Corporate Equipment Allocation and Tracking System

Owner: Sanjeev Kumar V
Date: Nov 22, 2025

The Problem

In a busy corporate office environment, the management of shared equipment—such as laptops, projectors, and tablets—presents a significant logistical challenge. The current reliance on manual tracking methods, like spreadsheets or physical logbooks, is inefficient and prone to human error.

This leads to several key problems:

- **Poor Availability Tracking:** Staff cannot easily determine what equipment is available or when a currently allocated item is scheduled to be returned.
- **Lack of Accountability:** There is no formal process for tracking the condition of equipment, leading to items being returned damaged without a clear maintenance flag. This also contributes to equipment loss.
- **Scheduling Conflicts:** Without an automated system to enforce return dates, employees often return items late, causing cascading scheduling conflicts for other users.
- **Siloed Information:** The Inventory and Maintenance teams are disconnected from the daily allocation process. They are not automatically updated when an item's status changes (e.g., "allocated," "returned," "damaged").
- Inefficient equipment distribution
- Missing or lost devices due to lack of audits
- No real-time view of availability
- No automated follow-up for overdue returns
- No proper maintenance workflow
- Lack of notifications to teams responsible for inventory and repairs

1.2. The Solution & System Goals

To solve these challenges, we are proposing a centralized, automated **Corporate Equipment Allocation and Tracking System**. This system will streamline the entire lifecycle of equipment management, from allocation to return and maintenance.

The primary goals of this solution are:

- **Goal 1: Simplify Allocation:** Empower reception staff to easily allocate and log equipment returns in seconds through a simple user interface.
- **Goal 2: Ensure Accountability:** Track every item's lifecycle, logging who has what, when it's due back, and its condition upon return.

- **Goal 3: Automate Communication:** Proactively notify all relevant stakeholders (Employees, Maintenance, Inventory) in real-time about equipment status.
- **Goal 4: Build a Resilient System:** Implement a modern, scalable, and fault-tolerant backend architecture that can handle failures gracefully and scale as the company grows.

The **Corporate Equipment Allocation and Tracking System** provides an automated, centralized backend that manages the full lifecycle of equipment assets.

1. Equipment Allocation & Return Workflow

- Reception staff assigns equipment to employees.
- The system checks availability before allocating.
- Return workflow logs condition and creates maintenance alerts for damaged items.

2. Automated Notifications using Kafka

- Overdue reminders sent automatically.
- Maintenance alerts for damaged items.
- Inventory updates when items are allocated/returned.
- Kafka ensures reliable event-driven communication.

3. Role-Based Access Control (RBAC)

- Admin
- Reception Staff
- Inventory Team
- Maintenance Team

Each role has separate access privileges.

4. Akka/Pekko Scheduler for Automated Overdue Checks

- Periodically scans for overdue items.
- Publishes events to Kafka or sends notifications.

5. Play Framework REST API Backend

- Fully RESTful endpoints for allocation, returns, maintenance, users, inventory, and notifications.

Core Features

The system's functionality is broken down into the following core features:

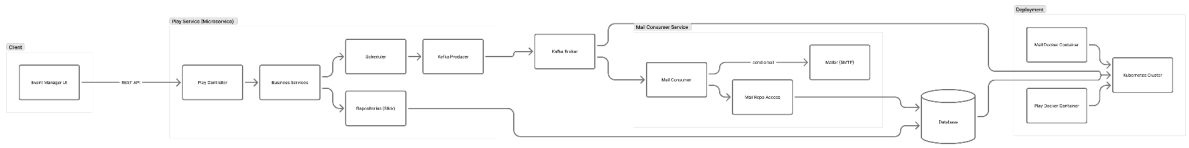
Feature	Description
Equipment Allocation	Reception staff logs employee details (name, dept, purpose) and expected return date.
Equipment Return	Staff logs the return, verifies the item's condition, and flags it for maintenance if needed.
Overdue Reminders	**Automated:** Sends email reminders to employees who have not returned equipment on time.
Maintenance Alerts	**Automated:** Notifies the maintenance team instantly if an item is returned damaged or due for service.
Inventory Sync	**Automated:** Notifies the inventory team on every allocation and return to keep availability status up-to-date.

User Roles & Stakeholders

The system will serve several key groups:

- **Reception Staff (Primary User):** Manages the day-to-day allocation and return process via the system's web interface.
- **Employees (End User):** The individuals who borrow equipment. Their primary interaction is receiving automated email notifications (e.g., overdue reminders).
- **Maintenance Team (Stakeholder):** A downstream consumer of the system. They receive automated alerts to schedule repairs for equipment flagged as damaged.
- **Inventory Team (Stakeholder):** A downstream consumer of the system. They receive real-time data to update master inventory lists and availability status.

System Architecture



4.1. Architectural Overview

We will implement a **Reactive Microservices Architecture** to separate concerns and ensure high availability and resilience. This design decouples the core request-handling logic from asynchronous background tasks and notifications.

The architecture consists of four primary components:

1. **Equipment Service (Play Framework):** The core of the system and the main "front door." This service exposes a REST API that handles all synchronous requests from the reception staff's web application (e.g., "Allocate this item," "Return this item").
2. **Notification Service (Akka Microservice):** A separate, asynchronous service. Its sole responsibility is to handle scheduled, internal tasks. For this project, it manages checking for and sending overdue reminders.
3. **Message Broker (Kafka):** This acts as the "central nervous system" for all event-driven, asynchronous communication. It decouples the Equipment Service from all other teams and services.
4. **Downstream Consumers:** These are independent services that listen for events from Kafka. In this system, they represent the Maintenance and Inventory teams, who consume alerts and updates.

Equipment Service (Play Framework)

- **Role:** The main "front door" of our system. It handles all direct user interactions.
- **Technology:** Play Framework (Java/Scala)
- **Justification:** The Play Framework is ideal for this role. It is built on Akka, making it non-blocking and asynchronous by default, which allows it to handle thousands of concurrent requests efficiently. Its REST-first design and hot-reloading capabilities also allow for rapid development and clean, stateless APIs.

Notification Service (Akka Actors)

- **Role:** The "background worker" for internal, stateful, and scheduled tasks.
- **Technology:** Akka Actors (in a standalone microservice)
- **Justification:** The Actor Model is perfect for our overdue reminder requirement. We can create a lightweight OverdueSchedulerActor with a built-in Scheduler to wake up periodically (e.g., once an hour). This actor then sends a message to a ReminderWorkerActor to perform the work

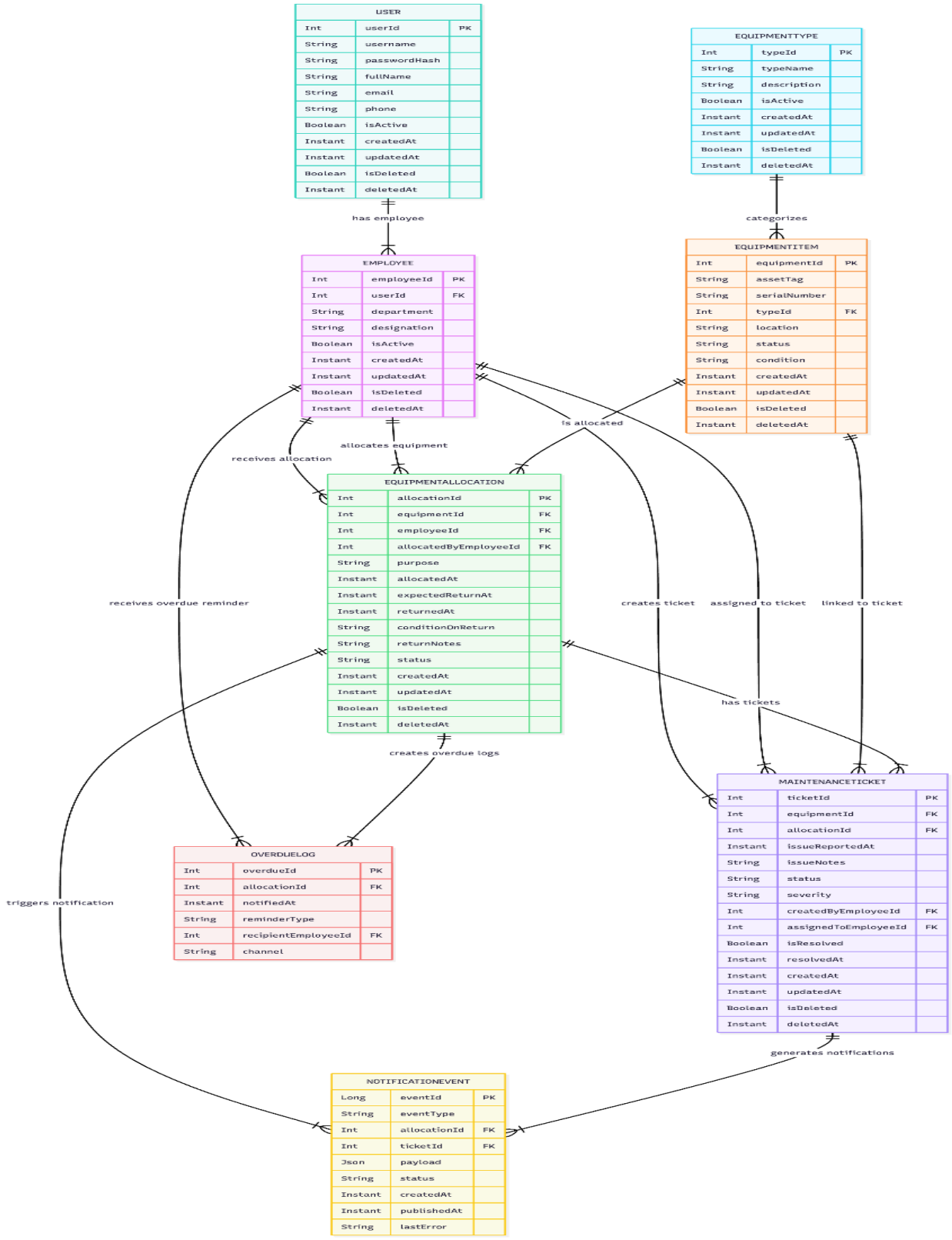
(querying the database and sending emails). This isolates the task and, by using Akka's supervision strategies, creates a self-healing, fault-tolerant system.

Apache Kafka (Message Queue)

Kafka acts as a durable, high-throughput buffer for all inter-service communication.

