Abstract:

This project aims to build a simple CRUD application using either Django or Node.js, with two distinct user modules: User and Admin. The Admin module is responsible for adding products, including product images, while the User module can view products, add them to a cart, and proceed with purchasing.

Features:

1. Authentication & Authorization:

   - Users can sign up, log in, and log out.
   - Admins have elevated privileges, enabling them to access an admin dashboard.

2. User Module:

   - View available products.
   - Add products to a cart.
   - View items in the cart.
   - Purchase items from the cart.

3. Admin Module:

   - Add new products with details (name, description, price).
   - Upload product images.
   - View existing products.
   - Edit or delete products.

4. Product Management:

   - Each product will have fields such as name, description, price, and an image.

5. Cart Management:

   - Users can add products to their cart, view cart contents, and purchase items.

Implementation Outline:

1. Setup:

    - Initialize the project structure.
    - Set up the database (e.g., SQLite for Django or MongoDB for Node.js).

2. User Authentication:

    - Implement user registration and login functionalities.
    - Set up user roles (User and Admin).

3. Admin Dashboard:

    - Create views/routes for admin functionalities.
    - Implement CRUD operations for products.

4. Product Display & Cart:

    - Display available products to users.
    - Allow users to add products to their cart.
    - Implement cart management functionalities (add, view, and purchase).

5. Frontend & Styling:
    - Design user-friendly interfaces for both User and Admin modules.
    - Ensure responsive design for better accessibility on various devices.

Conclusion:

This project serves as a foundational CRUD application with distinct user roles. By implementing features like product management, cart functionalities, and user authentication, it provides a comprehensive example of building a web-based e-commerce platform using either Django or Node.js.