



**An-Najah National University  
Faculty of Engineering and IT**

**جامعة النجاح الوطنية  
كلية الهندسة وتكنولوجيا المعلومات**

**Distributed Operating Systems**

**10636456**

**1<sup>st</sup> Semester | 2025-2026**

**Bazar-com Project | Part 1 | Results**

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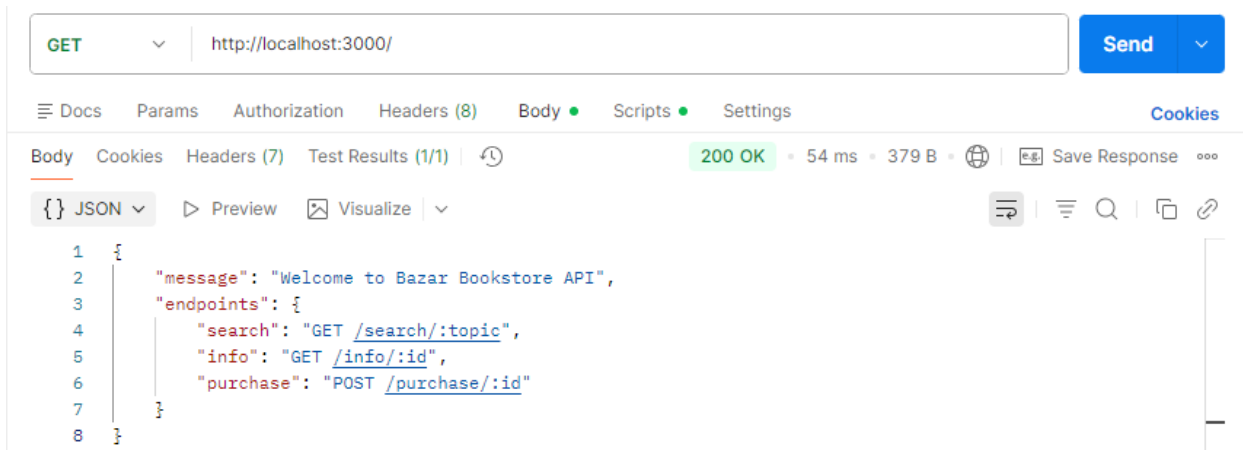
**12220650**

Once the system is running:

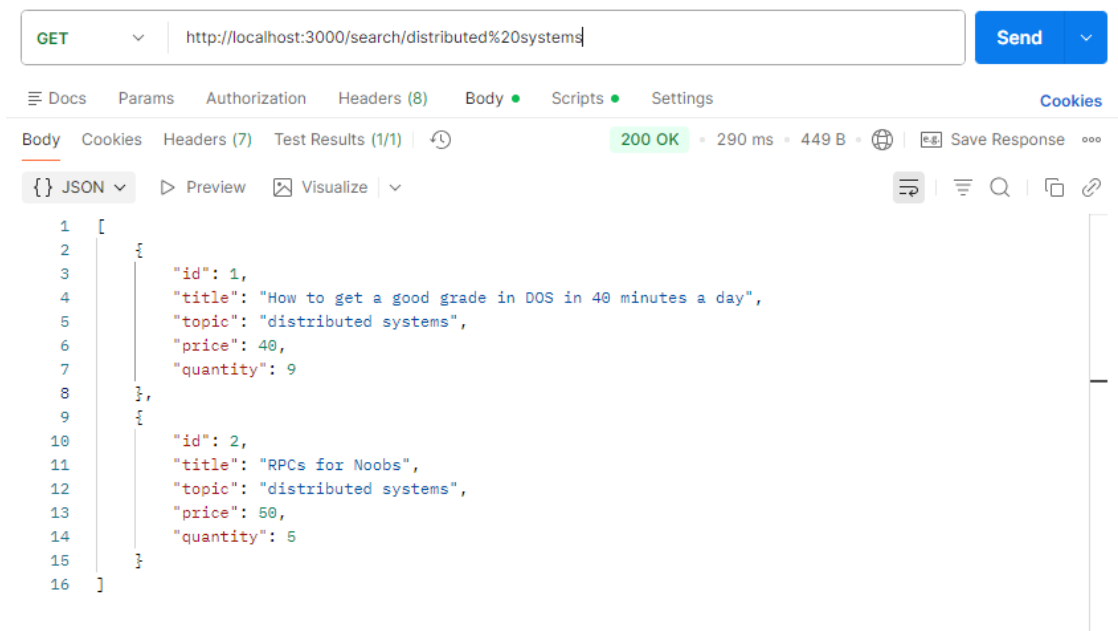
```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

PS C:\Users\lenovo\Desktop\Bazar-com\docker> docker-compose up --build

catalog-1 | 📖 Catalog service running on port 4000
fronted-1  | 🌐 Frontend service running on port 3000
order-1   | 🛒 Order service running on port 5000
```