- **Decoupling:** Play doesn't need to know how notifications are sent; it just sends the data to Akka, which uses Kafka.
- **Reliable Delivery:** If the final Notification Dispatcher fails, the messages remain in the Kafka topic, ensuring delivery once the dispatcher recovers.
- **Notification Queueing:** All reminders and alerts are queued, smoothing out traffic spikes and preventing the Akka service from blocking on external HTTP calls (Email/SMS gateways).
- **Usage Example:**
    - **Topic:** equipment-event
    - **Allocation Message:** When an item is allocated, the Play service publishes: { "event_type": "CREATE", "item_id": "laptop-123", "user": "..." }
    - **Damage Message:** When an item is returned damaged, the Play service publishes: { "event_type": "DAMEAGE", "item_id": "proj-456", "notes": "..." }

Database:


USER
Int userId PK
String username
String passwordHash
String fullName
String email
String phone
Boolean isActive
Instant createdAt
Instant updatedAt
Boolean isDeleted
Instant deletedAt
has employee
EQUIPMENTTYPE
Int typeId PK
String typeName
String description
Boolean isActive
Instant createdAt
Instant updatedAt
Boolean isDeleted
Instant deletedAt
categorizes
EMPLOYEE
Int employeeId PK
Int userId FK
String department
String designation
Boolean isActive
Instant createdAt
Instant updatedAt
Boolean isDeleted
Instant deletedAt
EQUIPMENTITEM
Int equipmentId PK
String assetTag
String serialNumber
Int typeId FK
String location
String status
String condition
Instant createdAt
Instant updatedAt
Boolean isDeleted
Instant deletedAt
is allocated
receives allocation
allocates equipment
EQUIPMENTALLOCATION
Int allocationId PK
Int equipmentId FK
Int employeeId FK
Int allocatedByEmployeeId FK
String purpose
Instant allocatedAt
Instant expectedReturnAt
Instant returnedAt
String conditionOnReturn
String returnNotes
String status
Instant createdAt
Instant updatedAt
Boolean isDeleted
Instant deletedAt
receives overdue reminder
creates ticket
assigned to ticket
linked to ticket
has tickets
creates overdue logs
OVERDUELOG
Int overdueId PK
Int allocationId FK
Instant notifiedAt
String reminderType
Int recipientEmployeeId FK
String channel
MAINTENANCETICKET
Int ticketId PK
Int equipmentId FK
Int allocationId FK
Instant issueReportedAt
String issueNotes
String status
String severity
Int createdByEmployeeId FK
Int assignedToEmployeeId FK
Boolean isResolved
Instant resolvedAt
Instant createdAt
Instant updatedAt
Boolean isDeleted
Instant deletedAt
triggers notification
generates notifications
NOTIFICATIONEVENT
Long eventId PK
String eventType
Int allocationId FK
Int ticketId FK
Json payload
String status
Instant createdAt
Instant publishedAt
String lastError

Sample Data:

Use:


```
{
 "userId": 1,
 "username": "john.doe",
 "passwordHash": "$2b$12$xxxxhashedpasswordxxxx",
 "fullName": "John Doe",
 "email": "john.doe@example.com",
 "phone": "9876543210",
 "isActive": true,
 "createdAt": "2025-01-10T10:00:00Z",
 "updatedAt": "2025-01-10T10:00:00Z",
 "roles": ["EMPLOYEE"],
 "isDeleted": false,
 "deletedAt": null
}
```


Employee:


```
{
 "employeeId": 101,
 "userId": 1,
 "department": "IT",
 "designation": "Technician",
 "isActive": true,
 "createdAt": "2025-01-10T10:05:00Z",
 "updatedAt": "2025-01-10T10:05:00Z",
 "isDeleted": false,
 "deletedAt": null
}
```


EquipmentType:


```
{
 "typeId": 10,
 "typeName": "Laptop",
 "description": "Portable computer devices",
```

```
  "isActive": true,
  "createdAt": "2025-01-12T09:00:00Z",
  "updatedAt": "2025-01-12T09:00:00Z",
  "isDeleted": false,
  "deletedAt": null
}
```


EquipmentItem:


```
{
  "equipmentId": 501,
  "assetTag": "ASSET-LAP-001",
  "serialNumber": "SN12345LAP",
  "typeId": 10,
  "location": "Storage Room A",
  "status": "AVAILABLE",
  "condition": "GOOD",
  "createdAt": "2025-01-12T10:00:00Z",
  "updatedAt": "2025-01-12T10:00:00Z",
  "isDeleted": false,
  "deletedAt": null
}
```


EquipmentAllocation:


```
{
  "allocationId": 3001,
  "equipmentId": 501,
  "employeeId": 101,
  "allocatedByEmployeeId": 102,
  "purpose": "For remote project work",
  "allocatedAt": "2025-01-15T09:30:00Z",
  "expectedReturnAt": "2025-02-15T09:30:00Z",
  "returnedAt": null,
  "conditionOnReturn": null,
  "returnNotes": null,
  "status": "ACTIVE",
  "createdAt": "2025-01-15T09:30:00Z",
  "updatedAt": "2025-01-15T09:30:00Z",
  "isDeleted": false,
```

```
  "deletedAt": null
}
```


MaintenanceTicket:


```
{
  "ticketId": 9001,
  "equipmentId": 501,
  "allocationId": 3001,
  "issueReportedAt": "2025-01-20T14:00:00Z",
  "issueNotes": "Laptop overheating frequently.",
  "status": "OPEN",
  "severity": "HIGH",
  "createdByEmployeeId": 101,
  "assignedToEmployeeId": 103,
  "isResolved": false,
  "resolvedAt": null,
  "createdAt": "2025-01-20T14:00:00Z",
  "updatedAt": "2025-01-20T14:00:00Z",
  "isDeleted": false,
  "deletedAt": null
}
```


OverdueLog:


```
{
  "overdueId": 1,
  "allocationId": 3001,
  "notifiedAt": "2025-02-16T09:00:00Z",
  "reminderType": "FIRST",
  "recipientEmployeeId": 101,
  "channel": "EMAIL"
}
```

Deployment Plan:

Environment Setup:

Component	Technology
Backend	Scala + Play
Actor System	Akka
Event Bus	Kafka
Database	MySQL
Build Tool	SBT
Deployment Container	Docker

Steps

1. Build the application

sbt clean compile stage

2. Containerize

Dockerfile

docker build -t event-coordination.

3. Deploy Kafka

Using docker-compose or managed Kafka.

docker-compose up -d kafka zookeeper

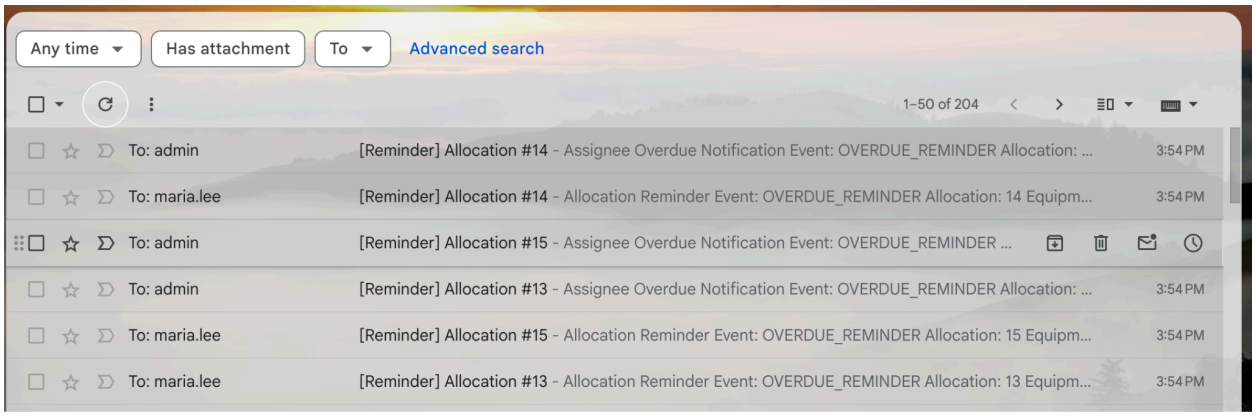
4. Deploy Database

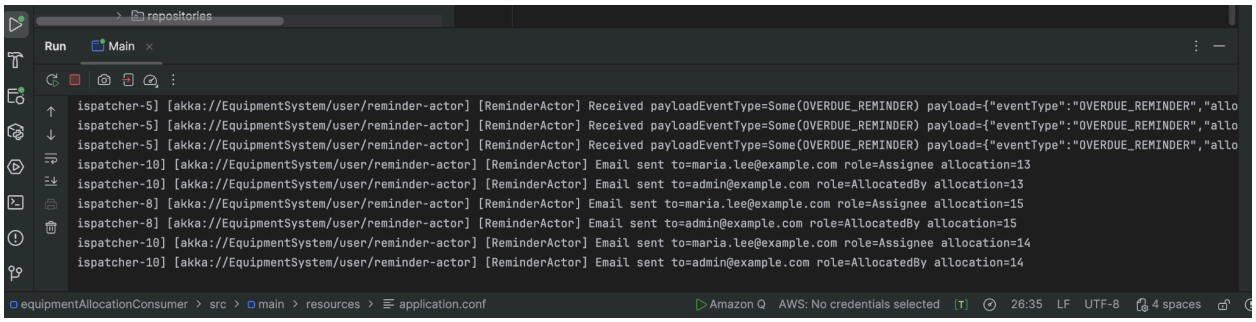
docker run -p 3306:3306 --name events-db mysql

