

## Laravel 12 Inventory API

A RESTful Laravel 12 backend for managing products with CRUD operations and user authentication using **Laravel Sanctum**. Supports basic role-based access control (admin vs staff).

### ## 🚀 Features

- Laravel 12 + Sanctum authentication
- Register/login endpoints
- Product CRUD API
- Role-based access (`admin` can create/delete, `staff` can only view)
- SKU generation
- Validation and structured API responses

### ## 🛠 Requirements

- PHP >= 8.2
- Composer
- MySQL or any supported DB
- Laravel CLI

Steps to integrate the project

1. Unzip the file
2. Create a DB called Crud on your local host
3. Migrate the db (php artisan migrate)
4. Insert dummy data into the db (php artisan migrate:fresh --seed)
5. Login details for the following users

admin => email: admin@example.com, password: password

staff => email: staff@example.com, password: password

Endpoint using Postman

BASE\_URL = http://127.0.0.1:8000

✦ Register

POST BASE\_URL/api/register

Body (JSON):

```
{
  "name": "Daniel",
  "email": "daniechinedu766@gmail.com",
  "password": "Password@",
  "role": "staff"
}
```

```
{
  "name": "Jane Doe",
  "email": "jane@example.com",
  "password": "password",
  "role": "admin"
}
```

Json(Response)

```
{
  "message": "User registered successfully"
}
```

✦ Login

POST BASE\_URL/api/login

Body (JSON):

```
{
  "email": "admin@example.com",
  "password": "password"
}
```

```
}  
{  
  "email": "jane@example.com",  
  "password": "password"  
}
```

Json

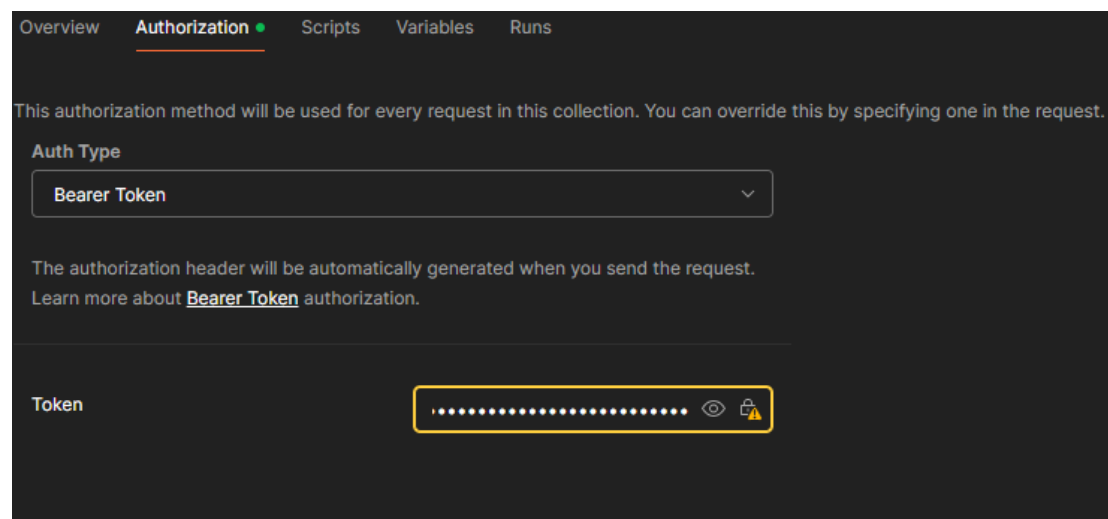
```
{  
  "token": "1 | UGwjhmBo8u6w6pMGpkaOfzf9xFeziB8JytOnF7sI7a93a5df"  
}
```

Response :{

```
  "token": "eyJ0eXAiOiJKV1QiLCJhb..."  
}
```


Authentication

The token gotten from the login will be used as a bearer token



The screenshot shows the Postman interface with the 'Authorization' tab selected. It displays the 'Auth Type' as 'Bearer Token' and a text box for the 'Token' which is currently masked with dots. A yellow box highlights the token input area.

Paste the token in the space provided.

