Project RESTful API

Setup dan Konfigurasi

Database
- Buatlah sebuah database baru
- Restore file project.sql ke dalam database yang baru saja dibuat
- Buka file config/app.go, ubah masing-masing konstanta `DbUser`, `DbPassword` dan `DbName` ke username, password dan nama database

Server File Upload Directory
- Secara default, file akan diupload ke folder "uploads". Buka file config/app.go dan ubah konstanta `UploadDir` ke folder yang diinginkan

Instruksi Penggunaan
- Gunakan tool Postman untuk melakukan review
- Postman collection tersedia di dalam source code repository. Gunakan menu File | Import dan memilih file 20241108Project.postman_collection.json

API Endpoints

a. Kategori Barang

1. GET /api/categories

Contoh response :

```
{
    "success": true,
    "status_code": 200,
    "data": [
        {
            "id": 1,
            "name": "Peralatan Kantor",
            "description": "Kategori untuk peralatan kantor"
        },
        {
            "id": 3,
            "name": "Peralatan Elektronis",
            "description": "Peralatan elektronik kantor"
        }
    ]
}
```

2. POST /api/categories

Contoh request :

```
{
    "name": "Peralatan Housekeeping",
    "description": "Kategori untuk peralatan housekeeping"
}
```

Contoh response sukses :

```
{
    "success": true,
    "status_code": 201,
    "message": "Kategori berhasil ditambahkan",
    "data": {
        "id": 4,
        "name": "Peralatan Kebersihan",
        "description": "Kategori untuk peralatan kebersihan"
    }
}
```

Contoh response gagal :

```
{
    "success": false,
    "status_code": 422,
    "message": "Nama kategori maksimal 20 karakter"
}
```

3. GET /api/categories/{id}

Contoh response sukses :

```
{
    "success": true,
    "status_code": 200,
    "data": {
        "id": 3,
        "name": "Peralatan Elektronis",
        "description": "Peralatan elektronik yang digunakan di kantor"
    }
}
```

Contoh response gagal :

```
{
    "success": false,
    "status_code": 404,
    "message": "Kategori tidak ditemukan"
}
```

4. PUT /api/categories/{id}

Contoh request :

```
{
    "name": "Peralatan Elektronik",
    "description": "Peralatan elektronik yang digunakan di kantor"
}
```

Contoh response sukses :

```
{
    "success": true,
    "status_code": 201,
    "message": "Kategori berhasil diperbarui",
    "data": {
        "id": 3,
        "name": "Peralatan Elektronik",
        "description": "Peralatan elektronik yang digunakan di kantor"
    }
}
```

Contoh response gagal :

```
{
    "success": false,
    "status_code": 422,
    "message": "Nama kategori maksimal 20 karakter"
}
```

5. DELETE /api/categories/{id}

Contoh response sukses :

```json
{
    "success": true,
    "status_code": 200,
    "message": "Kategori berhasil dihapus"
}
```

Contoh response gagal :

```json
{
    "success": false,
    "status_code": 404,
    "message": "Kategori tidak ditemukan"
}
```

b. Laporan Investasi dan Depresiasi
1. GET /api/items/investment

Contoh response :

```json
{
    "success": true,
    "data": {
        "total_investment": "7990000.00",
        "depreciated_value": "5762500.09"
    }
}
```