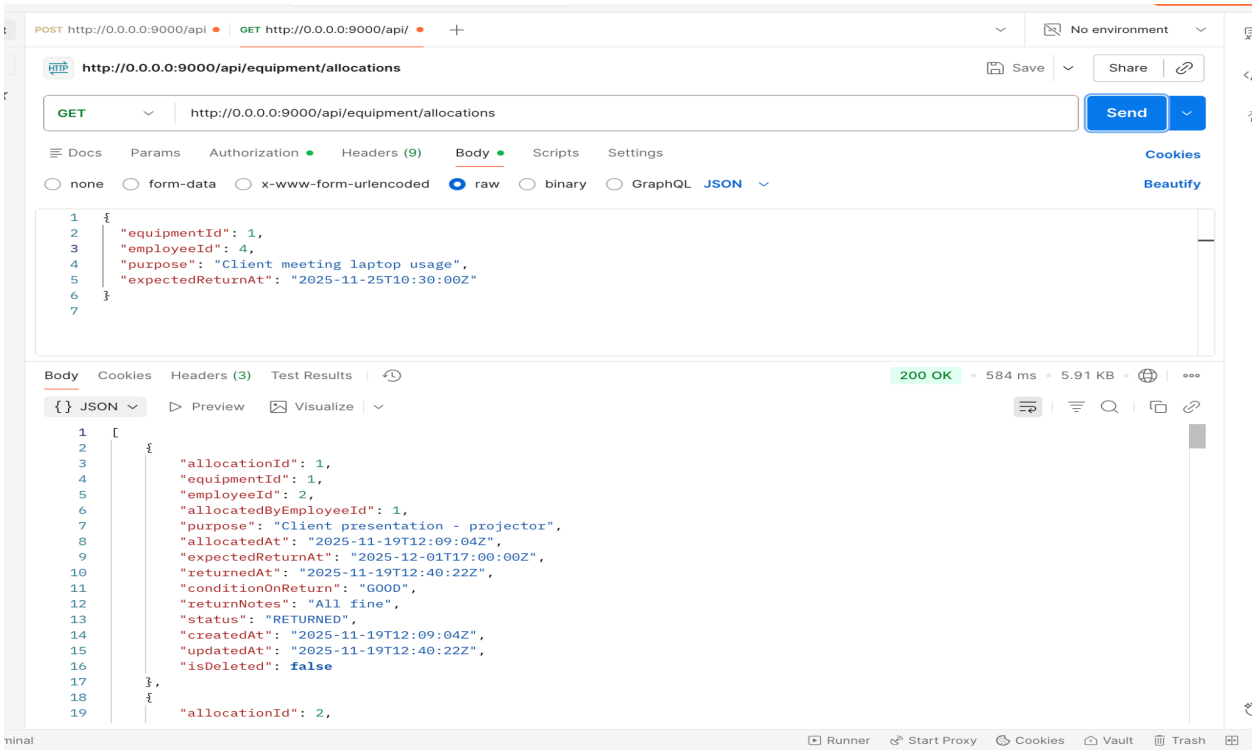
5. Run the Application

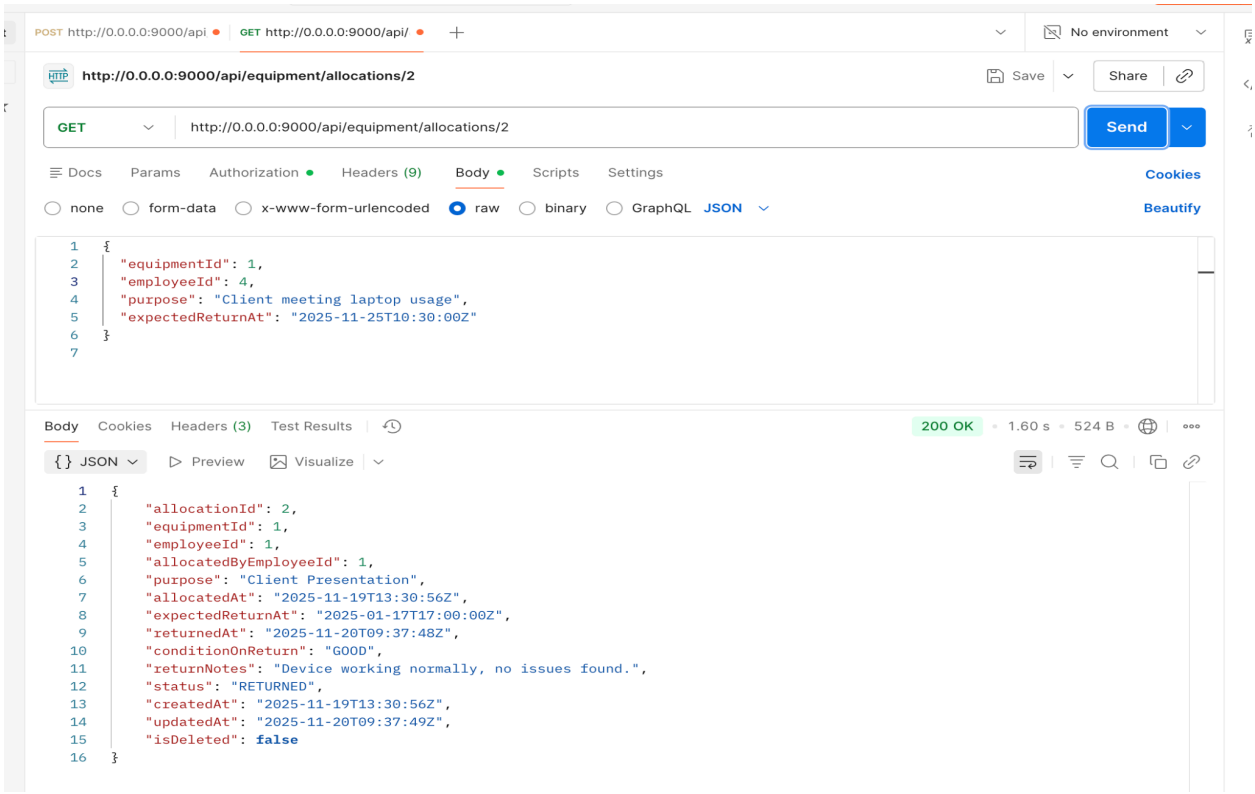
```
docker run -p 9000:9000 event-coordination
```

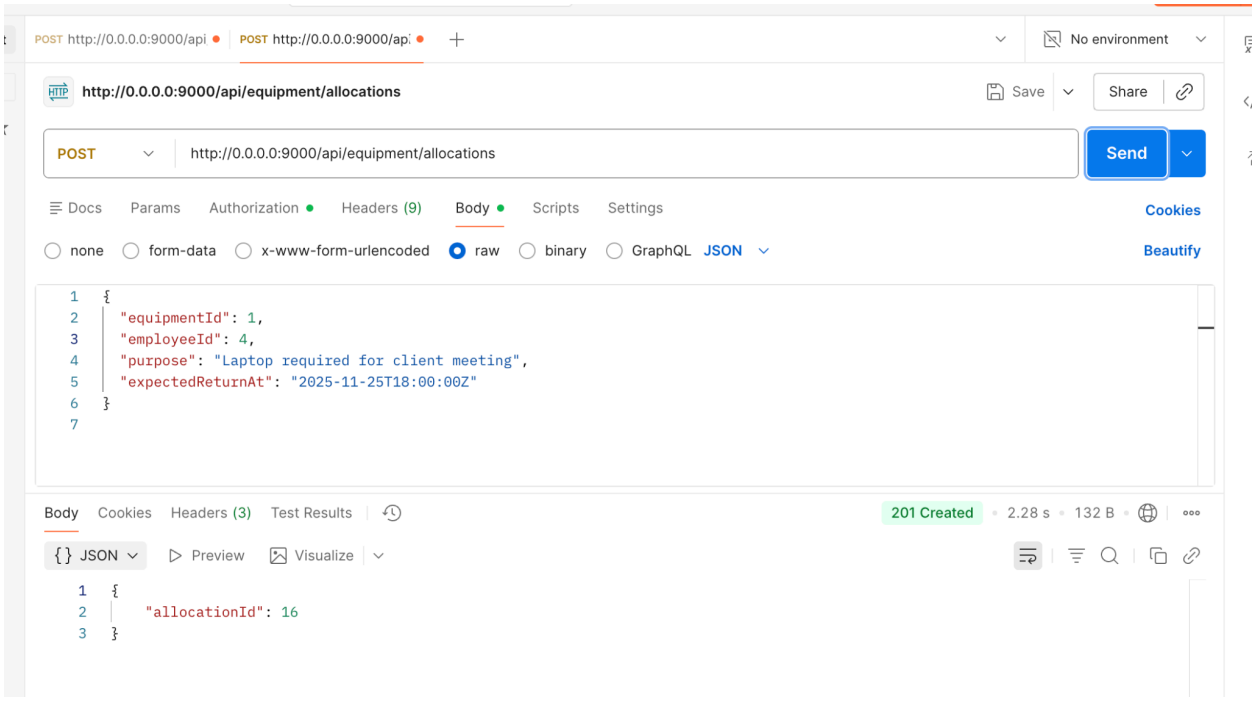
Output:

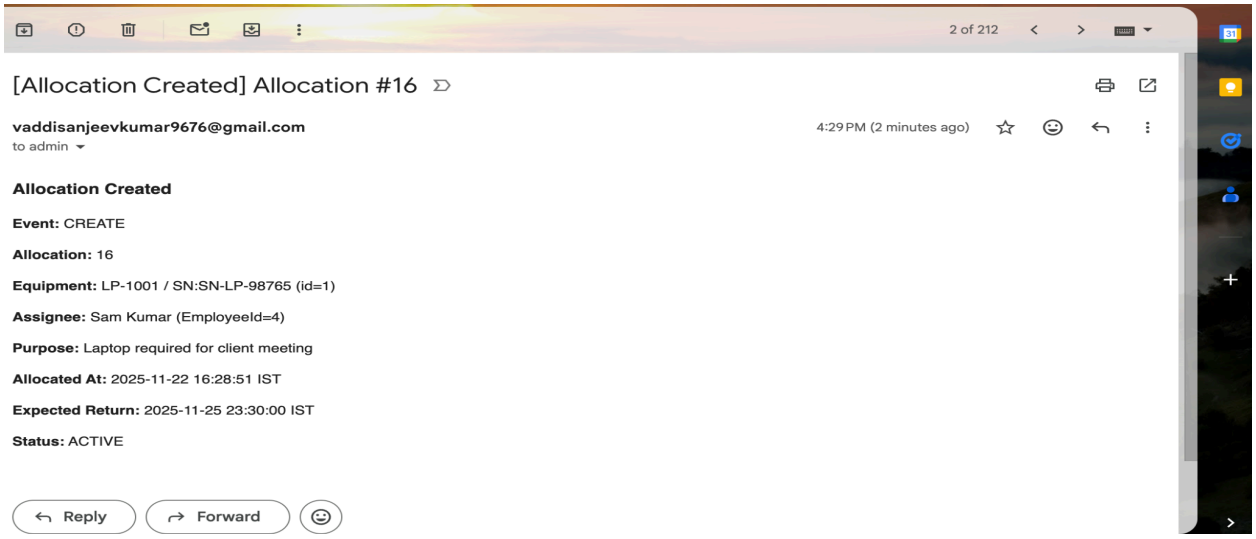

Any time
Has attachment
To
Advanced search
1–50 of 204
To: admin [Reminder] Allocation #14 - Assignee Overdue Notification Event: OVERDUE_REMINDER Allocation: ... 3:54 PM
To: maria.lee [Reminder] Allocation #14 - Allocation Reminder Event: OVERDUE_REMINDER Allocation: 14 Equipm... 3:54 PM
To: admin [Reminder] Allocation #15 - Assignee Overdue Notification Event: OVERDUE_REMINDER ... 3:54 PM
To: admin [Reminder] Allocation #13 - Assignee Overdue Notification Event: OVERDUE_REMINDER Allocation: ... 3:54 PM
To: maria.lee [Reminder] Allocation #15 - Allocation Reminder Event: OVERDUE_REMINDER Allocation: 15 Equipm... 3:54 PM
To: maria.lee [Reminder] Allocation #13 - Allocation Reminder Event: OVERDUE_REMINDER Allocation: 13 Equipm... 3:54 PM

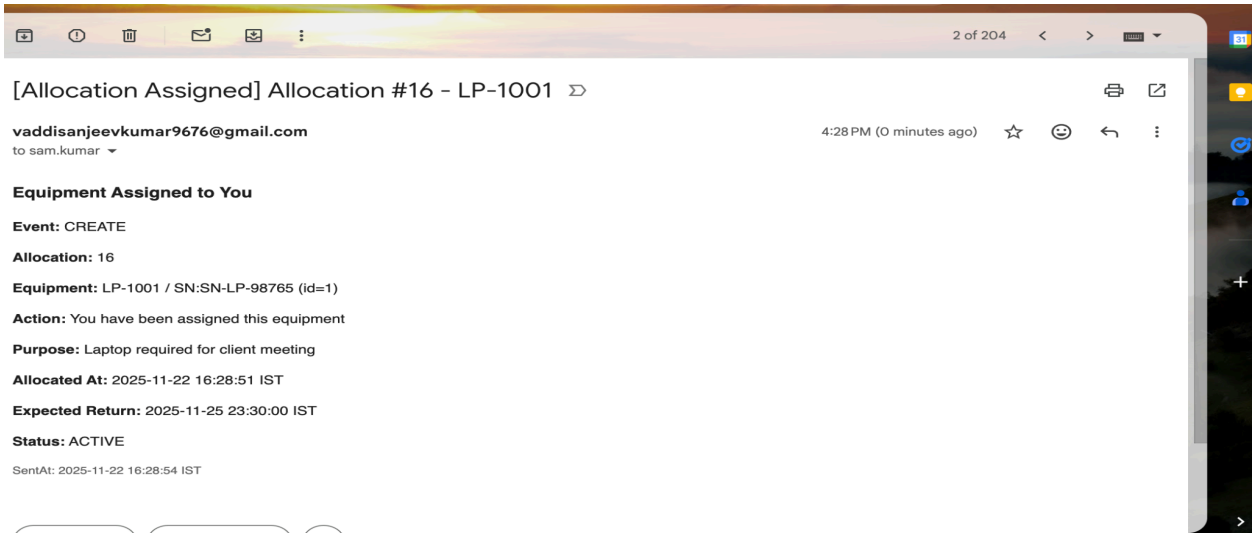

repositories
Run
Main
ispatcher-5] [akka://EquipmentSystem/user/reminder-actor] [ReminderActor] Received payloadEventType=Some(OVERDUE_REMINDER) payload={"eventType":"OVERDUE_REMINDER","allo
ispatcher-5] [akka://EquipmentSystem/user/reminder-actor] [ReminderActor] Received payloadEventType=Some(OVERDUE_REMINDER) payload={"eventType":"OVERDUE_REMINDER","allo
ispatcher-5] [akka://EquipmentSystem/user/reminder-actor] [ReminderActor] Received payloadEventType=Some(OVERDUE_REMINDER) payload={"eventType":"OVERDUE_REMINDER","allo
ispatcher-10] [akka://EquipmentSystem/user/reminder-actor] [ReminderActor] Email sent to=maria.lee@example.com role=Assignee allocation=13
ispatcher-10] [akka://EquipmentSystem/user/reminder-actor] [ReminderActor] Email sent to=admin@example.com role=AllocatedBy allocation=13
ispatcher-8] [akka://EquipmentSystem/user/reminder-actor] [ReminderActor] Email sent to=maria.lee@example.com role=Assignee allocation=15
ispatcher-8] [akka://EquipmentSystem/user/reminder-actor] [ReminderActor] Email sent to=admin@example.com role=AllocatedBy allocation=15
ispatcher-10] [akka://EquipmentSystem/user/reminder-actor] [ReminderActor] Email sent to=maria.lee@example.com role=Assignee allocation=14
ispatcher-10] [akka://EquipmentSystem/user/reminder-actor] [ReminderActor] Email sent to=admin@example.com role=AllocatedBy allocation=14
equipmentAllocationConsumer > src > main > resources > application.conf
Amazon Q
AWS: No credentials selected
26:35
LF
UTF-8
4 spaces

