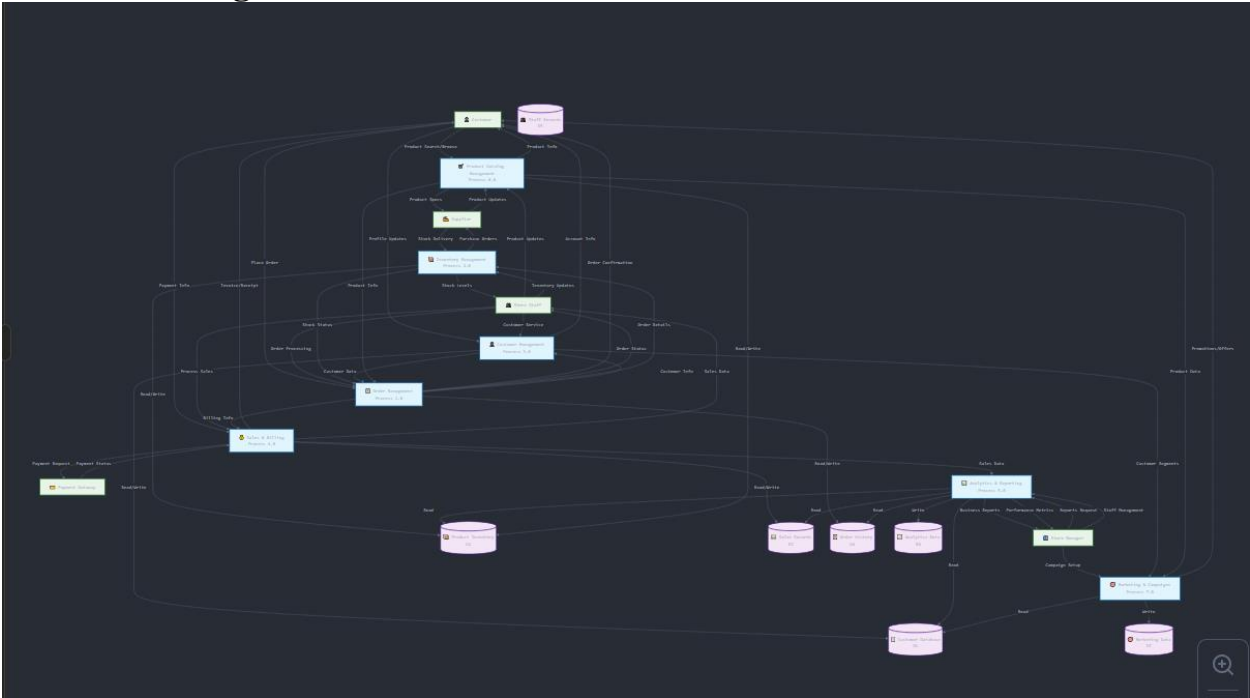


Requirement Analysis

DATE	29 July 2025
TEAM ID	PNT2025TMID13974
PROJECT NAME	Cosmetic Management System
MAXIMUM MARKS	

Data Flow Diagram and User Stories

Data Flow Diagram



User Stories

EPIC 1: User Registration & Authentication
US-001: Customer Registration (High Priority) As a potential customer, I want to create a new account by providing my personal details, email, and password, So that I can access the cosmetics store and make purchases. <i>Acceptance Criteria: User can fill registration form with name, email, password, phone number, and address. System validates email format and password strength. Confirmation email is sent upon successful registration.</i>
US-002: Email Verification (High Priority) As a newly registered customer, I want to receive an email verification link, So that I can activate my account and ensure account security. <i>Acceptance Criteria: Verification email sent within 2 minutes. Link expires after 24 hours. Account remains inactive until verified. Option to resend verification email.</i>
US-003: Social Media Login (Medium Priority) As a customer, I want to log in using my Google or Facebook account, So that I can quickly access the platform without creating new credentials. <i>Acceptance Criteria: Integration with Google and Facebook OAuth. Profile information automatically populated. User can link/unlink social accounts.</i>

EPIC 2: Product Catalog & Search

US-004: Browse Product Catalog (High Priority)

As a customer,
I want to view all cosmetic products organized by categories (skincare, makeup, fragrance),
So that I can easily find products that match my beauty needs.

