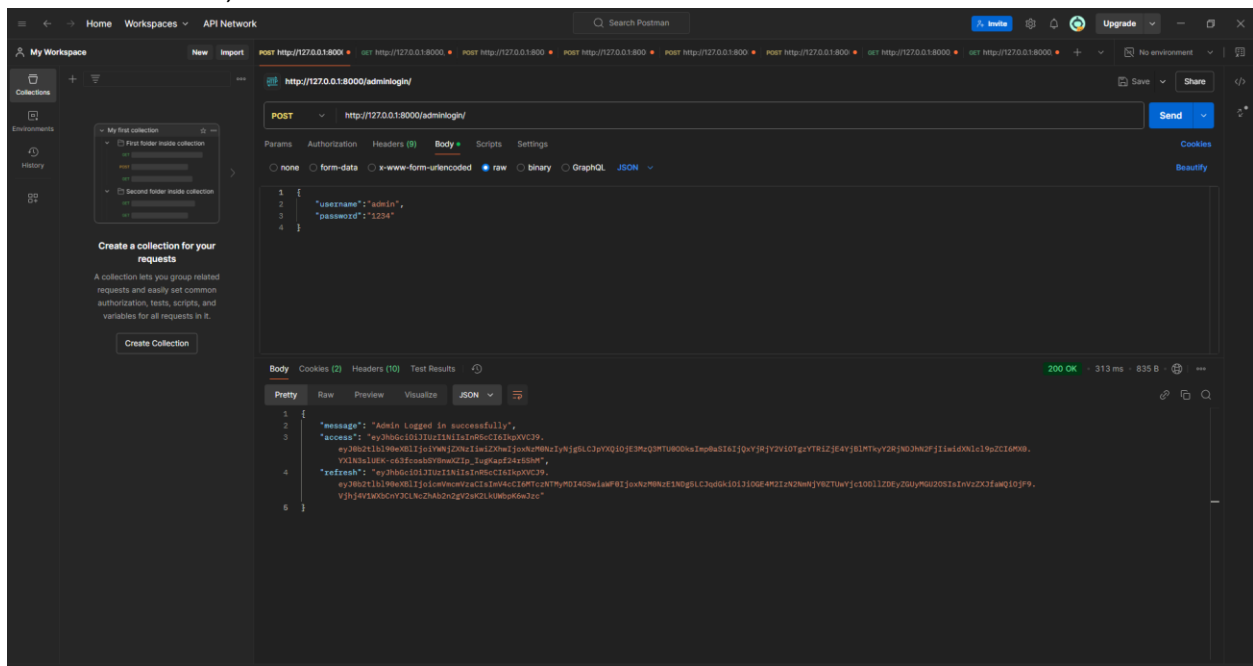


Figure: Admin Login(JWT)

Book Management (Admin Only)

Admin can perform CRUD, where admin can create, read, update and delete books from the library.