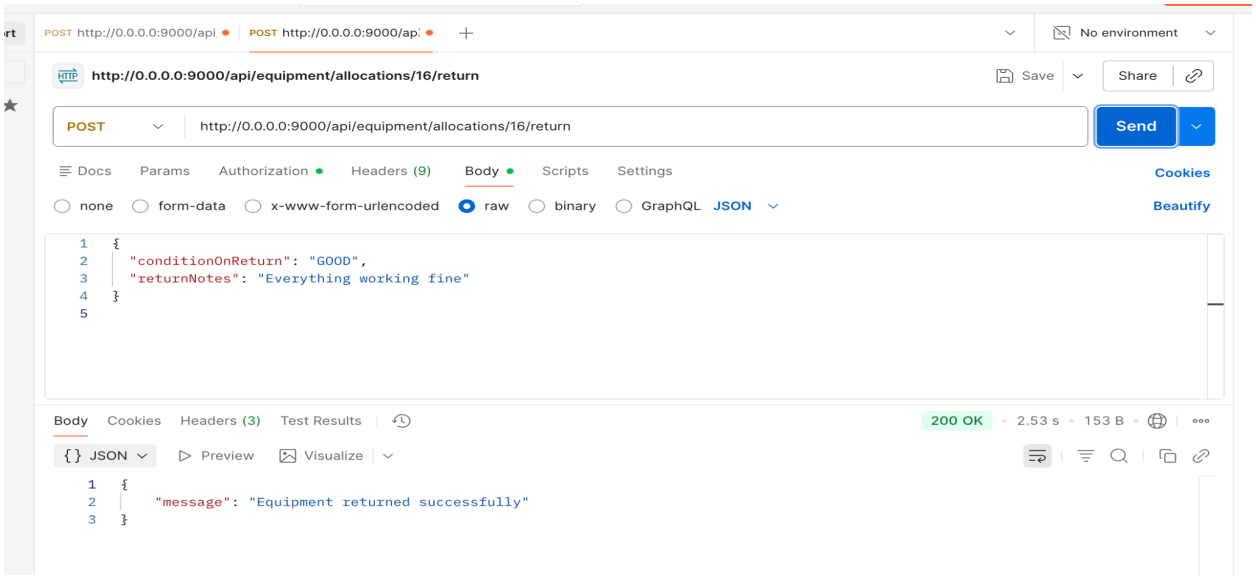

POST http://0.0.0.0:9000/api
GET http://0.0.0.0:9000/api/
No environment
http://0.0.0.0:9000/api/equipment/allocations
Save
Share
GET
http://0.0.0.0:9000/api/equipment/allocations
Send
Docs
Params
Authorization
Headers (9)
Body
Scripts
Settings
Cookies
none
form-data
x-www-form-urlencoded
raw
binary
GraphQL
JSON
Beautify
{
"equipmentId": 1,
"employeeId": 4,
"purpose": "Client meeting laptop usage",
"expectedReturnAt": "2025-11-25T10:30:00Z"
}
Body
Cookies
Headers (3)
Test Results
200 OK
584 ms
5.91 KB
JSON
Preview
Visualize
[
{
"allocationId": 1,
"equipmentId": 1,
"employeeId": 2,
"allocatedByEmployeeId": 1,
"purpose": "Client presentation - projector",
"allocatedAt": "2025-11-19T12:09:04Z",
"expectedReturnAt": "2025-12-01T17:00:00Z",
"returnedAt": "2025-11-19T12:40:22Z",
"conditionOnReturn": "GOOD",
"returnNotes": "All fine",
"status": "RETURNED",
"createdAt": "2025-11-19T12:09:04Z",
"updatedAt": "2025-11-19T12:40:22Z",
"isDeleted": false
},
{
"allocationId": 2,
Runner
Start Proxy
Cookies
Vault
Trash


POST http://0.0.0.0:9000/api
GET http://0.0.0.0:9000/api/
No environment
http://0.0.0.0:9000/api/equipment/allocations/2
Save
Share
GET
http://0.0.0.0:9000/api/equipment/allocations/2
Send
Docs
Params
Authorization
Headers (9)
Body
Scripts
Settings
Cookies
none
form-data
x-www-form-urlencoded
raw
binary
GraphQL
JSON
Beautify
{
"equipmentId": 1,
"employeeId": 4,
"purpose": "Client meeting laptop usage",
"expectedReturnAt": "2025-11-25T10:30:00Z"
}
Body
Cookies
Headers (3)
Test Results
200 OK
1.60 s
524 B
JSON
Preview
Visualize
{
"allocationId": 2,
"equipmentId": 1,
"employeeId": 1,
"allocatedByEmployeeId": 1,
"purpose": "Client Presentation",
"allocatedAt": "2025-11-19T13:30:56Z",
"expectedReturnAt": "2025-01-17T17:00:00Z",
"returnedAt": "2025-11-20T09:37:48Z",
"conditionOnReturn": "GOOD",
"returnNotes": "Device working normally, no issues found.",
"status": "RETURNED",
"createdAt": "2025-11-19T13:30:56Z",
"updatedAt": "2025-11-20T09:37:49Z",
"isDeleted": false
}


POST http://0.0.0.0:9000/api
POST http://0.0.0.0:9000/ap
No environment
http://0.0.0.0:9000/api/equipment/allocations
Save
Share
POST
http://0.0.0.0:9000/api/equipment/allocations
Send
Docs
Params
Authorization
Headers (9)
Body
Scripts
Settings
Cookies
none
form-data
x-www-form-urlencoded
raw
binary
GraphQL
JSON
Beautify
{
"equipmentId": 1,
"employeeId": 4,
"purpose": "Laptop required for client meeting",
"expectedReturnAt": "2025-11-25T18:00:00Z"
}
Body
Cookies
Headers (3)
Test Results
201 Created
2.28 s
132 B
JSON
Preview
Visualize
{
"allocationId": 16
}


2 of 212
[Allocation Created] Allocation #16
vaddisanjeevkumar9676@gmail.com
to admin
4:29 PM (2 minutes ago)
Allocation Created
Event: CREATE
Allocation: 16
Equipment: LP-1001 / SN:SN-LP-98765 (id=1)
Assignee: Sam Kumar (EmployeeId=4)
Purpose: Laptop required for client meeting
Allocated At: 2025-11-22 16:28:51 IST
Expected Return: 2025-11-25 23:30:00 IST
Status: ACTIVE
Reply
Forward


2 of 204
[Allocation Assigned] Allocation #16 - LP-1001
vaddisanjeevkumar9676@gmail.com
to sam.kumar
4:28 PM (0 minutes ago)
Equipment Assigned to You
Event: CREATE
Allocation: 16
Equipment: LP-1001 / SN:SN-LP-98765 (id=1)
Action: You have been assigned this equipment
Purpose: Laptop required for client meeting
Allocated At: 2025-11-22 16:28:51 IST
Expected Return: 2025-11-25 23:30:00 IST
Status: ACTIVE
SentAt: 2025-11-22 16:28:54 IST


POST http://0.0.0.0:9000/api
POST http://0.0.0.0:9000/ap
No environment
http://0.0.0.0:9000/api/equipment/allocations/16/return
Save
Share
POST
http://0.0.0.0:9000/api/equipment/allocations/16/return
Send
Docs
Params
Authorization
Headers (9)
Body
Scripts
Settings
Cookies
none
form-data
x-www-form-urlencoded
raw
binary
GraphQL
JSON
Beautify
{
"conditionOnReturn": "GOOD",
"returnNotes": "Everything working fine"
}
Body
Cookies
Headers (3)
Test Results
200 OK
2.53 s
153 B
{} JSON
Preview
Visualize
{
"message": "Equipment returned successfully"
}

2 of 213

[Allocation Returned] Allocation #16

vaddisanjeevkumar9676@gmail.com
to sam.kumar

4:31 PM (0 minutes ago)

Equipment Return Notice

Event: RETURN

Allocation: 16

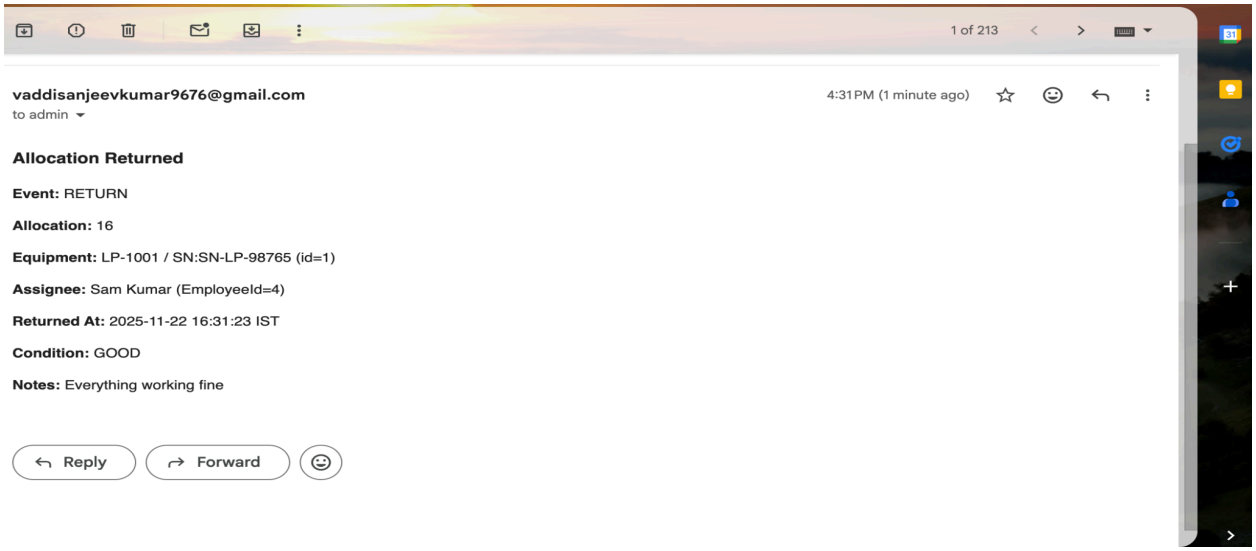
Equipment: LP-1001 / SN:SN-LP-98765 (id=1)

