

E-Commerce Website: Detailed Requirements & Features

1. Core System Requirements

- **Technology Stack:**
 - **Backend:** Django (Django REST Framework for APIs)
 - **Frontend:** React.js / Next.js
 - **Database:** PostgreSQL / MySQL
 - **Authentication:** JWT-based authentication
 - **WebSockets:** Real-time notifications
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2. User Roles & Authentication

1. **Admin (Store Owner)**
 - Manage products, orders, and customers
 - Configure settings (payments, shipping, etc.)
 - View reports & analytics
 2. **Customers (Users)**
 - Register/Login (JWT authentication)
 - Browse products, add to cart, and place orders
 - View order history and track orders
 3. **Guest Users**
 - Browse products and search
 - Add items to cart but require login for checkout
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3. Product & Category Management

- **Product Features**
 - Name, Description, Price, Stock, SKU
 - Product Images (Multiple images per product)
 - Categories & Subcategories
 - Product Variants (size, color, etc.)
 - Discount & Offers
 - **Admin Panel:**
 - Add, update, delete products
 - Set discounts & promotions
 - Manage categories
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4. Shopping Cart & Checkout

- **Cart Management**
 - Add/remove products
 - Update quantity
 - Display total price
 - **Checkout Process**
 - Shipping details (Address, Contact Info)
 - Payment selection (Card, PayPal, COD)
 - Order summary
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5. Payment Gateway Integration

- **Payment Options**
 - All payment methods can be integrated.
 - Cash on Delivery (COD)
 - **Transaction Management**
 - Order confirmation on payment success
 - Refunds & cancellations
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6. Order & Shipping Management

- **Order Processing**
 - Order status (Pending, Shipped, Delivered)
 - Order tracking for customers
 - Automatic email notifications
 - **Shipping Options**
 - Standard & Express delivery
 - Shipping cost calculations
 - Integration with courier services
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7. Product Search & Filtering

- **Search Functionality**
 - Search by name, category, tags
 - Autocomplete search
 - **Filters & Sorting**
 - Price range, Categories, Ratings
 - Sort by popularity, latest, price
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★ 8. Reviews & Ratings

- **Customer Reviews**
 - Only verified buyers can review
 - Star ratings (1-5)
 - Moderation by admin
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🔊 9. Notifications & Alerts

- **User Notifications**
 - Order confirmations
 - Shipping updates
 - Discount alerts
 - **Admin Alerts**
 - Low stock notifications
 - New order alerts
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📊 10. Reports & Analytics

- **Sales Reports**
 - Total revenue, orders, best-selling products
 - **Customer Insights**
 - New vs. returning customers
 - Most purchased categories
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🔒 11. Security Features

- **User Authentication**
 - JWT-based authentication
 - Password hashing
 - **Data Protection**
 - HTTPS & SSL
 - Prevent SQL Injection, CSRF, XSS attacks
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12. Responsive & Mobile-Friendly UI

- **Mobile-first design**
 - **PWA support** (Progressive Web App)
 - **Fast page load speeds**
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13. Admin Panel & CMS

- **Manage Products, Orders, Users**
 - **Set tax, shipping rates, and discounts**
 - **Dashboard with key metrics**
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Next Steps

This is a **single-vendor e-commerce system** with essential and advanced features.

Do you need **custom features** or **third-party integrations** like ERP, CRM, or Marketing tools?

Let me know! 