2. GET /api/items/investment/1

Contoh response :

```json
{
    "success": true,
    "data": {
        "item_id": 1,
        "name": "Item 001",
        "initial_price": "120000.00",
        "depreciated_value": "63772.92",
        "depreciation_rate": "10"
    }
}
```
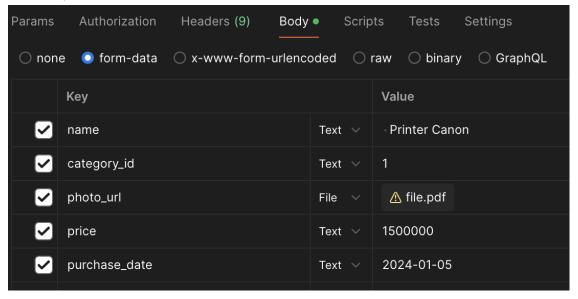
c. Manajemen Barang
1. GET /api/items?search=01&page=1&limit=3
Contoh response :

```json
{
    "success": true,
    "page": 1,
    "limit": 3,
    "total_items": 11,
    "total_pages": 4,
    "data": [
        {
            "id": 10,
            "name": "Item 010",
            "category": "Peralatan Elektronis",
            "photo_url": "/images/ten.jpg",
            "price": "JDEyMCwwMDAuMDA=",
            "purchase_date": "2024-10-04T00:00:00Z",
            "total_usage_days": 0
        },
        {
            "id": 11,
            "name": "Item 011",
            "category": "Peralatan Kantor",
            "photo_url": "/images/eleven.jpg",
            "price": "JDI0MCwwMDAuMDA=",
            "purchase_date": "2024-09-19T00:00:00Z",
            "total_usage_days": 0
        },
        {
            "id": 12,
            "name": "Item 012",
            "category": "Peralatan Elektronis",
            "photo_url": "/images/twelve.jpg",
            "price": "JDE1NSwwMDAuMDA=",
            "purchase_date": "2024-07-07T00:00:00Z",
            "total_usage_days": 0
        }
    ]
}
```
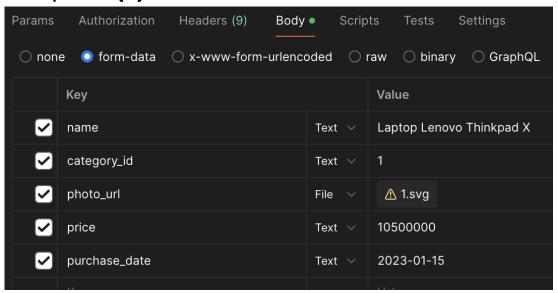
2. POST /api/items

Contoh request :

Contoh response sukses :

```
{
    "success": true,
    "message": "Barang berhasil ditambahkan",
    "data": {
        "id": 2,
        "name": " Printer Canon",
        "category": "",
        "photo_url":
"http://localhost:8080/assets/4c8ad5f5-bee7-4222-9c1b-fa79257bb0b8.pdf",
        "price": "1500000",
        "purchase_date": "2024-01-05",
        "total_usage_days": 0
    }
}
```

Contoh response gagal :

```
{
    "success": false,
    "status_code": 422,
    "message": "Photo processing failed"
}
```

3. GET /api/items/{id}

Contoh response sukses :

```
{
    "success": true,
    "status_code": 200,
    "data": {
        "id": 3,
        "name": "Peralatan Elektronis",
        "description": "Peralatan elektronik yang digunakan di kantor"
    }
}
```

Contoh response gagal :

```
{
    "success": false,
    "status_code": 404,
    "message": "Kategori tidak ditemukan"
}
```

4. PUT /api/items/{id}

Params	Authorization	Headers (9)	Body ●	Scripts	Tests	Settings

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

	Key		Value
☑	name	Text ⌄	Laptop Lenovo Thinkpad X
☑	category_id	Text ⌄	1
☑	photo_url	File ⌄	⚠ 1.svg
☑	price	Text ⌄	10500000
☑	purchase_date	Text ⌄	2023-01-15

Contoh response sukses :

```
{
    "success": true,
    "status_code": 200,
    "message": "Barang berhasil diperbarui",
    "data": {
        "id": 5,
        "name": "Laptop Lenovo Thinkpad X",
        "category": "",
        "photo_url":
"http://localhost:8080/assets/9a9f2bfb-fb3b-418b-aee1-8ec312160863.svg",
        "price": "10500000",
        "purchase_date": "2023-01-15",
        "total_usage_days": 0
    }
}
```

Contoh response gagal :

```
{
    "success": false,
    "status_code": 422,
    "message": "Photo processing failed"
}
```

5. DELETE /api/items/{id}

Contoh response sukses :

```
{
    "success": true,
    "status_code": 200,
    "message": "Barang berhasil dihapus"
}
```

Contoh response gagal :

```
{
    "success": false,
    "status_code": 404,
    "message": "Barang tidak ditemukan"
}
```