Returned At: 2025-11-22 16:31:23 IST

Status: RETURNED

Notes: Everything working fine

Reply Forward



1 of 213

vaddisanjeevkumar9676@gmail.com
to admin

4:31 PM (1 minute ago)

Allocation Returned

Event: RETURN

Allocation: 16

Equipment: LP-1001 / SN:SN-LP-98765 (id=1)

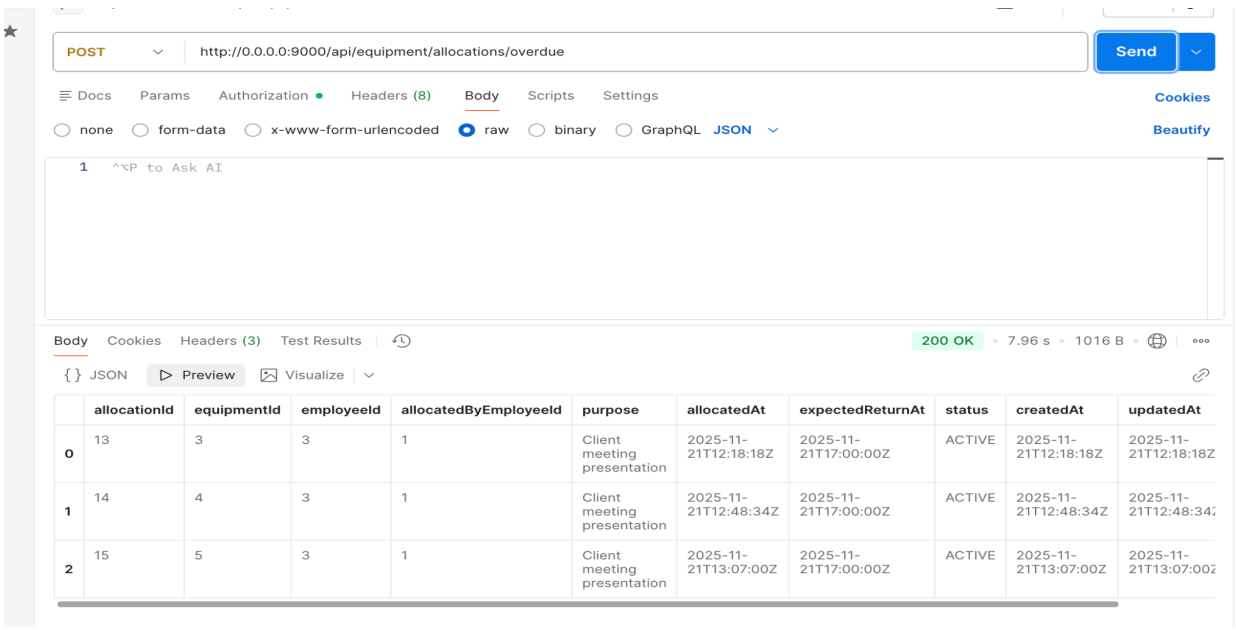
Assignee: Sam Kumar (EmployeeId=4)

Returned At: 2025-11-22 16:31:23 IST

Condition: GOOD

Notes: Everything working fine

Reply Forward



POST http://0.0.0.0:9000/api/equipment/allocations/overdue Send

Docs Params Authorization Headers (8) Body Scripts Settings Cookies

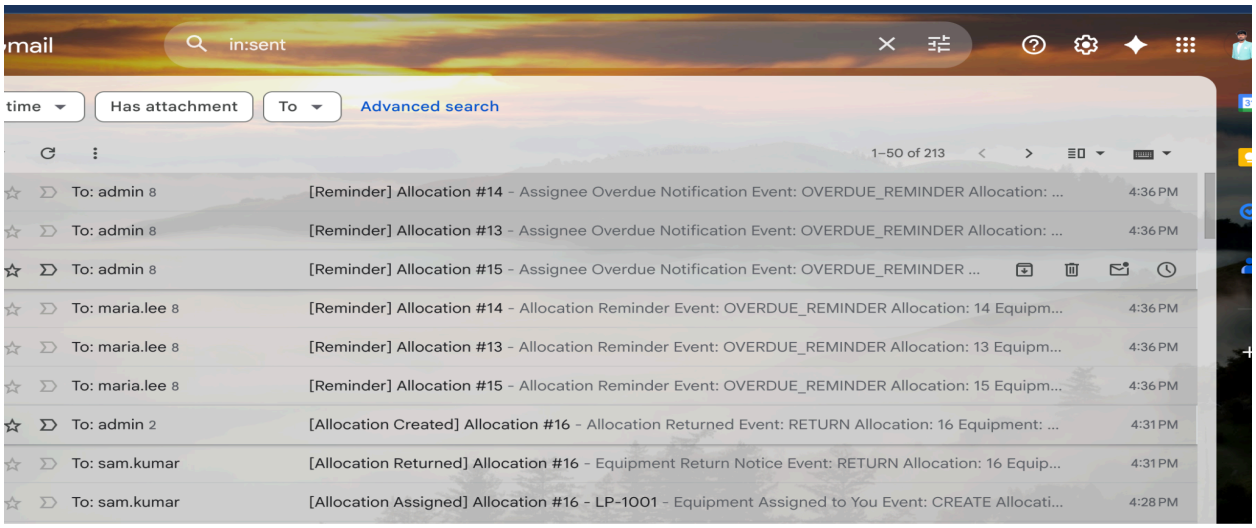
none form-data x-www-form-urlencoded raw binary GraphQL JSON Beautify

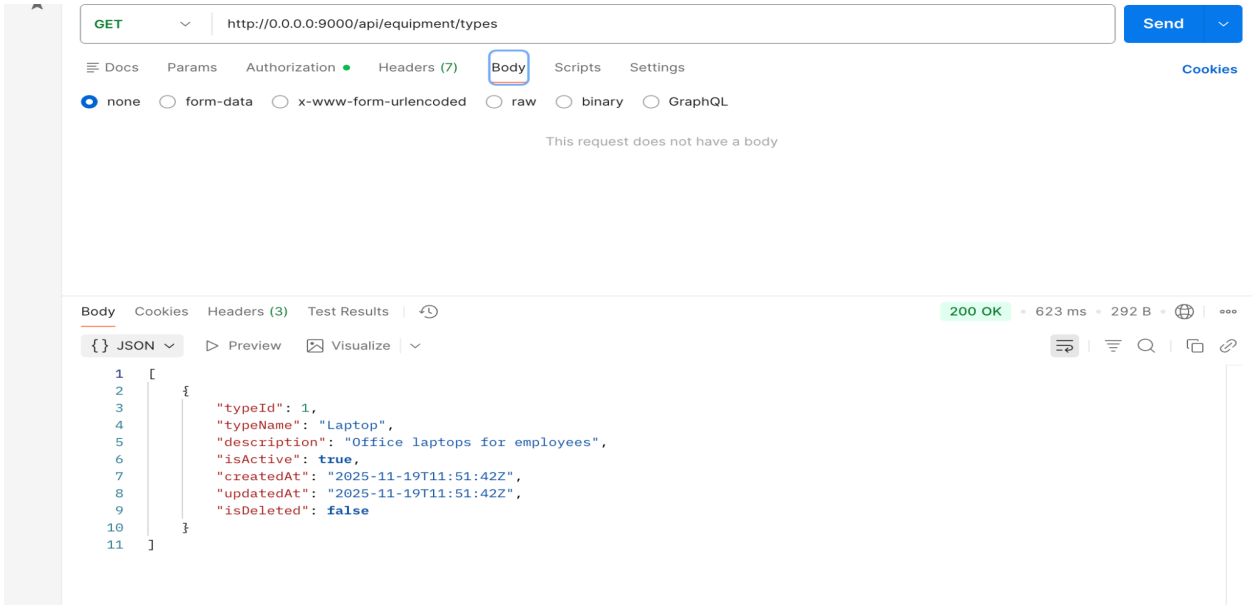
1 ^⌥P to Ask AI

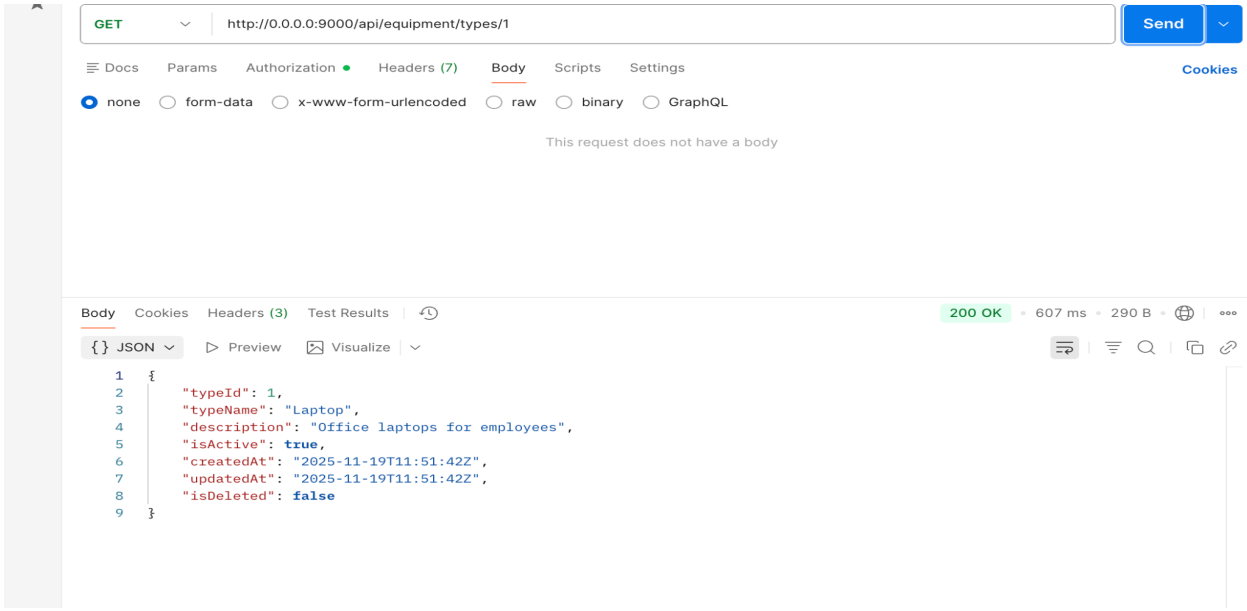
Body Cookies Headers (3) Test Results 200 OK 7.96 s 1016 B

