

Simple API Documentation - Inventory & Billing System

Base Configuration

- **Base URL:** `http://localhost:4000`
 - **Authentication:** JWT Token required for all routes except login/register
 - **Content-Type:** `application/json`
-

1. Authentication Routes

Register New User

POST `/auth/register`

Request:

```
json

{
  "username": "testuser",
  "email": "test@test.com",
  "password": "test123",
  "businessName": "Test Business"
}
```

Response (201):

```
json

{
  "success": true,
  "message": "Account created successfully"
}
```

Login

POST `/auth/login`

Request:

```
json
```

```
{  
  "username": "testuser",  
  "password": "test123"  
}
```

Response (200):

```
json  
  
{  
  "success": true,  
  "message": "Login successful",  
  "token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9...",  
  "businessName": "Test Business"  
}
```

2. Product Routes

Get All Products

GET `/products`

Response (200):

```
json
```

```
{
  "success": true,
  "count": 3,
  "products": [
    {
      "_id": "676f5dc6ac00c858cfbb8e90",
      "name": "Laptop",
      "description": "High-performance laptop",
      "price": 50000,
      "stock": 10,
      "category": "Electronics"
    },
    {
      "_id": "676f5e65ac00c858cfbb8e93",
      "name": "Wireless Mouse",
      "description": "Ergonomic wireless mouse",
      "price": 1500,
      "stock": 50,
      "category": "Accessories"
    }
  ]
}
```

Create Product

POST `/products`

Request:

```
json

{
  "name": "Laptop",
  "description": "High-performance laptop",
  "price": 50000,
  "stock": 10,
  "category": "Electronics"
}
```

Response (201):

```
json
```

```
{
  "success": true,
  "message": "Product created successfully",
  "product": {
    "_id": "676f5dc6ac00c858cfbb8e90",
    "name": "Laptop",
    "description": "High-performance laptop",
    "price": 50000,
    "stock": 10,
    "category": "Electronics",
    "businessId": "676f5d33ac00c858cfbb8e8d"
  }
}
```

Update Product Stock

PUT `/products/:id/stock`

Request (Increase Stock):

```
json

{
  "action": "increase",
  "quantity": 5
}
```

Response (200):

```
json

{
  "success": true,
  "message": "Stock increased successfully",
  "product": {
    "id": "676f5dc6ac00c858cfbb8e90",
    "name": "Laptop",
    "previousStock": 10,
    "currentStock": 15,
    "change": "+5"
  }
}
```

Request (Decrease Stock):

json

```
{
  "action": "decrease",
  "quantity": 3
}
```

3. Contact Routes

Get All Contacts

GET `/contacts`

Query Parameters: `?type=customer` or `?type=vendor`

Response (200):

json

```
{
  "success": true,
  "count": 2,
  "contacts": [
    {
      "_id": "676f5ee5ac00c858cfbb8e96",
      "name": "John Doe",
      "phone": "1234567890",
      "email": "john@customer.com",
      "address": "123 Main St",
      "type": "customer"
    },
    {
      "_id": "676f5f1aac00c858cfbb8e99",
      "name": "ABC Suppliers",
      "phone": "9876543210",
      "email": "contact@abcsuppliers.com",
      "address": "456 Business Ave",
      "type": "vendor"
    }
  ]
}
```

Create Contact

POST `/contacts`

Request (Customer):

```
json

{
  "name": "John Doe",
  "phone": "1234567890",
  "email": "john@customer.com",
  "address": "123 Main St",
  "type": "customer"
}
```

Request (Vendor):

```
json

{
  "name": "ABC Suppliers",
  "phone": "9876543210",
  "email": "contact@abcsuppliers.com",
  "address": "456 Business Ave",
  "type": "vendor"
}
```

Response (201):

```
json

{
  "success": true,
  "message": "Contact created successfully",
  "contact": {
    "_id": "676f5ee5ac00c858cfbb8e96",
    "name": "John Doe",
    "type": "customer"
  }
}
```

