Project Development Phase

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

Solution Architecture



1. Architecture Overview

This diagram illustrates the comprehensive architecture and data flow of the Cosmetics Store Management System built on the Salesforce platform. The system follows a layered architecture approach designed specifically for cosmetics retail operations.

2. Key Architecture Layers:

User Interface Layer - Multiple touchpoints including mobile apps for beauty consultants, web portals for store managers, and POS terminals for sales associates, ensuring seamless user experience across all roles.

Business Logic Layer - Six specialized modules handle core cosmetics retail functions: Customer Profile Management (beauty preferences, skin type tracking), Product Catalog Management (SKU variants, shade matching), Inventory Management (stock tracking, expiry monitoring), Sales Processing (transactions, loyalty programs), Marketing Automation (personalized campaigns, seasonal trends), and Analytics & Reporting (performance insights, customer analytics).

Platform Layer - Salesforce serves as the central platform providing robust CRM capabilities, security, workflow automation, and API management, ensuring scalability and reliability.

Integration Layer - Seamless connectivity with external systems including payment gateways, e-commerce platforms, ERP systems, beauty APIs for shade matching, social media platforms for influencer marketing, and supplier APIs for real-time inventory updates.

Data Layer - Centralized data storage in Salesforce database with dedicated analytics data store for advanced reporting and predictive modeling.

The architecture enables real-time data flow from customer interactions through business processing to data persistence, supporting end-to-end cosmetics retail operations while maintaining data integrity and system performance. This design ensures the system can handle the unique complexities of cosmetics retail, from managing thousands of product variants to providing personalized beauty recommendations.