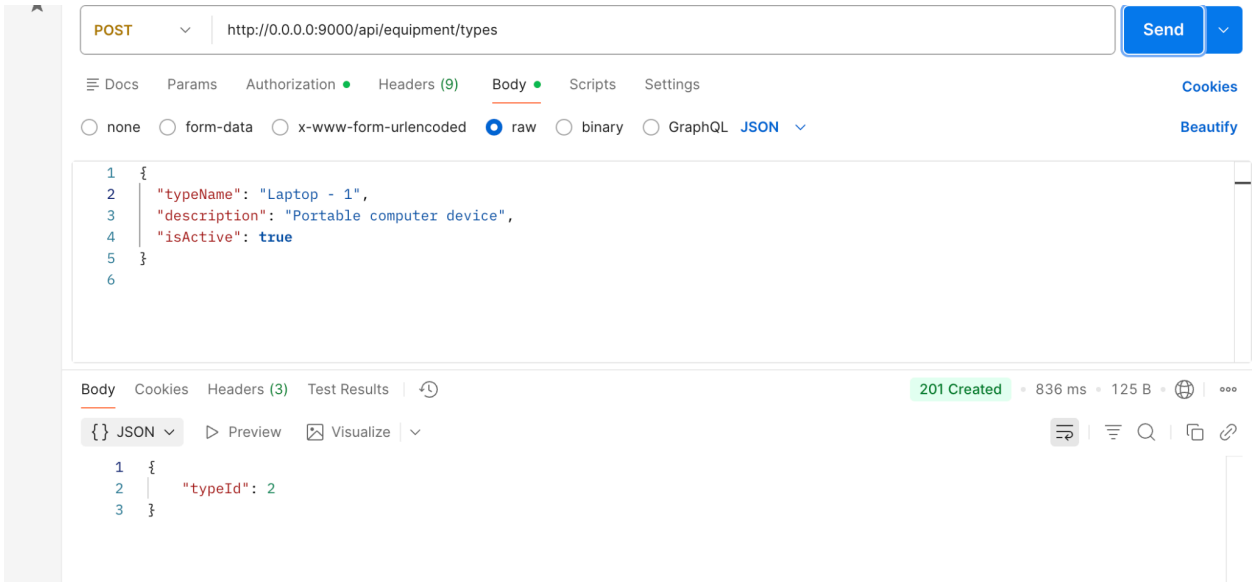
JSON Preview Visualize

	allocationId	equipmentId	employeeId	allocatedByEmployeeId	purpose	allocatedAt	expectedReturnAt	status	createdAt	updatedAt
0	13	3	3	1	Client meeting presentation	2025-11-21T12:18:18Z	2025-11-21T17:00:00Z	ACTIVE	2025-11-21T12:18:18Z	2025-11-21T12:18:18Z
1	14	4	3	1	Client meeting presentation	2025-11-21T12:48:34Z	2025-11-21T17:00:00Z	ACTIVE	2025-11-21T12:48:34Z	2025-11-21T12:48:34Z
2	15	5	3	1	Client meeting presentation	2025-11-21T13:07:00Z	2025-11-21T17:00:00Z	ACTIVE	2025-11-21T13:07:00Z	2025-11-21T13:07:00Z


mail
in:sent
time
Has attachment
To
Advanced search
1–50 of 213
To: admin 8 [Reminder] Allocation #14 - Assignee Overdue Notification Event: OVERDUE_REMINDER Allocation: ... 4:36 PM
To: admin 8 [Reminder] Allocation #13 - Assignee Overdue Notification Event: OVERDUE_REMINDER Allocation: ... 4:36 PM
To: admin 8 [Reminder] Allocation #15 - Assignee Overdue Notification Event: OVERDUE_REMINDER ... 4:36 PM
To: maria.lee 8 [Reminder] Allocation #14 - Allocation Reminder Event: OVERDUE_REMINDER Allocation: 14 Equipm... 4:36 PM
To: maria.lee 8 [Reminder] Allocation #13 - Allocation Reminder Event: OVERDUE_REMINDER Allocation: 13 Equipm... 4:36 PM
To: maria.lee 8 [Reminder] Allocation #15 - Allocation Reminder Event: OVERDUE_REMINDER Allocation: 15 Equipm... 4:36 PM
To: admin 2 [Allocation Created] Allocation #16 - Allocation Returned Event: RETURN Allocation: 16 Equipment: ... 4:31 PM
To: sam.kumar [Allocation Returned] Allocation #16 - Equipment Return Notice Event: RETURN Allocation: 16 Equip... 4:31 PM
To: sam.kumar [Allocation Assigned] Allocation #16 - LP-1001 - Equipment Assigned to You Event: CREATE Allocati... 4:28 PM


GET
http://0.0.0.0:9000/api/equipment/types
Send
Docs
Params
Authorization
Headers (7)
Body
Scripts
Settings
Cookies
none
form-data
x-www-form-urlencoded
raw
binary
GraphQL
This request does not have a body
Body
Cookies
Headers (3)
Test Results
200 OK
623 ms
292 B
{ } JSON
Preview
Visualize
[
{
"typeId": 1,
"typeName": "Laptop",
"description": "Office laptops for employees",
"isActive": true,
"createdAt": "2025-11-19T11:51:42Z",
"updatedAt": "2025-11-19T11:51:42Z",
"isDeleted": false
}
]


GET
http://0.0.0.0:9000/api/equipment/types/1
Send
Docs
Params
Authorization
Headers (7)
Body
Scripts
Settings
Cookies
none
form-data
x-www-form-urlencoded
raw
binary
GraphQL
This request does not have a body
Body
Cookies
Headers (3)
Test Results
200 OK
607 ms
290 B
{} JSON
Preview
Visualize
{
"typeId": 1,
"typeName": "Laptop",
"description": "Office laptops for employees",
"isActive": true,
"createdAt": "2025-11-19T11:51:42Z",
"updatedAt": "2025-11-19T11:51:42Z",
"isDeleted": false
}


POST
http://0.0.0.0:9000/api/equipment/types
Send
Docs
Params
Authorization
Headers (9)
Body
Scripts
Settings
Cookies
none
form-data
x-www-form-urlencoded
raw
binary
GraphQL
JSON
Beautify
{
"typeName": "Laptop - 1",
"description": "Portable computer device",
"isActive": true
}
Body
Cookies
Headers (3)
Test Results
201 Created
836 ms
125 B
{} JSON
Preview
Visualize
{
"typeId": 2
}

PUT http://0.0.0.0:9000/api/equipment/types/2 Send

Docs Params Authorization Headers (9) Body Scripts Settings Cookies

none form-data x-www-form-urlencoded raw binary GraphQL JSON Beautify

```
{
  "typeName": "High-end Laptop",
  "description": "Upgraded laptop with extended specs",
  "isActive": true
}
```

Body Cookies Headers (3) Test Results 200 OK 1.25 s 313 B

{} JSON Preview Visualize

```
{
    "typeId": 2,
    "typeName": "High-end Laptop",
    "description": "Upgraded laptop with extended specs",
    "isActive": true,
    "createdAt": "2025-11-22T11:11:14Z",
    "updatedAt": "2025-11-22T11:12:16.595142Z",
    "isDeleted": false
}
```

GET http://0.0.0.0:9000/api/equipment/items Send

Docs Params Authorization Headers (7) Body Scripts Settings Cookies

none form-data x-www-form-urlencoded raw binary GraphQL

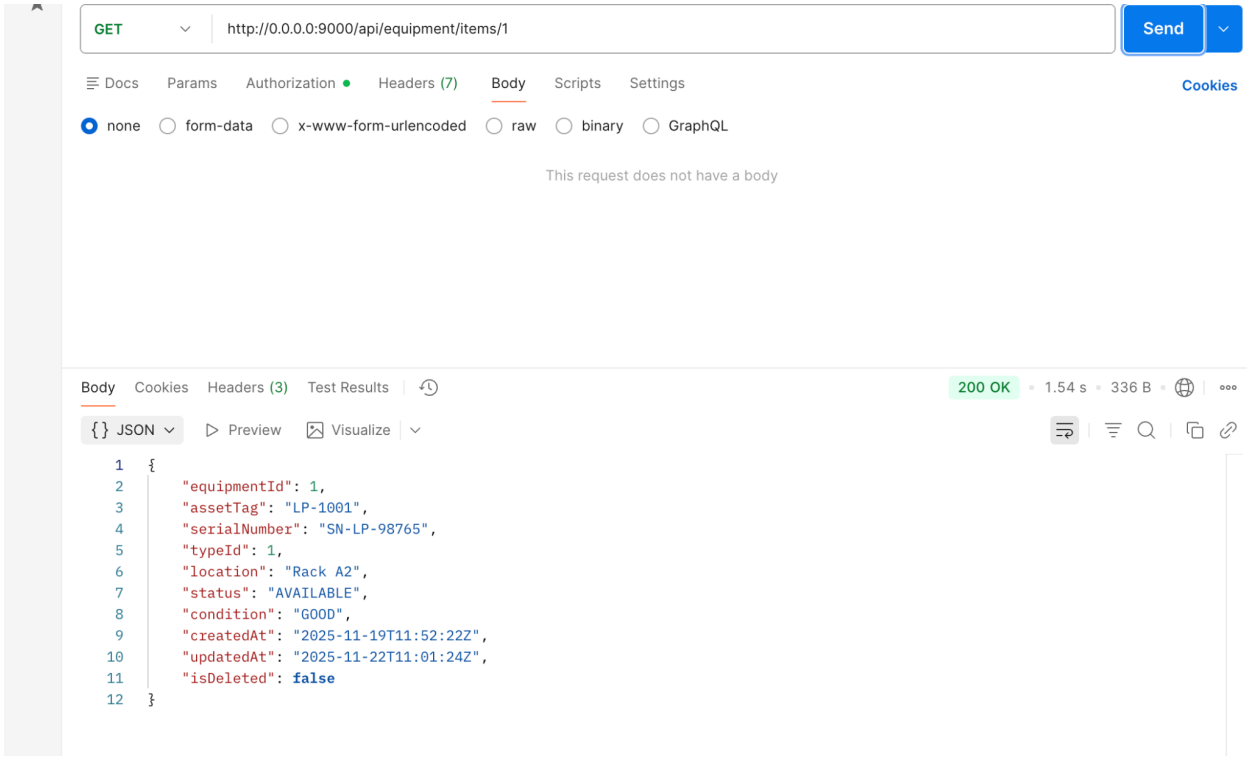
This request does not have a body

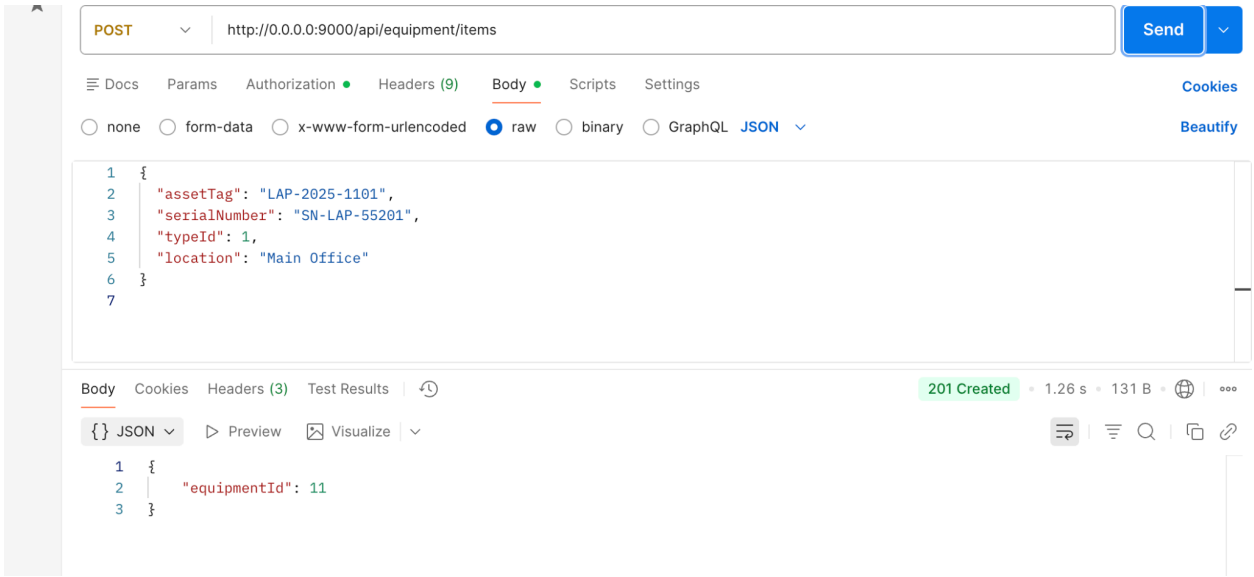
Body Cookies Headers (3) Test Results 200 OK 567 ms 2.34 KB

