

Requirement Analysis

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

Solution Requirement

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (User / Sub-Task)
FR 1	User Registration	Registration through Email Registration through Social Links/INI Confirmation via Email Confirmation via OTP
FR 2	User Authentication	Login with Email and Password Social Media Login Integration Password Reset Functionality Two-Factor Authentication
FR 3	Product Catalog Management	Browse Products by Category Product Search and Filtering Product Details Display Product Image Gallery Product Reviews and Ratings
FR 4	Shopping Cart Management	Add Products to Cart Update Product Quantities Remove Products from Cart Save Cart for Later Cart Total Calculation
FR 5	Wishlist Management	Add Products to Wishlist Remove from Wishlist Move Items to Cart Share Wishlist with Others

FR 6	Order Processing	Secure Checkout Process Multiple Payment Methods Order Confirmation Guest Checkout Option Order Summary Display
FR 7	Payment Processing	Credit/Debit Card Processing PayPal Integration Digital Wallet Support Payment Security Encryption Payment Confirmation
FR 8	Order Management	Order Tracking System Order History Display Order Status Updates Shipping Notifications Reorder Functionality
FR 9	Inventory Management	Stock Level Monitoring Low Stock Alerts Product Availability Updates Supplier Management Inventory Reports
FR 10	Customer Support	Live Chat Support Support Ticket System FAQ Management Help Documentation Contact Form
FR 11	Admin Dashboard	Sales Analytics Display Customer Management Product Management Order Management Revenue Reports
FR 12	User Profile Management	Update Personal Information Manage Shipping Addresses View Order History Manage Payment Methods Account Settings

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

FR No.	Non Functional Requirement	Description
NFR 1	Usability	The system shall provide an intuitive user interface that allows customers to easily navigate through product categories, search for cosmetics, and complete purchases within 3 clicks. The interface should be responsive and accessible across all devices including mobile, tablet, and desktop.
NFR 2	Security	The system shall implement SSL encryption for all data transmission, secure payment processing compliance with PCI DSS standards, user authentication with password encryption, and protection against common security threats like SQL injection and cross-site scripting attacks.
NFR 3	Reliability	The system shall maintain 99.5% uptime availability, implement automated backup procedures every 24 hours, provide disaster recovery mechanisms, and ensure data integrity through transaction rollback capabilities in case of system failures.

NFR 4	Performance	The system shall load web pages within 3 seconds under normal conditions, support concurrent user sessions of up to 1000 users, process payment transactions within 5 seconds, and maintain response times under 2 seconds for search and catalog browsing operations.
NFR 5	Availability	The system shall be available 24/7 with planned maintenance windows scheduled during low-traffic hours (2-4 AM), implement load balancing to distribute traffic evenly, and provide automatic failover capabilities to backup servers in case of primary server failure.
NFR 6	Scalability	The system shall be designed to handle increased user load by supporting horizontal scaling, accommodate growing product catalog up to 50,000 products, scale database operations to handle increased transaction volumes, and support expansion to multiple geographic locations.
NFR 7	Compatibility	The system shall be compatible with major web browsers including Chrome, Firefox, Safari, and Edge, support mobile operating systems (iOS and Android), integrate with popular payment gateways (PayPal, Stripe), and maintain compatibility with Salesforce platform updates.
NFR 8	Maintainability	The system shall be developed using modular architecture to facilitate easy updates and maintenance, provide comprehensive logging and monitoring capabilities, include detailed documentation for administrators, and support automated testing procedures for quality assurance.