# API Documentation

### **General Information**

Version: v0

Base URL: <a href="http://localhost:8080">http://localhost:8080</a>

Format: Follows OpenAPI 3.0 Specification

## Category Controller

GET /categories/{id}

**Description:** Get a category by ID.

#### Parameters:

• id (path, integer, required): The ID of the category.

### **Responses:**

• 200 OK: Returns a CategoryDTO object.

## PUT /categories/{id}

**Description:** Update an existing category by ID.

#### Parameters:

• id (path, integer, required): The ID of the category.

### **Request Body:**

• CategoryDT0

### Responses:

• 200 OK: Updated CategoryDTO object.

### DELETE /categories/{id}

**Description:** Delete a category by ID.

#### Parameters:

• id (path, integer, required): The ID of the category.

### Responses:

• 200 OK

### GET /categories

**Description:** Retrieve all categories.

### Responses:

• 200 OK: List of CategoryDTO objects.

### POST /categories

**Description:** Create a new category.

### **Request Body:**

• CategoryDT0

### Responses:

• 200 OK: Created CategoryDTO object.

# Product Controller

## POST /products/createProduct

**Description:** Create a new product.

### **Request Body:**

• CreateProductDTO

#### Responses:

• 200 OK: Created ProductDT0 object.

## PATCH /products/updateProduct/{id}

**Description:** Update an existing product by ID.

#### Parameters:

• id (path, integer, required): The ID of the product.

### **Request Body:**

• Partial properties of ProductDT0

### Responses:

• 200 OK: Updated ProductDT0 object.

### GET /products/product/{id}

**Description:** Get a product by ID.

#### Parameters:

• id (path, integer, required): The ID of the product.

### Responses:

• 200 OK: Returns ProductDT0 object.

## GET /products/product/all

**Description:** Retrieve all products.

#### Responses:

• 200 OK: List of ProductDTO objects.

# **Order Controller**

### POST /orders/place

**Description:** Place an order.

#### **Responses:**

200 OK: Returns OrderDTO object.

## POST /orders/confirmPayment/{paymentOrderId}

**Description:** Confirm order payment.

#### Parameters:

paymentOrderId (path, string, required): Payment order ID.

#### **Responses:**

• 200 OK: Updated OrderDTO object.

## POST /orders/cancel/{orderId}

**Description:** Cancel an order.

#### Parameters:

• orderId (path, integer, required): Order ID.

#### **Responses:**

200 OK: Cancelled OrderDTO object.

### GET /orders

**Description:** Get all orders.

#### Parameters:

• status (query, string, optional): Filter by order status.

#### **Responses:**

• 200 OK: List of OrderDTO objects.

### GET /orders/{orderId}

**Description:** Get order by ID.

### Parameters:

• orderId (path, integer, required): Order ID.

### Responses:

• 200 OK: Returns OrderDTO object.

## **Service** Controller

### GET /carts/cart

**Description:** Retrieve the current cart.

### Responses:

• 200 OK: CartResponseDTO object.

### POST /carts/cart

**Description:** Add items to the cart.

### **Request Body:**

• CartItemDTO

### Responses:

• 200 OK: Updated CartResponseDTO object.

### DELETE /carts/cart

**Description:** Clear the cart.

### Responses:

• 200 OK

### PATCH /carts/cart

**Description:** Update cart item quantity.

#### Parameters:

- cartItemId (query, integer, required): Cart item ID.
- quantity (query, integer, required): New quantity.

### Responses:

• 200 OK: Updated CartResponseDTO object.

## PATCH /carts/cart/removeItem/{cartItemId}

**Description:** Remove an item from the cart.

#### Parameters:

• cartItemId (path, integer, required): Cart item ID.

### Responses:

• 200 OK: Updated CartResponseDTO object.

# Schemas

## CategoryDTO

Field	Type	Description
id	integer	Unique category ID
name	string	Name of the category

## **CreateProductDTO**

Field	Туре		Description
title	string	Product title	

description string Detailed product description

price double Price of the product

stockQuantity integer Available stock quantity

rating double Product rating (e.g., 4.5)

category string Name of associated category

## **ProductDTO**

Field	Type	Description
id	integer	Unique product ID
title	string	Product title
description	string	Product description
price	double	Price of the product
stockQuantity	integer	Quantity in stock
rating	double	Product rating
category	string	Category of the product

## OrderDTO

Field	Type	Description
orderld	integer	Unique order ID
userld	integer	ID of the user who placed order
status	string	Current status of the order
orderDate	date-time	Date and time of order placement
paymentMethod	string	Method used for payment
paymentStatus	string	Status of the payment
totalAmount	double	Total cost of the order
items	array	List of ordered items (OrderItemsDTO)

## **CartItemDTO**

Field	Type	Description
productId	integer	ID of the product
quantity	integer	Quantity to be added

## CartResponseDTO

Field	Туре	Description
id	integer	Cart ID
userId	integer	ID of the user
items	array of CartItemResponseDTO	List of cart items
totalPrice	double	Total price of items in the cart

# Conclusion

This document outlines all REST API endpoints, request and response structures, and schema definitions for the v0 version of your service. You can use this to generate Swagger/OpenAPI UI or integrate with frontend/backend teams seamlessly.