{} JSON Preview Visualize

```
[
    {
        "equipmentId": 1,
        "assetTag": "LP-1001",
        "serialNumber": "SN-LP-98765",
        "typeId": 1,
        "location": "Rack A2",
        "status": "AVAILABLE",
        "condition": "GOOD",
        "createdAt": "2025-11-19T11:52:22Z",
        "updatedAt": "2025-11-22T11:01:24Z",
        "isDeleted": false
    },
    {
        "equipmentId": 2,
        "assetTag": "LP-1002",
        "serialNumber": "SN-LP-12345",
        "typeId": 1,
        "location": "Rack A3",
```

Terminal Runner Start Proxy Cookies Vault Trash


GET
http://0.0.0.0:9000/api/equipment/items/1
Send
Docs
Params
Authorization
Headers (7)
Body
Scripts
Settings
Cookies
none
form-data
x-www-form-urlencoded
raw
binary
GraphQL
This request does not have a body
Body
Cookies
Headers (3)
Test Results
200 OK
1.54 s
336 B
JSON
Preview
Visualize
{
"equipmentId": 1,
"assetTag": "LP-1001",
"serialNumber": "SN-LP-98765",
"typeId": 1,
"location": "Rack A2",
"status": "AVAILABLE",
"condition": "GOOD",
"createdAt": "2025-11-19T11:52:22Z",
"updatedAt": "2025-11-22T11:01:24Z",
"isDeleted": false
}


POST
http://0.0.0.0:9000/api/equipment/items
Send
Docs
Params
Authorization
Headers (9)
Body
Scripts
Settings
Cookies
none
form-data
x-www-form-urlencoded
raw
binary
GraphQL
JSON
Beautify
{
"assetTag": "LAP-2025-1101",
"serialNumber": "SN-LAP-55201",
"typeId": 1,
"location": "Main Office"
}
Body
Cookies
Headers (3)
Test Results
201 Created
1.26 s
131 B
JSON
Preview
Visualize
{
"equipmentId": 11
}

PUT http://0.0.0.0:9000/api/equipment/items/10 Send

Docs Params Authorization Headers (9) Body Scripts Settings Cookies

none form-data x-www-form-urlencoded raw binary GraphQL JSON Beautify

```
{
  "assetTag": "LAP-2025-1101-UPDATED",
  "serialNumber": "SN-LAP-55201-NEW",
  "typeId": 1,
  "location": "Conference Room"
}
```

Body Cookies Headers (3) Test Results 200 OK 2.43 s 371 B

{} JSON Preview Visualize

```
{
    "equipmentId": 10,
    "assetTag": "LAP-2025-1101-UPDATED",
    "serialNumber": "SN-LAP-55201-NEW",
    "typeId": 1,
    "location": "Conference Room",
    "status": "AVAILABLE",
    "condition": "GOOD",
    "createdAt": "2025-11-19T17:11:28Z",
    "updatedAt": "2025-11-22T11:19:38.031456Z",
    "isDeleted": false
}
```

GET http://0.0.0.0:9000/api/maintenance/tickets Send

Docs Params Authorization Headers (7) Body Scripts Settings Cookies

Auth Type

Bearer Token

Token ••••••••••••••••••••••••••••••••

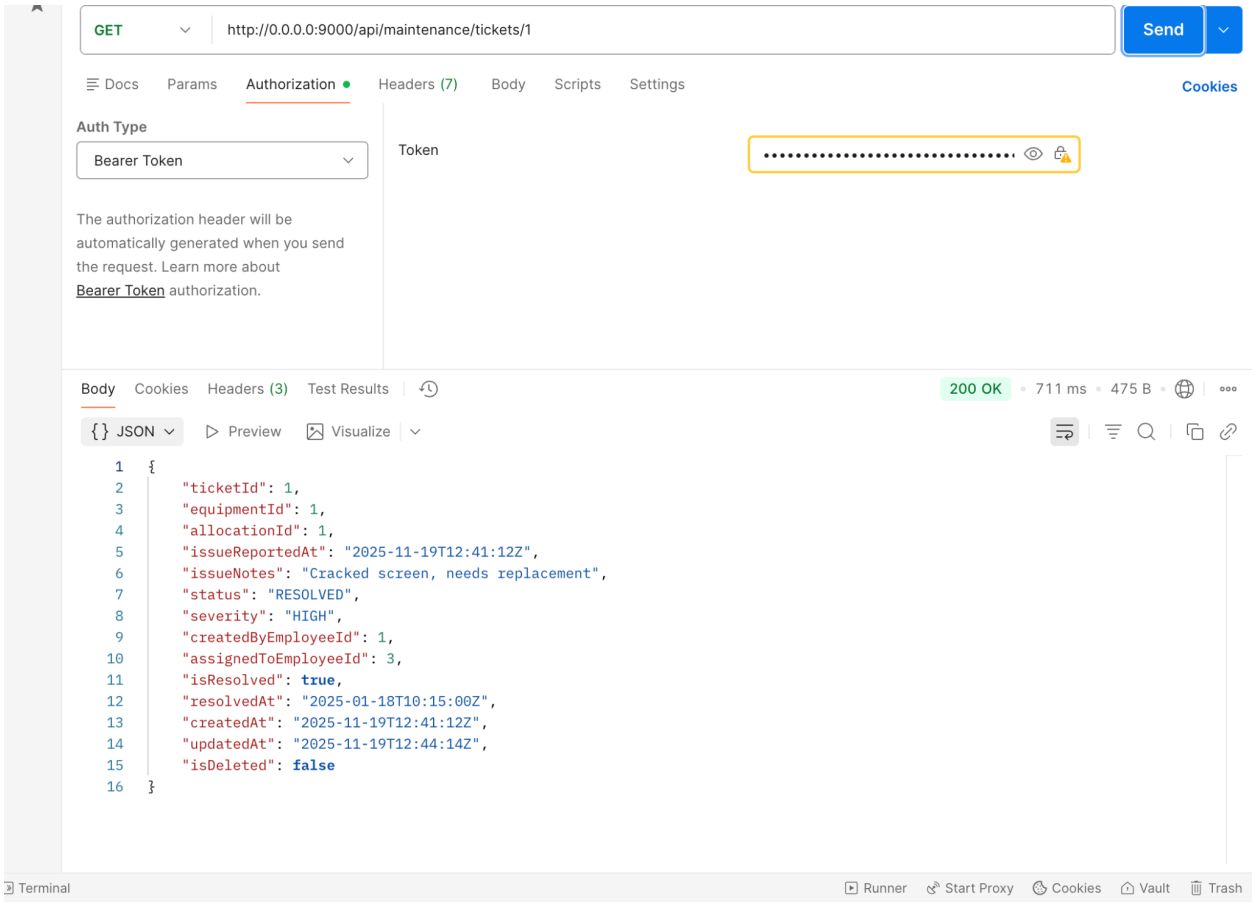
The authorization header will be automatically generated when you send the request. Learn more about Bearer Token authorization.

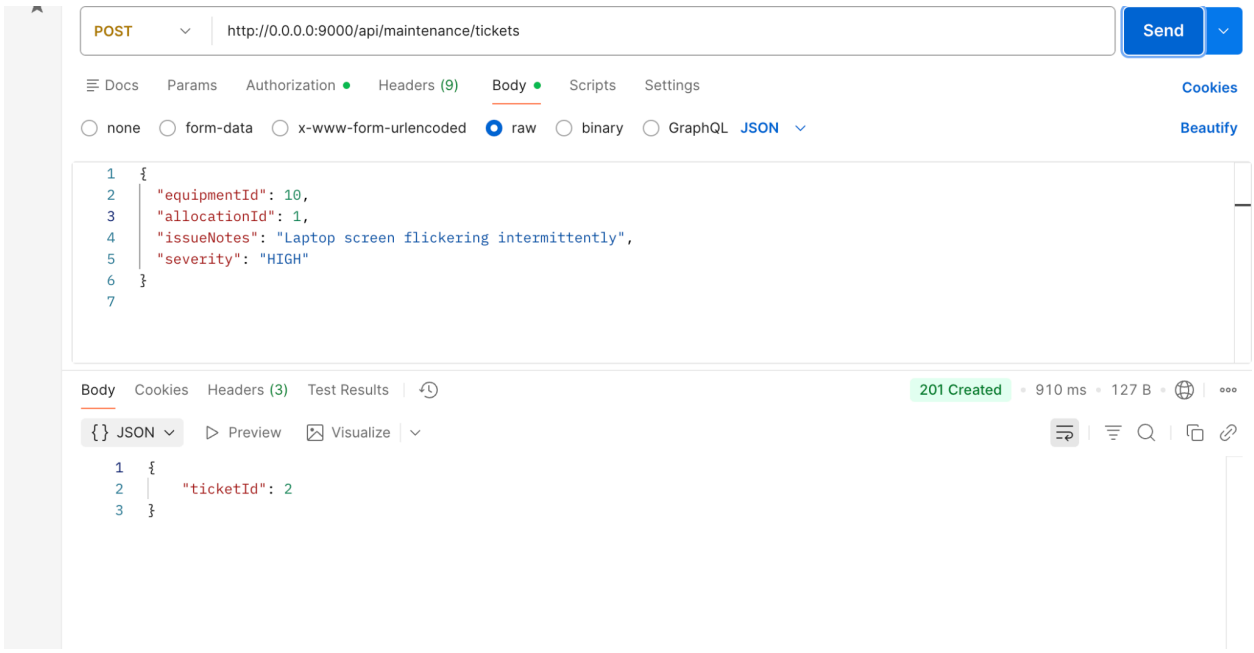
Body Cookies Headers (3) Test Results 200 OK 579 ms 477 B