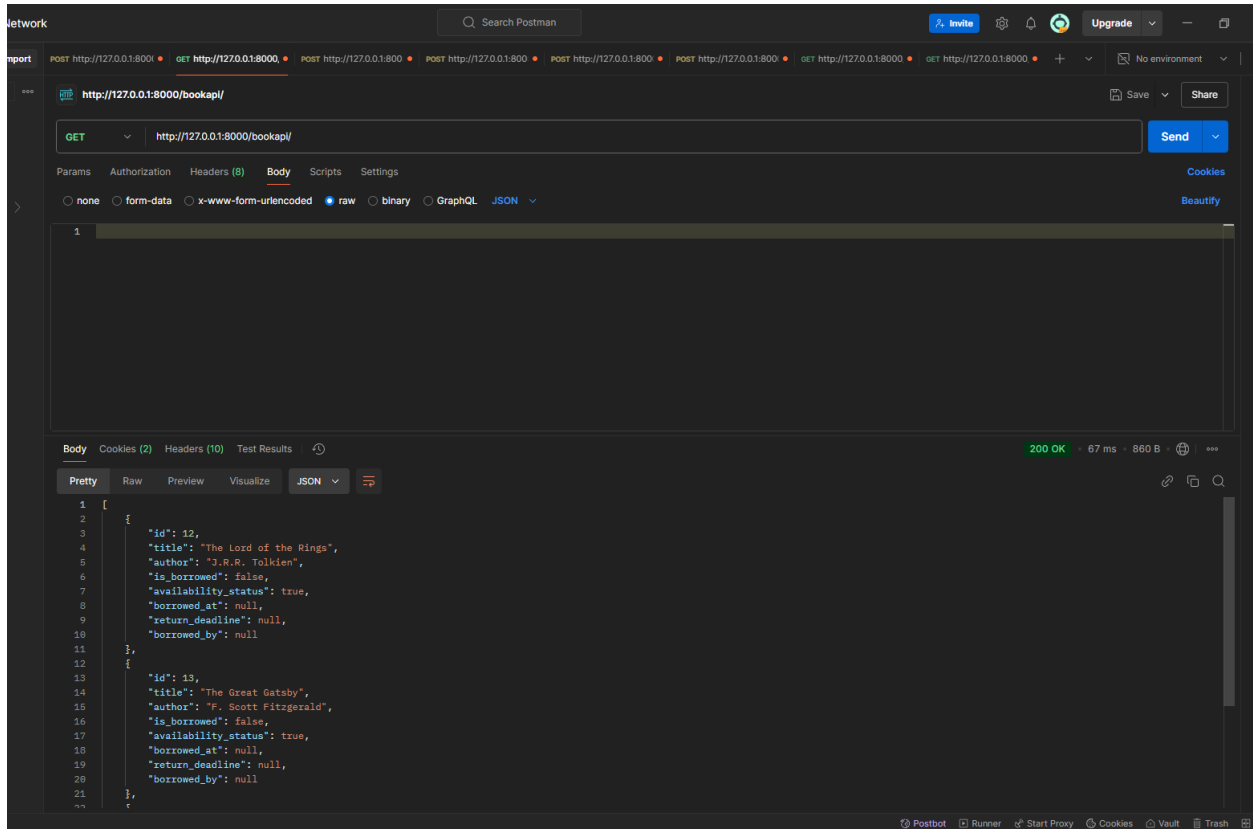


Figure: Read the data

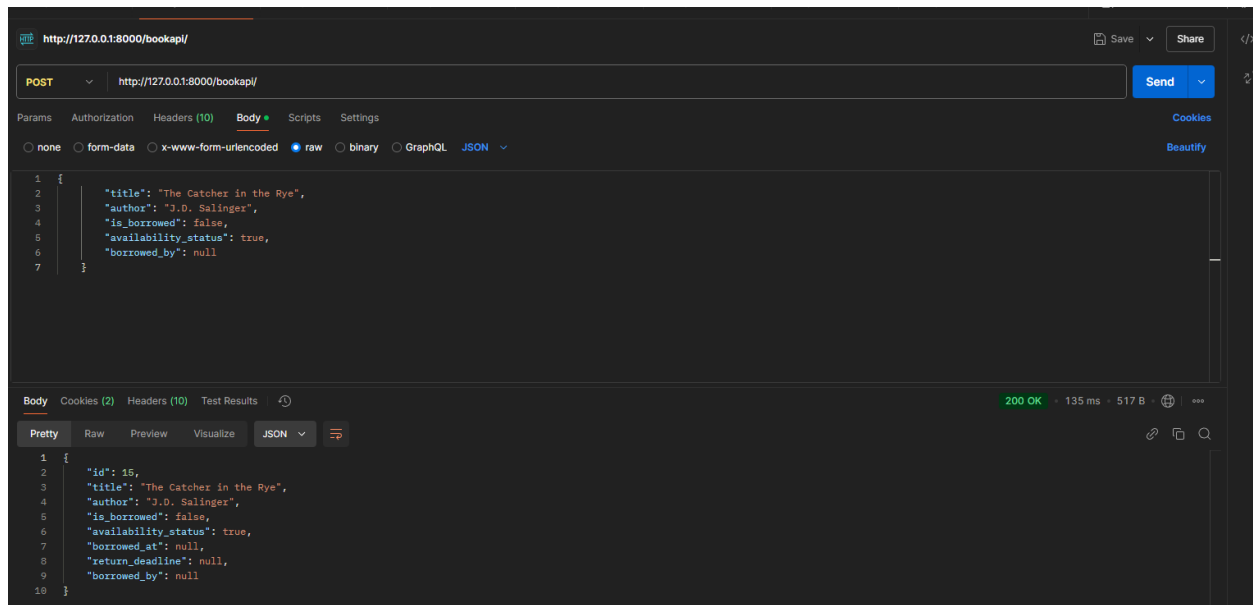


Figure: Post Data

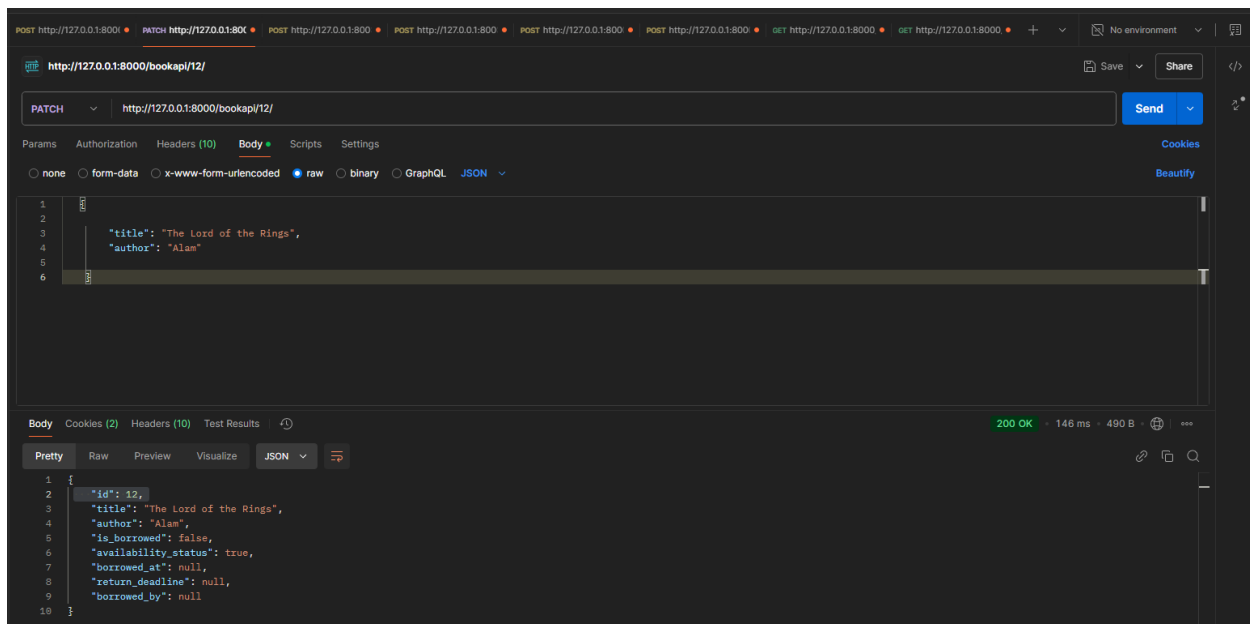


Figure: Patch Data

