## **API Endpoints**

## 1. Home Page API

- Endpoint: / (GET)
- Description: Fetch new arrivals and featured clothes.
- Response: JSON array of products categorized as "new arrivals" or "featured".
- Query Parameters: ?limit=10 for paginated responses.
- Example Response: json { "newArrivals": [{ "id": 1, "name": "Dress A", "price": 50 }], "featured": [{ "id": 2, "name": "Jacket B", "price": 80 }] }

## 2. Products API

- Endpoint: /products (GET)
- **Description:** Fetch products by category and apply filters.
- Request Parameters:
  - ?category=women  $\rightarrow$  Filter by category.
  - ?priceRange=100-500  $\rightarrow$  Filter by price range.
  - ?sort=price  $\rightarrow$  Sort by price or relevance.
- Response: JSON array of products matching filters.
- Example Response: json [ { "id": 1, "name": "T-shirt", "price": 20, "category": "women" }, { "id": 2, "name": "Skirt", "price": 35, "category": "women" }

## 3. Single Product API

- Endpoint: /product/:id (GET)
- Description: Fetch specific product details.
- Request Parameters: :id → Product ID (e.g., /product/123).
- Response: JSON object with detailed product info.
- Example Response: json { "id": 123, "name": "Winter Coat", "description": "Warm and stylish coat.", "price": 150, "stock": 25, "images": ["image1.jpg", "image2.jpg"] } ### 3.1. Cart Management (State Management)
  - Description: Manage user's shopping cart using state management (Zustand).
  - Actions:
    - \* Add to Cart: Add a product to the user's cart.
    - \* Remove from Cart: Remove a product from the user's cart.
    - \* Fetch Cart Items: Retrieve all products in the user's cart.

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- State
                                                          "cart": [
                  Structure:
                                  json
                                             {
         { "productId": 101, "name": "T-shirt", "price": 20,
         "quantity": 2 },
                                        { "productId": 202,
         "name": "Skirt", "price": 35, "quantity": 1 }
                                                                  ]
       - Example Actions:
                                            addToCart({ productId:
          * Add to Cart: javascript
             101, name: "T-shirt", price: 20, quantity: 2 });
          * Remove from Cart: javascript
                                                 removeFromCart(101);
           * Fetch Cart Items: javascript
                                                 const cartItems =
            getCartItems();
       - Example State Update:
          * Add to Cart:
                                            {
                                                         "message":
                                 json
             "Product added to cart successfully."
                                                         }
           * Remove from Cart: json
                                             {
                                                         "message":
             "Product removed from cart successfully."
4. Orders API
  • Endpoint: /orders (POST)
  • Description: Save the order and process payment.
  • Request Body: json
                                        "user": { "id": 1, "name":
                            {
     "John Doe", "email": "john@example.com" },
                                                         "products":
                   { "id": 101, "quantity": 2 },
                                                              {
     "id": 202, "quantity": 1 }
                                                    "paymentInfo":
     { "method": "credit_card", "status": "paid" }
  • Response: Confirm order status and payment.
  • Example Response: json
                                            "orderId": "ORD12345",
                                  "message": "Order placed successfully."
     "status": "success",
5. Shipment API
  • Endpoint: /shipment (GET)
  • Description: Fetch all orders and their payment status.
  • Request Parameters: : ?userId=1 \rightarrow Fetch shipments for a specific
     user.
  • Response: JSON array of orders with shipment and payment status.
  • Example Response: json
                                           {
                                                          "orderId":
                                 "ORD12345",
                             "shipmentStatus": "shipped",
                                                                        "paymentStatus":
                         "trackingNumber": "TRK123"
     "paid",
                                                             },
                   "orderId": "ORD67890",
                                                       "shipmentStatus":
                            "paymentStatus": "pending",
     "pending",
                                                                     "trackingNumber":
     null
                  }
```