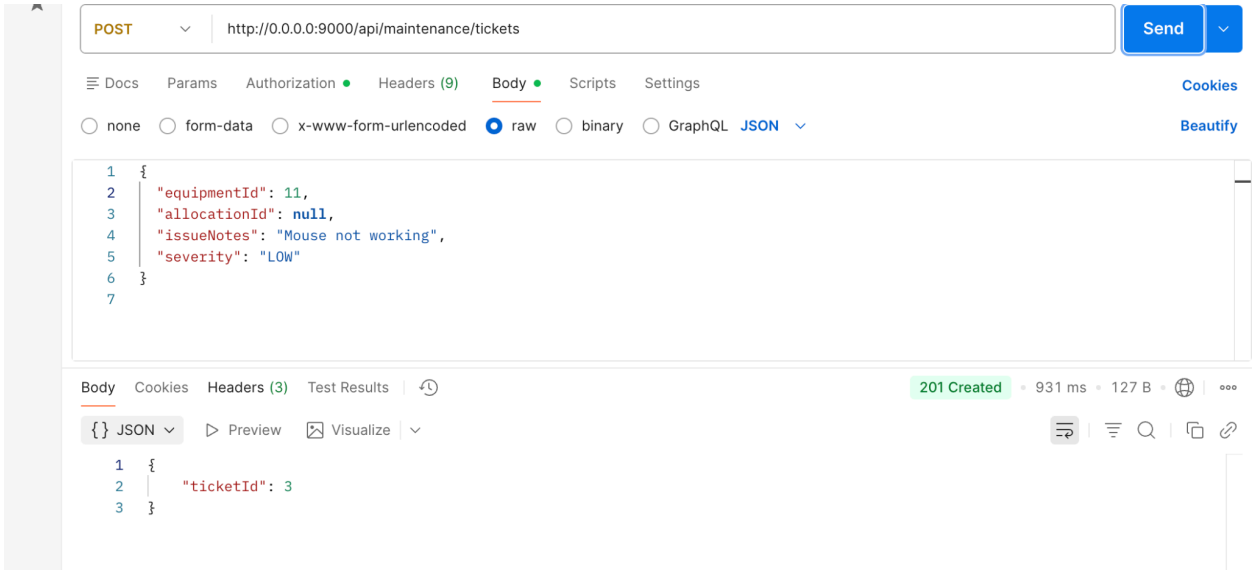
{} JSON Preview Visualize

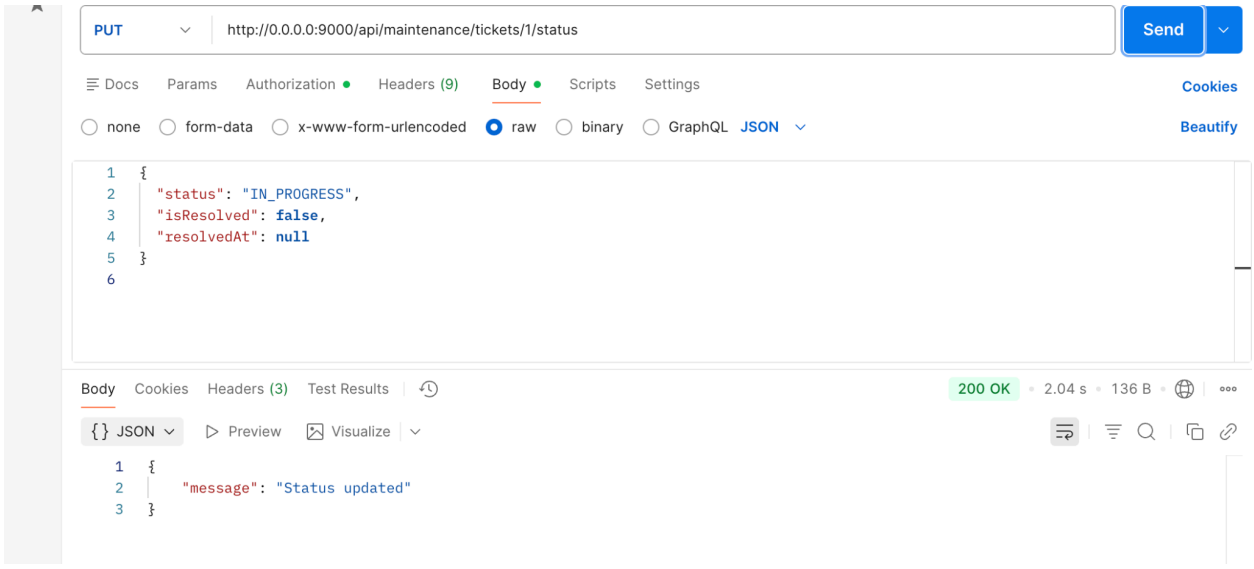
```
[
    {
        "ticketId": 1,
        "equipmentId": 1,
        "allocationId": 1,
        "issueReportedAt": "2025-11-19T12:41:12Z",
        "issueNotes": "Cracked screen, needs replacement",
        "status": "RESOLVED",
        "severity": "HIGH",
        "createdByEmployeeId": 1,
        "assignedToEmployeeId": 3,
        "isResolved": true,
        "resolvedAt": "2025-01-18T10:15:00Z",
        "createdAt": "2025-11-19T12:41:12Z",
        "updatedAt": "2025-11-19T12:44:14Z",
        "isDeleted": false
    }
]
```

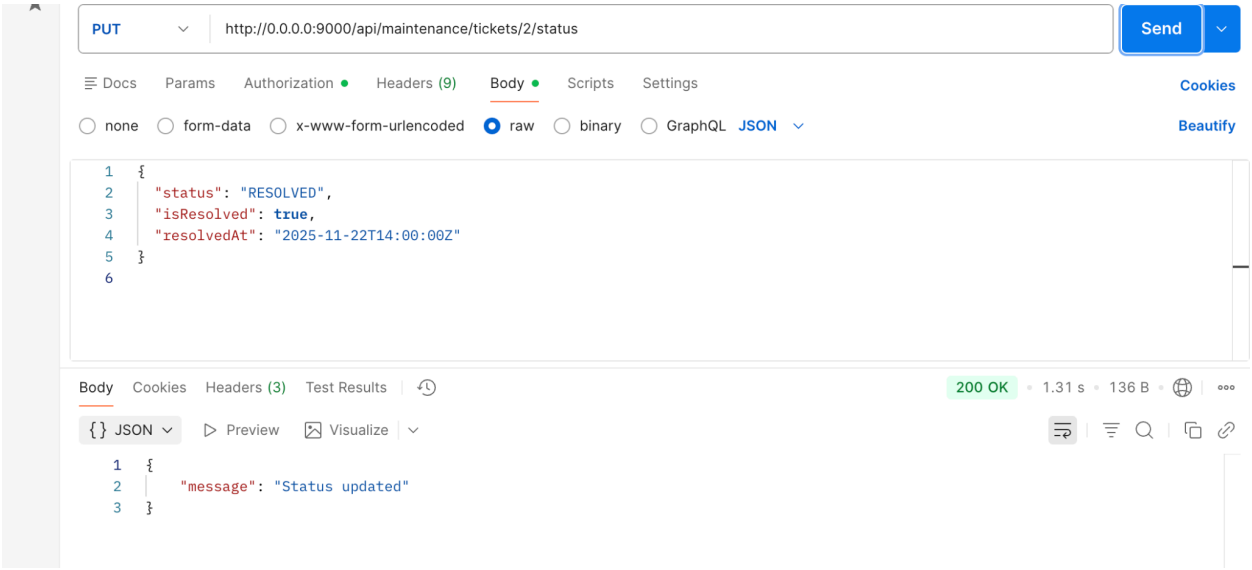
Terminal Runner Start Proxy Cookies Vault Trash

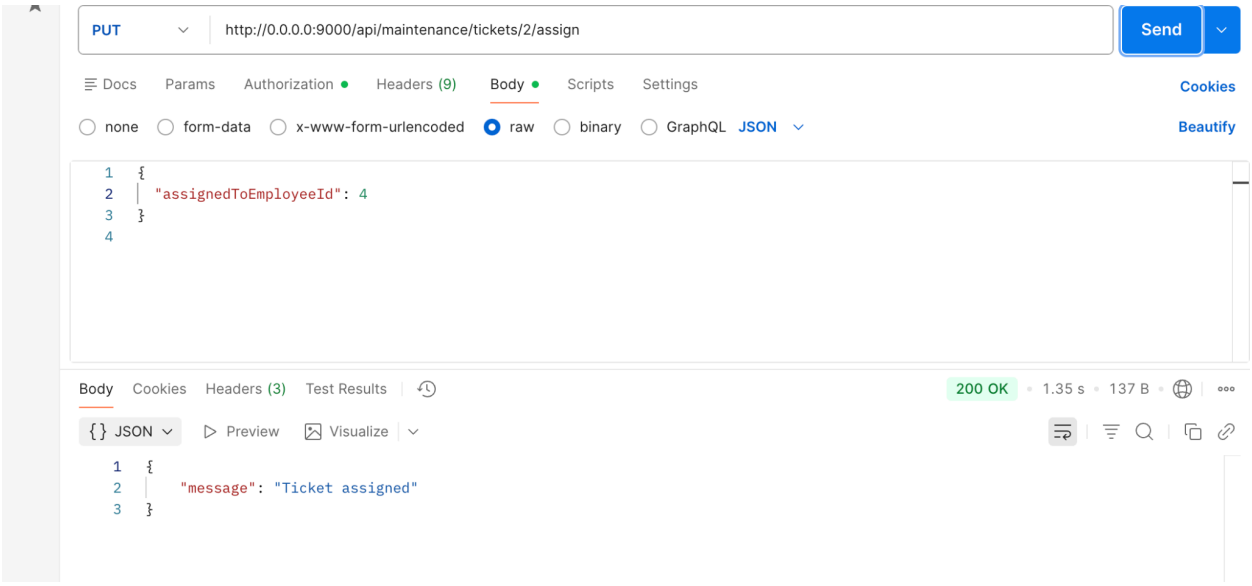

GET
http://0.0.0.0:9000/api/maintenance/tickets/1
Send
Docs
Params
Authorization
Headers (7)
Body
Scripts
Settings
Cookies
Auth Type
Bearer Token
Token
The authorization header will be automatically generated when you send the request. Learn more about Bearer Token authorization.
Body
Cookies
Headers (3)
Test Results
200 OK
711 ms
475 B
JSON
Preview
Visualize
{
"ticketId": 1,
"equipmentId": 1,
"allocationId": 1,
"issueReportedAt": "2025-11-19T12:41:12Z",
"issueNotes": "Cracked screen, needs replacement",
"status": "RESOLVED",
"severity": "HIGH",
"createdByEmployeeId": 1,
"assignedToEmployeeId": 3,
"isResolved": true,
"resolvedAt": "2025-01-18T10:15:00Z",
"createdAt": "2025-11-19T12:41:12Z",
"updatedAt": "2025-11-19T12:44:14Z",
"isDeleted": false
}
Terminal
Runner
Start Proxy
Cookies
Vault
Trash


POST
http://0.0.0.0:9000/api/maintenance/tickets
Send
Docs
Params
Authorization
Headers (9)
Body
Scripts
Settings
Cookies
none
form-data
x-www-form-urlencoded
raw
binary
GraphQL
JSON
Beautify
{
"equipmentId": 10,
"allocationId": 1,
"issueNotes": "Laptop screen flickering intermittently",
"severity": "HIGH"
}
Body
Cookies
Headers (3)
Test Results
201 Created
910 ms
127 B
JSON
Preview
Visualize
{
"ticketId": 2
}


POST
http://0.0.0.0:9000/api/maintenance/tickets
Send
Docs Params Authorization Headers (9) Body Scripts Settings
Cookies
none form-data x-www-form-urlencoded raw binary GraphQL JSON
Beautify
{
"equipmentId": 11,
"allocationId": null,
"issueNotes": "Mouse not working",
"severity": "LOW"
}
Body Cookies Headers (3) Test Results
201 Created 931 ms 127 B
JSON Preview Visualize
{
"ticketId": 3
}


PUT
http://0.0.0.0:9000/api/maintenance/tickets/1/status
Send
Docs Params Authorization Headers (9) Body Scripts Settings
Cookies
none form-data x-www-form-urlencoded raw binary GraphQL JSON
Beautify
{
"status": "IN_PROGRESS",
"isResolved": false,
"resolvedAt": null
}
Body Cookies Headers (3) Test Results
200 OK 2.04 s 136 B
JSON Preview Visualize
{
"message": "Status updated"
}


PUT
http://0.0.0.0:9000/api/maintenance/tickets/2/status
Send
Docs
Params
Authorization
Headers (9)
Body
Scripts
Settings
Cookies
none
form-data
x-www-form-urlencoded
raw
binary
GraphQL
JSON
Beautify
{
"status": "RESOLVED",
"isResolved": true,
"resolvedAt": "2025-11-22T14:00:00Z"
}
Body
Cookies
Headers (3)
Test Results
200 OK
1.31 s
136 B
JSON
Preview
Visualize
{
"message": "Status updated"
}


PUT
http://0.0.0.0:9000/api/maintenance/tickets/2/assign
Send
Docs
Params
Authorization
Headers (9)
Body
Scripts
Settings
Cookies
none
form-data
x-www-form-urlencoded
raw
binary
GraphQL
JSON
Beautify
{
"assignedToEmployeeId": 4
}
Body
Cookies
Headers (3)
Test Results
200 OK
1.35 s
137 B
JSON
Preview
Visualize
{
"message": "Ticket assigned"
}