

Prioritized Product Backlog

1. User Registration (High Priority)

- The system shall allow users to register with an email, username, and password.
- The system shall validate the uniqueness of the email to prevent duplicate accounts.
- The system shall send a verification email to activate the user account.
- The system shall enforce password complexity rules.

2. Secure Login (High Priority)

- The system shall allow users to log in using their email and password.
- The system shall hash and securely store passwords.
- The system shall lock an account after three consecutive failed login attempts.
- The system shall allow users to reset passwords via a secure email link.
- The system shall support two-factor authentication (optional).

3. Seller Profile Creation (High Priority)

- The system shall allow registered users to create a seller profile.
- The system shall require sellers to provide business details (name, address, contact info).
- The system shall allow sellers to upload business verification documents.
- The system shall notify sellers upon successful verification of their profile.

4. Manage Profile (Medium Priority)

- The system shall allow users to update their profile information.
- The system shall allow users to update their email, password, and contact details.
- The system shall provide a history of recent account activities.
- The system shall allow users to delete their accounts permanently.

5. Product Search (High Priority)

- The system shall allow users to search for products by name, category, and brand.
- The system shall display search suggestions as users type.
- The system shall return relevant products based on keyword matching.
- The system shall allow users to refine search results with filters.

6. Wishlist (Medium Priority)

- The system shall allow users to add products to their wishlist.
- The system shall allow users to remove products from their wishlist.
- The system shall notify users when a wishlist item goes on sale.

7. View Product Details (High Priority)

- The system shall display product details including images, description, price, and seller information.
- The system shall show product reviews and ratings.
- The system shall allow users to share product links via social media.

8. Product Catalog Management (Seller Side) (High Priority)

- The system shall allow sellers to add, edit, and delete products.
- The system shall allow sellers to upload product images.
- The system shall allow sellers to manage inventory (stock availability).

9. Secure Checkout (High Priority)

- The system shall allow users to add items to their cart and proceed to checkout.
- The system shall allow users to enter shipping and billing information.
- The system shall support multiple payment options (Credit/Debit Card, PayPal, Cash on Delivery).
- The system shall securely process payments and generate invoices.
- The system shall display an order confirmation message upon successful checkout.

10. Order Tracking (High Priority)

- The system shall allow users to track their order status (Pending, Shipped, Delivered).
- The system shall provide estimated delivery dates.
- The system shall allow users to cancel an order before it is shipped.

11. Email Order Updates (Medium Priority)

- The system shall send email notifications for order confirmation, shipping, and delivery.
- The system shall send an email receipt to users after a successful purchase.
- The system shall notify users if an order is delayed or canceled.

12. Sales Analytics (Medium Priority)

- The system shall generate sales reports based on daily, weekly, and monthly performance.
- The system shall provide graphical representations of sales trends.
- The system shall allow sellers to filter sales data by product, category, or date range.
- The system shall display top-selling products and revenue statistics.

13. Product Feedback (Medium Priority)

- The system shall allow users to leave feedback in the form of ratings and reviews.
- The system shall moderate and filter inappropriate reviews using predefined policies.
- The system shall allow sellers to respond to customer feedback.
- The system shall display average product ratings based on user feedback.

14. Inventory Management (High Priority)

- The system shall allow sellers to add, edit, and remove products from inventory.
- The system shall track stock levels in real-time.
- The system shall prevent customers from purchasing out-of-stock items.
- The system shall generate stock reports for sellers.

15. Product Comparison (Low Priority)

- The system shall allow users to select multiple products for comparison.
- The system shall display product specifications side by side.
- The system shall highlight key differences such as price, features, and ratings.
- The system shall allow users to save comparisons for future reference.

16. Promotions and Discounts (Medium Priority)

- The system shall allow sellers to create and manage discount campaigns.
- The system shall apply discounts automatically during checkout.
- The system shall display discounted prices on product listings.
- The system shall notify users of ongoing promotions via email or dashboard alerts.

17. Read Customer Reviews (Medium Priority)

- The system shall allow users to view customer reviews on product pages.
- The system shall provide sorting options for reviews (e.g., most recent, highest-rated).
- The system shall verify that reviews come from authenticated buyers.
- The system shall allow users to report inappropriate reviews.

18. Low Stock Alerts (High Priority)

- The system shall send automatic alerts to sellers when stock levels drop below a defined threshold.
- The system shall display a "low stock" label on affected products.
- The system shall provide an inventory dashboard summarizing low-stock products.
- The system shall allow sellers to set custom stock alert thresholds.

19. Real-time Shipment Tracking (High Priority)

- The system shall allow customers to track their shipments in real-time.
- The system shall integrate with third-party courier APIs to fetch tracking details.
- The system shall send automatic shipment status updates via email and dashboard notifications.
- The system shall display estimated delivery dates based on courier data.