Acceptance Criteria: Products displayed with images, prices, ratings. Filter by brand, price range, skin type. Sort by popularity, price, newest. Pagination for large catalogs.

US-005: Product Search (High Priority)

As a customer,
I want to search for specific products using keywords,
So that I can quickly find the cosmetics I'm looking for.

Acceptance Criteria: Search by product name, brand, ingredient, skin concern. Auto-suggestions appear while typing. Search results show relevant products with highlighting.

US-006: Product Details (High Priority)

As a customer,
I want to view detailed product information including ingredients, reviews, and usage instructions,
So that I can make informed purchasing decisions.

Acceptance Criteria: Product page shows multiple images, ingredient list, customer reviews, ratings, usage instructions, and related products.

EPIC 3: Shopping Cart & Wishlist

US-007: Add to Cart (High Priority)

As a customer,
I want to add cosmetic products to my shopping cart with desired quantities,
So that I can collect items for purchase.

Acceptance Criteria: Add products with quantity selection. Update quantities in cart. Remove items from cart. Cart persists across sessions. Real-time price calculation.

US-008: Wishlist Management (Medium Priority)

As a customer,
I want to save products to my wishlist for future consideration,
So that I can keep track of items I'm interested in purchasing later.

Acceptance Criteria: Add/remove products from wishlist. View wishlist with product details. Move items from wishlist to cart. Share wishlist with others.

EPIC 4: Checkout & Payment

US-009: Secure Checkout (High Priority)

As a customer,
I want to securely checkout and pay using multiple payment methods,
So that I can complete my purchase safely and conveniently.

Acceptance Criteria: Support credit cards, PayPal, digital wallets. SSL encryption for payment data. Order summary before payment. Payment confirmation receipt.

US-010: Guest Checkout (Medium Priority)

As a guest customer,
I want to checkout without creating an account,
So that I can make quick purchases without registration.

Acceptance Criteria: Checkout with minimal information (name, email, address). Option to create account after purchase. Order tracking via email.

EPIC 5: Order Management

US-011: Order Tracking (High Priority)

As a customer,
I want to track my order status and receive notifications about shipment progress,
So that I know when to expect my cosmetics delivery.

Acceptance Criteria: Real-time order status updates. Email/SMS notifications for status changes. Tracking number integration with shipping providers. Estimated delivery dates.

US-012: Order History (Medium Priority)

As a customer,
I want to view my order history and reorder previous purchases,
So that I can easily repurchase my favorite products.

Acceptance Criteria: List of all past orders with details. Filter orders by date, status, products. One-click reorder functionality. Download order invoices.

EPIC 6: Admin & Inventory Management

US-013: Inventory Management (High Priority)

As a store manager,
I want to manage product inventory levels and receive low stock alerts,
So that I can maintain adequate stock and prevent stockouts.

Acceptance Criteria: Update stock quantities. Set low stock thresholds. Automated alerts for low inventory. Bulk inventory updates via CSV import.

US-014: Sales Analytics (High Priority)

As a store manager,
I want to view sales analytics and customer behavior reports,
So that I can make data-driven business decisions.

Acceptance Criteria: Dashboard with sales metrics, popular products, customer demographics. Export reports to PDF/Excel. Date range filtering. Revenue trend analysis.

EPIC 7: Customer Support & Reviews

US-015: Customer Support Chat (Medium Priority)

As a customer,
I want to contact customer support through live chat or email,
So that I can get help with product questions or order issues.

Acceptance Criteria: Live chat widget on all pages. Support ticket system. FAQ section. Response time tracking. Chat history preservation.

US-016: Product Reviews (Medium Priority)

As a customer,
I want to leave reviews and ratings for cosmetic products I have purchased,
So that I can share my experience and help other customers make decisions.

Acceptance Criteria: Star rating system (1-5). Written review with photos. Only verified purchasers can review. Moderation system for inappropriate content.