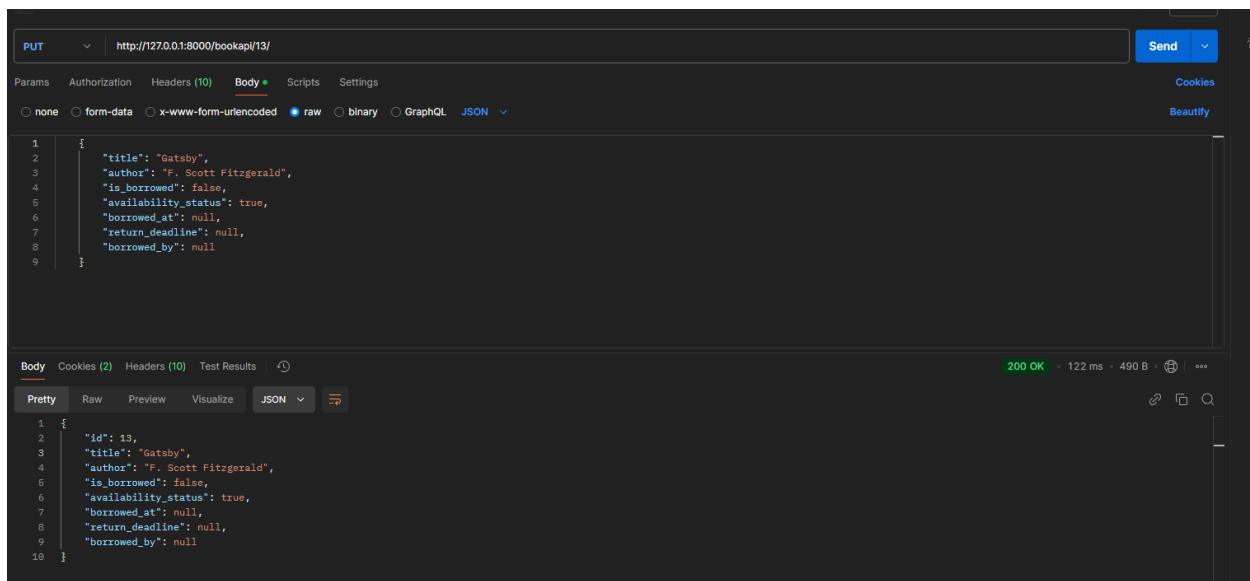


Figure: Put data

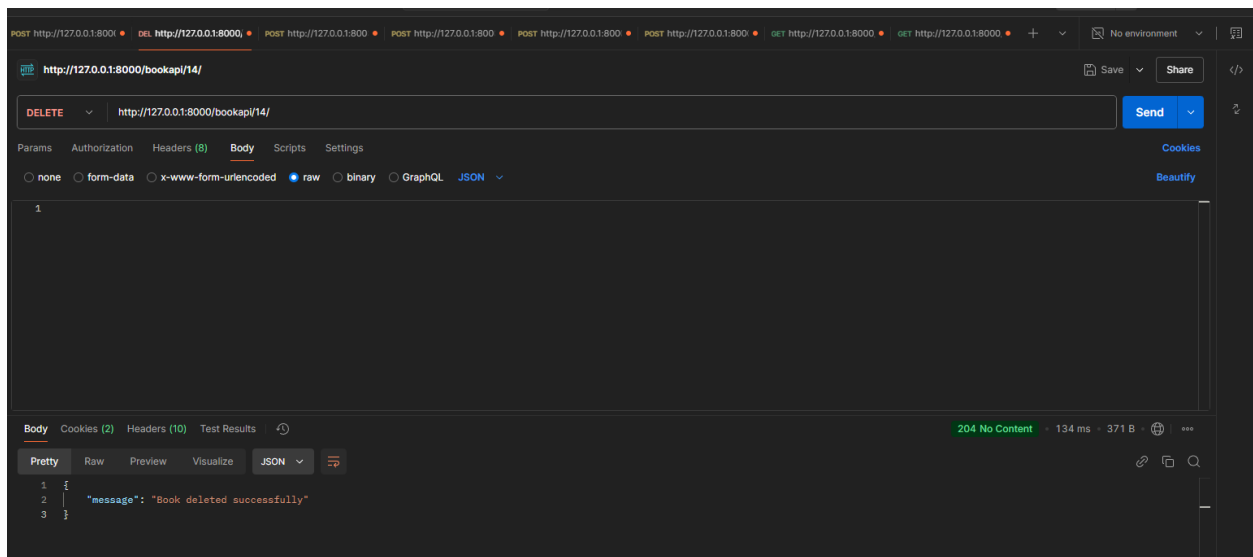


Figure: Delete Data

Book Borrowing and Returning System