 Product Management (Requires Auth token)

✓ List all Products

GET BASE\_URL/api/v1/products

json response

```
{
  "current_page": 1,
  "data": [
    {
      "id": 1,
      "name": "aspernatur",
      "sku": "SKU042",
      "quantity": "195",
      "status": "A",
      "cost_price": 58138,
      "selling_price": 122827,
      "created_by": 1,
      "updated_by": null,
      "created_at": "2025-06-24T07:46:12.000000Z",
      "updated_at": "2025-06-24T07:46:12.000000Z"
    },
  ],
  "next_page_url": "http://127.0.0.1:8000/api/v1/products?page=2",
  "path": "http://127.0.0.1:8000/api/v1/products",
  "per_page": 10,
  "prev_page_url": null,
  "to": 10,
  "total": 20
}
```

✓ List Products by id

GET BASE\_URL/api/products/view/{product\_id}

json

```
{
  "id": 1,
  "name": "Test Product 1",
```

```
{
  "sku": "SKU042",
  "quantity": "14",
  "status": "U",
  "cost_price": 90,
  "selling_price": 100,
  "created_by": 1,
  "updated_by": 1,
  "created_at": "2025-06-24T07:46:12.000000Z",
  "updated_at": "2025-06-24T11:42:09.000000Z"
}
```

## + Create Product

POST BASE\_URL/api/products/create

Body (JSON):

```
{
  "name": "Test Product 3",
  "quantity": 32,
  "status": "A",
  "cost_price": 89.77,
  "selling_price": 99.900
}
```

json

```
{
  "name": "Test Product 3",
  "sku": "TEST-PRODUCT-3-9ICXP",
  "quantity": "32",
  "status": "A",
  "cost_price": "89.77",
  "selling_price": "99.9",
  "created_by": 1,
  "updated_at": "2025-06-24T09:27:40.000000Z",
  "created_at": "2025-06-24T09:27:40.000000Z",
  "id": 21
}
```

## + Update Product

POST BASE\_URL/api/v1/products/update/{product\_id}

```
{
  "name": "Test Product 1",
  "quantity": 14,
  "status": "A",
  "cost_price": 89.77,
```

```
"selling_price": 99.900
}
```

Json

```
{
  "id": 1,
  "name": "Test Product 1",
  "sku": "SKU042",
  "quantity": "14",
  "status": "A",
  "cost_price": "89.77",
  "selling_price": "99.9",
  "created_by": 1,
  "updated_by": 1,
  "created_at": "2025-06-24T07:46:12.000000Z",
  "updated_at": "2025-06-24T11:25:38.000000Z"
}
```

#### + Delete Product

GET BASE\_URL/api/v1/products/delete/{product\_id}

```
{
  "message": "Product deleted successfully."
}
```

json

```
{
  "message": "Product deleted successfully."
}
```

#### + Set Product Status to Available

GET BASE\_URL/api/v1/products/avail/{product\_id}

```
{
  "message": "Product set to available successfully."
}
```

### + Set Product Status to Unavailable

GET BASE\_URL/api/v1/products/unavail/{product\_id}

```
{
  "message": "Product set to unavailable successfully."
}
```

### + Get User Details

GET BASE\_URL/api/get\_user

json

```
{
  "id": 1,
  "name": "Admin User",
  "email": "admin@example.com",
  "role": "1",
  "email_verified_at": null,
  "created_at": "2025-06-24T07:46:12.000000Z",
  "updated_at": "2025-06-24T07:46:12.000000Z"
}
```

### + Low Stock

GET BASE\_URL/api/v1/products/lowstock

```
[
  {
    "id": 1,
    "name": "Test Product 1",
    "sku": "SKU042",
```

```
    "quantity": 14,  
    "status": "U",  
    "cost_price": 90,  
    "selling_price": 100,  
    "created_by": 1,  
    "updated_by": 1,  
    "created_at": "2025-06-24T07:46:12.000000Z",  
    "updated_at": "2025-06-24T11:42:09.000000Z"  
  },  
]
```

POST BASE\_URL/api/v1/ai\_query

Body

```
{  
  "question": "Whats is total product"  
}
```

Response

```
{  
  "status": "success",  
  "answer": "The total product value is 21",  
  "breakdown": {  
    "total_Product": 21  
  }  
}
```

✚ Export.xlsx file (Excel file)

GET BASE\_URL/api/v1/products/export

In the future when report start getting huge a job will be created to handle the file to prevent crashing or hanging of ones pc or laptop

✚ Logout

GET BASE\_URL/api/logout