

API Requirements Plan

1. Product API

Endpoint Name: `/products`

- **Method:** GET
- **Description:** Fetch all available products from Sanity CMS, which includes furniture details like sofas, chairs, tables, etc. This endpoint will allow customers to browse the product catalog.
- **Response:**

```
[
  {
    "id": 1,
    "name": "Comfortable Sofa",
    "price": 499.99,
    "stock": 15,
    "image": "https://example.com/images/sofa.jpg"
  },
  {
    "id": 2,
    "name": "Modern Dining Table",
    "price": 299.99,
    "stock": 10,
    "image": "https://example.com/images/table.jpg"
  }
]
```

- **Purpose:** This API retrieves a list of all products, including essential details such as product name, price, stock availability, and image.
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2. Product Details API

Endpoint Name: `/products/{id}`

- **Method:** GET
- **Description:** Fetch detailed information for a specific product based on its ID. This will provide in-depth product details like dimensions, material type, description, etc.
- **Response:**

```
{
  "id": 1,
  "name": "Comfortable Sofa",
  "price": 499.99,
  "stock": 15,
  "description": "A luxurious and comfortable sofa made with premium leather.",
  "dimensions": "84 x 34 x 36 inches",
  "material": "Leather",
  "image": "https://example.com/images/sofa.jpg"
}
```

- **Purpose:** To provide detailed information about a specific product when a user clicks on it from the product listing page.
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3. Order API

Endpoint Name: `/orders`

- **Method:** POST

- **Description:** Create a new order. This API will be used when a customer proceeds to checkout, sending order details including product, shipping address, and payment status to be recorded in the database (Sanity CMS).
- **Payload:**

```
{
  "customerInfo": {
    "name": "John Doe",
    "email": "johndoe@example.com",
    "address": "123 Main St, City, Country"
  },
  "products": [
    {
      "productId": 1,
      "quantity": 2,
      "price": 499.99
    }
  ],
  "paymentStatus": "Pending"
}
```

- **Response:**

```
{
  "orderId": 123,
  "status": "Order Created",
  "message": "Your order has been successfully placed."
}
```

- **Purpose:** To create and store a new order in Sanity CMS when a customer places an order.
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4. Shipment Tracking API

Endpoint Name: `/shipment/{orderId}`

- **Method:** GET
- **Description:** Track the shipment status of an order. This API will interact with third-party shipment tracking services to fetch updates about the delivery status of an order.
- **Response:**

```
{
  "shipmentId": "ABC123",
  "orderId": 123,
  "status": "In Transit",
  "expectedDeliveryDate": "2025-01-18"
}
```

- **Purpose:** To provide the customer with real-time updates on the status of their order (e.g., "In Transit", "Delivered") and the expected delivery date.
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5. Payment API

Endpoint Name: `/payment`

- **Method:** POST
- **Description:** Process payment for an order. This API will be responsible for securely handling payments via third-party gateways like **Stripe** or **PayPal**.
- **Payload:**

```
{
  "orderId": 123,
```

```
"amount": 999.98,
"paymentMethod": "credit_card",
"paymentDetails": {
  "cardNumber": "1234567812345678",
  "expiryDate": "12/25",
  "cvv": "123"
}
```

- **Response:**

```
{
  "paymentStatus": "Success",
  "transactionId": "XYZ789",
  "message": "Payment successfully processed"
}
```

- **Purpose:** To securely process payments for orders placed by customers and return a confirmation of the payment.
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6. Customer Authentication API

Endpoint Name: /auth/login

- **Method:** POST
- **Description:** Authenticate the customer login using their credentials.
- **Payload:**

```
{
  "email": "johndoe@example.com",
  "password": "password123"
}
```

- **Response:**

```
{
  "userId": 123,
  "status": "Success",
  "message": "Login successful"
}
```

- **Purpose:** To authenticate the user and allow them to access their account and order history.
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Conclusion:

These API endpoints are essential for the seamless operation of your furniture ecommerce website. By implementing them, your system will support key functionalities such as product browsing, order management, shipment tracking, and secure payment processing, ensuring an efficient user experience.