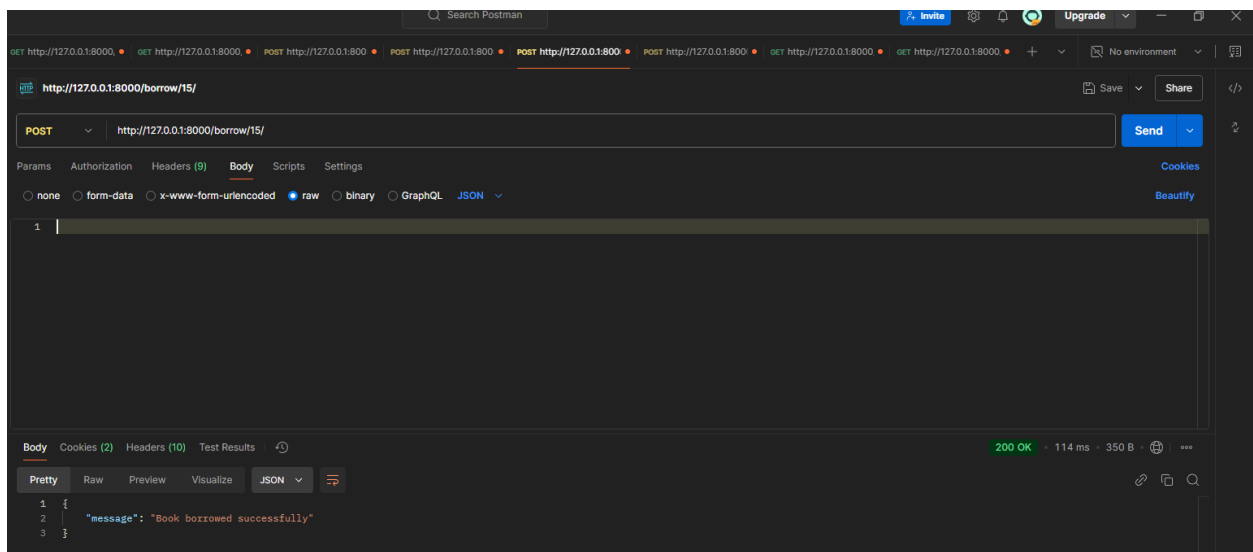


Figure: Borrow Book

```

    },
    {
      "id": 15,
      "title": "The Catcher in the Rye",
      "author": "J.D. Salinger",
      "is_borrowed": true,
      "availability_status": false,
      "borrowed_at": "2024-12-21T00:12:26.187423Z",
      "return_deadline": "2025-01-04T00:12:26.187423Z",
      "borrowed_by": 3
    }
  ]
}

