1. **User Authentication** and Authorization: Implement a secure authentication system to allow users to register, log in, and manage their accounts. Use authorization mechanisms to control access to certain resources and actions based on user roles and permissions.
2. **Product Management**: Create APIs to manage products, including features such as creating, updating, and deleting products. Implement search and filtering functionality to allow users to find products based on various criteria.
3. **Shopping Cart**: Develop APIs to handle shopping cart functionality, allowing users to add products, update quantities, and remove items from their cart. Implement features like guest carts and persistent carts for registered users.
4. **Order Management**: Build APIs to handle order creation, tracking, and management. Include features such as order history, order status updates, and payment integration with popular payment gateways.
5. **Inventory Management**: Implement inventory management functionality to track product stock levels and handle inventory updates when orders are placed. Include features like low stock notifications and out-of-stock handling.
6. **Payment Integration**: Integrate with popular payment gateways to enable secure and seamless payment processing. Implement features like payment verification, refunds, and order fulfillment upon successful payment.
7. **Shipping Integration**: Integrate with shipping providers to calculate shipping rates, generate shipping labels, and track shipments. Include features like address validation and real-time shipping quotes.
8. **Reviews and Ratings**: Allow users to leave reviews and ratings for products. Implement APIs to manage reviews, including features like moderation, average ratings, and sorting/filtering options.
9. **Analytics and Reporting**: Implement tracking and analytics to gather insights on user behavior, sales performance, and other key metrics. Generate reports and visualizations to help monitor and optimize your e-commerce platform.
10. **Security and Performance**: Implement security measures such as input validation, data sanitization, and protection against common web vulnerabilities. Optimize performance by implementing caching, database indexing, and efficient query handling.