

WEB-API User Guide

Welcome to the "WEB-API" User Guide. This guide will help you understand how to use the API, including authentication using JSON Web Tokens (JWT). The API allows you to manage products, orders, and user-related operations.

1. Installation and Setup

To use the API, follow these steps:

1. Clone the project repository to your local machine using Git.
2. Navigate to the project directory in your terminal.
3. Install the required dependencies using the following command:

Copy code

```
npm install
```

2. Starting the API Server

To start the API server, run the following command:

sqlCopy code

```
npm start
```

3. Authentication

Authentication for secure routes (e.g., creating orders, managing products) is done using JSON Web Tokens (JWT). Here's how it works:

Login (**Generate Token**):

- **Request Method:** POST
- **URL:** http://localhost:3000/login
- **Example Request Body:**

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

Response:

- If the login is successful, you will receive a JWT token in the response:

```
{  
  "message": "Successfully Login",  
  "Token": "your_jwt_token_here"  
}
```

You should store this token securely for future authenticated requests.

4. API Routes

Here are the available API routes and how to use them:

A. Products

1. Retrieve a List of Products

- **Request Method:** GET
- **URL:** http://localhost:3000/products

2. Add a New Product (**Authentication Required**)

- **Request Method:** POST
- **URL:** http://localhost:3000/products
- **Example Request Body:**

```
{
  "name": "Product Name",
  "price": 19.99,
  "description": "Product Description",
  "category": "Product Category",
  // Other product attributes
}
```

Authentication: Include the JWT token in the request body as follows:

```
{
  "Token": "your_jwt_token_here"
}
```

3. Retrieve Details of a Single Product

- **Request Method:** GET
- **URL:** `http://localhost:3000/products/<productid>`
- **Example:** Replace `<productid>` with the actual product ID.

4. Delete a Product (**Authentication Required**)

- **Request Method:** DELETE
- **URL:** `http://localhost:3000/products/<productid>`
- **Example:** Replace `<productid>` with the actual product ID.

Authentication: Include the JWT token in the request body as explained above.

```
{
  "Token": "your_jwt_token_here"
}
```

5. Update Product Details (**Authentication Required**)

- **Request Method:** PATCH
- **URL:** `http://localhost:3000/products/<productid>`
- **Example:** Replace `<productid>` with the actual product ID.
- **Example Request Body:**

```
{
  // Update product attributes
}
```

B. Orders

1. Retrieve a List of Orders (**Authentication Required**)

- **Request Method:** GET
- **URL:** http://localhost:3000/orders

2. Create a New Order (**Authentication Required**)

- **Request Method:** POST
- **URL:** http://localhost:3000/orders
- **Example Request Body:**

```
{
  "customerId": "Customer ID",
  "items": [
    {
      "product": "Product Name",
      "quantity": 2,
      "price": 9.99
    },
    // Add more items as needed
  ],
  "totalquantity": 4,
  "totalAmount": 39.96,
  "status": "pending"
}
```

- **Authentication:** Include the JWT token in the request body as explained above.

3. Retrieve Details of a Single Order (**Authentication Required**)

- **Request Method:** GET
- **URL:** http://localhost:3000/orders/<orderid>
- **Example:** Replace <orderid> with the actual order ID.

4. Delete an Order (**Authentication Required**)

- **Request Method:** DELETE
- **URL:** http://localhost:3000/orders/<orderid>
- **Example:** Replace <orderid> with the actual order ID.
 - **Authentication:** Include the JWT token in the request body as explained above.

5. Update Order Details (**Authentication Required**)

- **Request Method:** PATCH

- **URL:** http://localhost:3000/orders/<orderid>
- **Example:** Replace <orderid> with the actual order ID.
- **Example Request Body:**

```
{  
  // Update order attributes  
}
```

- **Authentication:** Include the JWT token in the request body as explained above.

C. User Operations

1. Create a New User (Sign Up)

- **Request Method:** POST
- **URL:** http://localhost:3000/signin
- **Example Request Body:**

```
{  
  "firstName": "First Name",  
  "lastName": "Last Name",  
  "email": "user@example.com",  
  "password": "password123",  
  "phoneNumber": "1234567890"  
  // Other user attributes  
}
```

This user guide provides detailed information on using the "WEB-API" with JWT-based authentication. Make sure to include the JWT token in the request body for authenticated routes that require it. Keep your JWT token secure, and use it for authentication when making requests to protected endpoints.