```

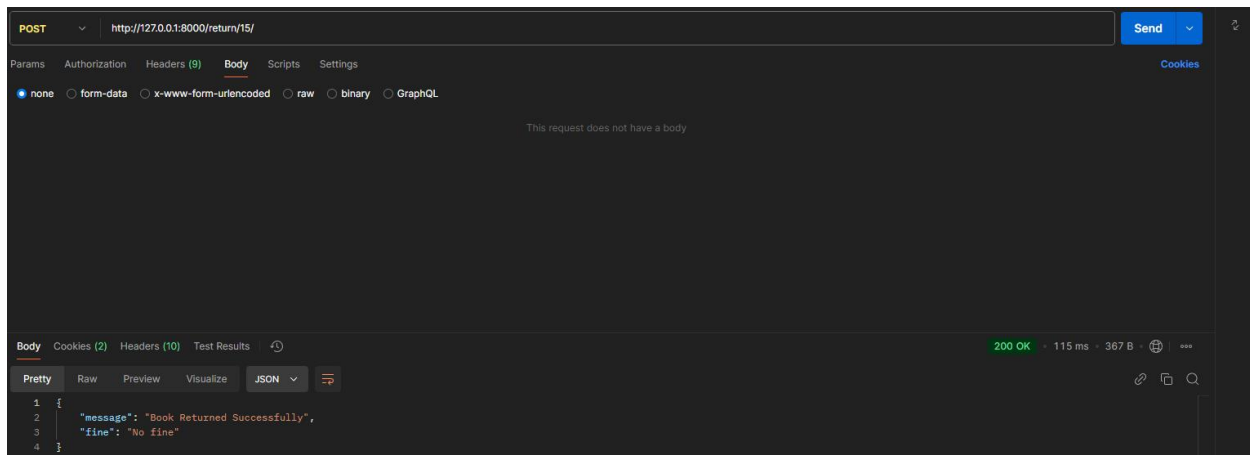


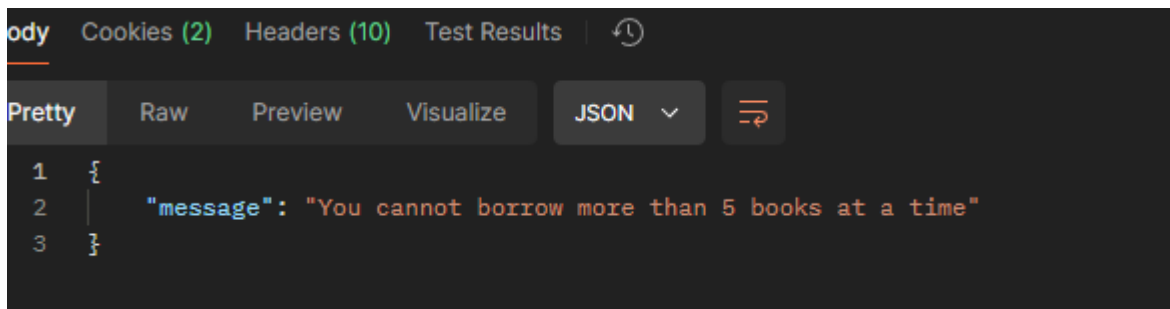
Figure: Book Returned

```

{
  "id": 15,
  "title": "The Catcher in the Rye",
  "author": "J.D. Salinger",
  "is_borrowed": false,
  "availability_status": true,
  "borrowed_at": null,
  "return_deadline": null,
  "borrowed_by": null
}

```

Figure: Status of book



The image shows a screenshot of a web browser's developer console. At the top, there are tabs for 'body', 'Cookies (2)', 'Headers (10)', and 'Test Results'. Below these tabs is a toolbar with buttons for 'Pretty', 'Raw', 'Preview', 'Visualize', and 'JSON'. The 'JSON' button is selected, and a dropdown arrow is visible next to it. To the right of the 'JSON' button is a button with a red icon. The main area of the console displays a JSON object on three lines: line 1 shows an opening curly brace '{', line 2 shows a quoted string '"message": "You cannot borrow more than 5 books at a time"' with a vertical line pointing to it, and line 3 shows a closing curly brace '}'. The text is color-coded: the opening and closing braces are grey, and the string is orange.

```
1  {  
2  |    "message": "You cannot borrow more than 5 books at a time"  
3  }
```

Figure: Book Borrowing limitations