**E-COMMERCE API - ENDPOINTS PLANNING**

**1. Users**

For user management, including registration, login, profile updates, and deletion.

* **Register a User**
  + **POST /users/register** - Register a new user.
* **Login**
  + **POST /users/login** - Authenticate a user and return a token.
* **Get User Information**
  + **GET /users/:id** - Retrieve user details.
* **Update User Information**
  + **PUT /users/:id** - Update user details.
* **Delete a User**
  + **DELETE /users/:id** - Delete a user.

**2. Products**

Endpoints to browse products, view single product details, create new products (admin), update and delete existing products (admin).

* **List All Products**
  + **GET /products** - Retrieve all products.
* **Get a Single Product**
  + **GET /products/:id** - Retrieve details of a specific product.
* **Create a Product**
  + **POST /products** - Add a new product (Admin only).
* **Update a Product**
  + **PUT /products/:id** - Update a specific product (Admin only).
* **Delete a Product**
  + **DELETE /products/:id** - Remove a product (Admin only).

**3. Carts**

Manage shopping cart contents for logged-in users.

* **View Cart**
  + **GET /carts/:userId** - Retrieve a user’s cart.
* **Add Product to Cart**
  + **POST /carts/:userId/products** - Add a product to the cart.
* **Update Product Quantity in Cart**
  + **PUT /carts/:userId/products/:productId** - Update the quantity of a product in the cart.
* **Remove Product from Cart**
  + **DELETE /carts/:userId/products/:productId** - Remove a product from the cart.
* **Clear Cart**
  + **DELETE /carts/:userId/clear** - Remove all products from the cart.

**4. Orders**

Endpoints for managing orders from cart checkout to order tracking.

* **Create an Order**
  + **POST /orders/:userId** - Create an order from the cart.
* **Get All Orders for a User**
  + **GET /orders/:userId** - Retrieve all orders made by a user.
* **Get Specific Order**
  + **GET /orders/:userId/:orderId** - Retrieve details of a specific order.
* **Update Order Status** (Admin)
  + **PUT /orders/:orderId/status** - Update the status of an order.
* **Cancel an Order**
  + **DELETE /orders/:userId/:orderId** - Cancel an existing order.

**Additional Considerations:**

* **Authentication and Authorization**: Use middleware to protect endpoints, especially for creating, updating, and deleting resources.
* **Rate Limiting**: Implement rate limiting to prevent abuse of the API.
* **Data Validation**: Ensure robust validation on all inputs to maintain data integrity.