Searching for books with topic “distributed systems”:



```
fronted-1 | 🔍 Frontend: Search request for topic: distributed systems
catalog-1 | 📖 Search for "distributed systems": Found 2 books
fronted-1 | ✅ Frontend: Search successful, found 2 books
```

Searching for books with topic “undergraduate school”:

GET http://localhost:3000/search/undergraduate%20school Send

Docs Params Authorization Headers (8) Body ● Scripts ● Settings Cookies

Body Cookies Headers (7) Test Results (1/1) 200 OK • 27 ms • 471 B Save Response

{ } JSON Preview Visualize

```
1 [
2   {
3     "id": 3,
4     "title": "Xen and the Art of Surviving Undergraduate School",
5     "topic": "undergraduate school",
6     "price": 35,
7     "quantity": 5
8   },
9   {
10    "id": 4,
11    "title": "Cooking for the Impatient Undergrad",
12    "topic": "undergraduate school",
13    "price": 25,
14    "quantity": 4
15  }
16 ]
```

```
fronted-1 | 🔍 Frontend: Search request for topic: undergraduate school
catalog-1 | 📖 Search for "undergraduate school": Found 2 books
fronted-1 | ✅ Frontend: Search successful, found 2 books
```

Get information about book with id=3:

GET http://localhost:3000/info/3 Send

Docs Params Authorization Headers (8) Body ● Scripts ● Settings Cookies

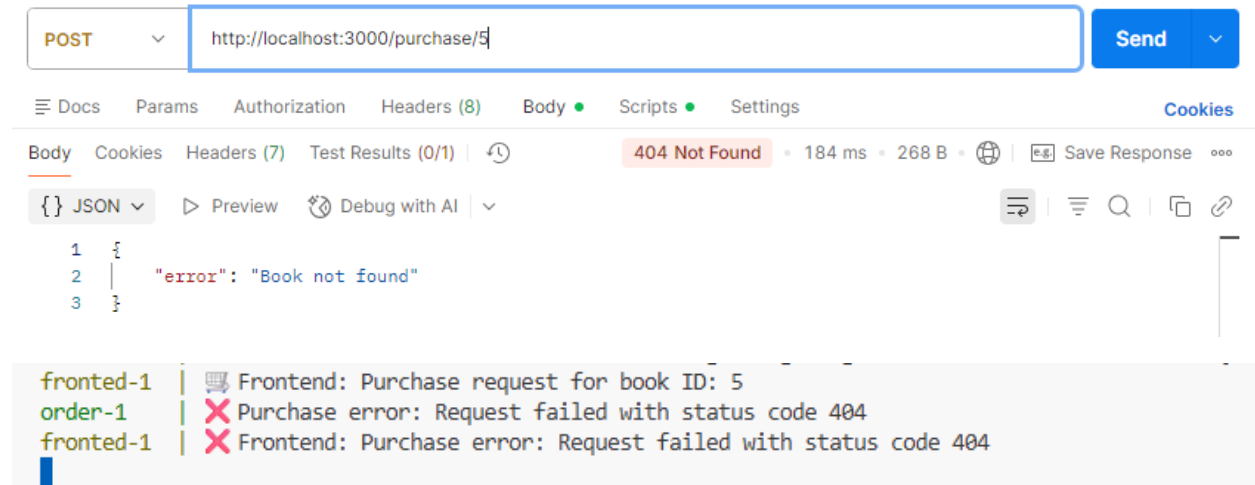
Body Cookies Headers (7) Test Results (1/1) 200 OK • 27 ms • 359 B Save Response

{ } JSON Preview Visualize

```
1 {
2   "id": 3,
3   "title": "Xen and the Art of Surviving Undergraduate School",
4   "topic": "undergraduate school",
5   "price": 35,
6   "quantity": 5
7 }
```

```
fronted-1 | [i]Frontend: Info request for book ID: 3
fronted-1 | [✓]Frontend: Info retrieved for: "Xen and the Art of Surviving Undergraduate School"
catalog-1 | [i]Info request for book ID: 3 - "Xen and the Art of Surviving Undergraduate School"
```

Purchase for book with not available id:



POST http://localhost:3000/purchase/5 Send

Docs Params Authorization Headers (8) Body Scripts Settings Cookies

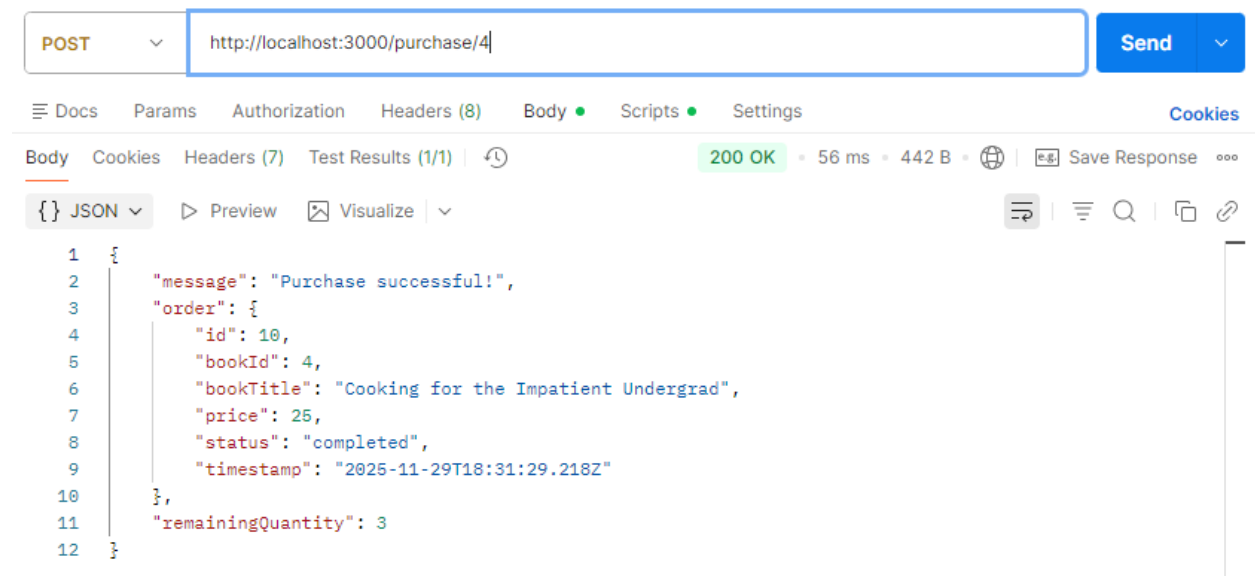
Body Cookies Headers (7) Test Results (0/1) 404 Not Found 184 ms 268 B Save Response

JSON Preview Debug with AI

```
1 {
2   "error": "Book not found"
3 }
```

```
fronted-1 | [i]Frontend: Purchase request for book ID: 5
order-1   | [✗]Purchase error: Request failed with status code 404
fronted-1 | [✗]Frontend: Purchase error: Request failed with status code 404
```

Purchase for book with id=4:



POST http://localhost:3000/purchase/4 Send

Docs Params Authorization Headers (8) Body Scripts Settings Cookies

Body Cookies Headers (7) Test Results (1/1) 200 OK 56 ms 442 B Save Response

JSON Preview Visualize

```
1 {
2   "message": "Purchase successful!",
3   "order": {
4     "id": 10,
5     "bookId": 4,
6     "bookTitle": "Cooking for the Impatient Undergrad",
7     "price": 25,
8     "status": "completed",
9     "timestamp": "2025-11-29T18:31:29.218Z"
10  },
11   "remainingQuantity": 3
12 }
```

```
fronted-1 | [i]Frontend: Purchase request for book ID: 4
order-1   | [✓]Purchase successful: Request completed with status code 200
```

```
fronted-1 | 🛒 Frontend: Purchase request for book ID: 4
catalog-1 | ⓘ Info request for book ID: 4 - "Cooking for the Impatient Undergrad"

order-1 | 🛒 Purchase request for: "Cooking for the Impatient Undergrad" - Current quantity: 4

catalog-1 | 🔄 Updated book ID: 4 - Quantity: 3, Price: 25
fronted-1 | ✅ Frontend: Purchase successful - Order ID: 10
order-1 | ✅ Purchase successful! Order ID: 10, Remaining quantity: 3
```

Purchase a book out of stock:

The screenshot shows a REST client interface with a POST request to `http://localhost:3000/purchase/4`. The response is a 400 Bad Request with a body containing `"error": "Book out of stock"`. Below the screenshot, a log shows the sequence of events: a purchase request for book ID 4, an info request for the book, and a successful purchase for a different book, followed by a frontend error message for the failed purchase request.

```
POST http://localhost:3000/purchase/4
Send

Docs Params Authorization Headers (8) Body ● Scripts ● Settings Cookies
Body Cookies Headers (7) Test Results (0/1) 400 Bad Request 14 ms 273 B Save Response
{} JSON Preview Debug with AI
1
2 "error": "Book out of stock"
3

fronted-1 | 🛒 Frontend: Purchase request for book ID: 4
order-1 | 🛒 Purchase request for: "Cooking for the Impatient Undergrad" - Current quantity: 0
catalog-1 | ⓘ Info request for book ID: 4 - "Cooking for the Impatient Undergrad"

fronted-1 | ❌ Frontend: Purchase error: Request failed with status code 400
```