4. Transaction Routes

Get All Transactions

GET `/transactions`

Query Parameters: `?type=sale` or `?type=purchase`

Response (200):

```
json
{
  "success": true,
  "count": 2,
  "transactions": [
    {
      "_id": "676f5fc9ac00c858cfbb8e9e",
      "type": "sale",
      "customerId": "676f5ee5ac00c858cfbb8e96",
      "products": [
        {
          "productId": "676f5dc6ac00c858cfbb8e90",
          "quantity": 2,
          "price": 50000
        }
      ],
      "totalAmount": 100000,
      "date": "2024-12-28T00:03:53.470Z"
    }
  ]
}
```

Create Sale Transaction

POST `/transactions`

Request:

```
json
```

```
{
  "type": "sale",
  "customerId": "676f5ee5ac00c858cfbb8e96",
  "products": [
    {
      "productId": "676f5dc6ac00c858cfbb8e90",
      "quantity": 2,
      "price": 50000
    }
  ]
}
```

Response (201):

```
json
{
  "success": true,
  "message": "Transaction created successfully",
  "transaction": {
    "_id": "676f5fc9ac00c858cfbb8e9e",
    "type": "sale",
    "customerId": "676f5ee5ac00c858cfbb8e96",
    "products": [
      {
        "productId": "676f5dc6ac00c858cfbb8e90",
        "quantity": 2,
        "price": 50000
      }
    ],
    "totalAmount": 100000,
    "date": "2024-12-28T00:03:53.470Z"
  }
}
```

Note: Stock is automatically decreased by 2 units

Create Purchase Transaction

POST `/transactions`

Request:

```
json
```



```
{
  "type": "purchase",
  "vendorId": "676f5f1aac00c858cfbb8e99",
  "products": [
    {
      "productId": "676f5e65ac00c858cfbb8e93",
      "quantity": 10,
      "price": 1000
    }
  ]
}
```

Response (201):

```
json
{
  "success": true,
  "message": "Transaction created successfully",
  "transaction": {
    "_id": "676f6016ac00c858cfbb8ea4",
    "type": "purchase",
    "vendorId": "676f5f1aac00c858cfbb8e99",
    "products": [
      {
        "productId": "676f5e65ac00c858cfbb8e93",
        "quantity": 10,
        "price": 1000
      }
    ],
    "totalAmount": 10000,
    "date": "2024-12-28T00:05:10.819Z"
  }
}
```

Note: Stock is automatically increased by 10 units

5. Report Routes

Inventory Report

GET `/reports/inventory`

Response (200):

json

```
{
  "success": true,
  "data": [
    {
      "_id": "676f5dc6ac00c858cfbb8e90",
      "name": "Laptop",
      "category": "Electronics",
      "stock": 6,
      "price": 50000
    },
    {
      "_id": "676f5e65ac00c858cfbb8e93",
      "name": "Wireless Mouse",
      "category": "Accessories",
      "stock": 60,
      "price": 1500
    }
  ],
  "totalProducts": 3,
  "lowStockCount": 1,
  "lowStockItems": [
    {
      "_id": "676f5dc6ac00c858cfbb8e90",
      "name": "Laptop",
      "stock": 6,
      "category": "Electronics"
    }
  ]
}
```

Transaction Report

GET `/reports/transactions`

Response (200):

json

```
{
  "success": true,
  "data": [
    {
      "_id": "676f5fc9ac00c858cfbb8e9e",
      "type": "sale",
      "customerId": {
        "_id": "676f5ee5ac00c858cfbb8e96",
        "name": "John Doe"
      },
      "products": [
        {
          "productId": {
            "_id": "676f5dc6ac00c858cfbb8e90",
            "name": "Laptop"
          },
          "quantity": 2,
          "price": 50000
        }
      ],
      "totalAmount": 100000,
      "date": "2024-12-28T00:03:53.470Z"
    }
  ],
  "summary": {
    "totalTransactions": 2,
    "totalSales": 103000,
    "totalPurchases": 10000,
    "totalAmount": 113000
  }
}
```

Common Error Responses

Authentication Error (401)

```
json

{
  "error": true,
  "message": "Token required"
}
```