

ONLINE COSMETICS STORE
SOFTWARE DESIGN DESCRIPTION DOCUMENT

VERSION:1.0

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03-12-2025	Version 1.0	Babar Ali Adil	First Revision

DOCUMENTS Approval

The following Software Design Description Document has been accepted and approved by the following:

Signature	Name	Title	Date
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1. Purpose

The purpose of this document is to describe the design of the Online Cosmetics Store system. This system is developed to allow customers to browse, search, and purchase cosmetic products online easily and safely.

1.2 Scope

The Online Cosmetics Store provides features such as user registration, product listing, product search, shopping cart, online orders, and payment processing. It also allows the admin to manage products, orders, and customers through an admin panel.

1.3 Overview

This document gives a brief overview of the system design, main features, and how different parts of the system work together. The system is designed to be user-friendly, secure, and efficient for both customers and administrators.

References

1. Software Requirements Specification (SRS) guidelines
2. E-commerce website design tutorials and documentation
3. Online Cosmetics Store websites (for feature understanding)
4. Database design concepts and tutorials
5. Payment gateway documentation (for online transactions)
6. User Interface (UI)

Definitions and Acronyms

- **UI** – User Interface
- **DB** – Database
- **SRS** – Software Requirements Specification
- **API** – Application Programming Interface

2. System Overview

The Online Cosmetics Store is a web-based system that allows users to browse cosmetic products, add them to a cart, and place orders online. Admin users manage products, orders, and users through an admin panel.

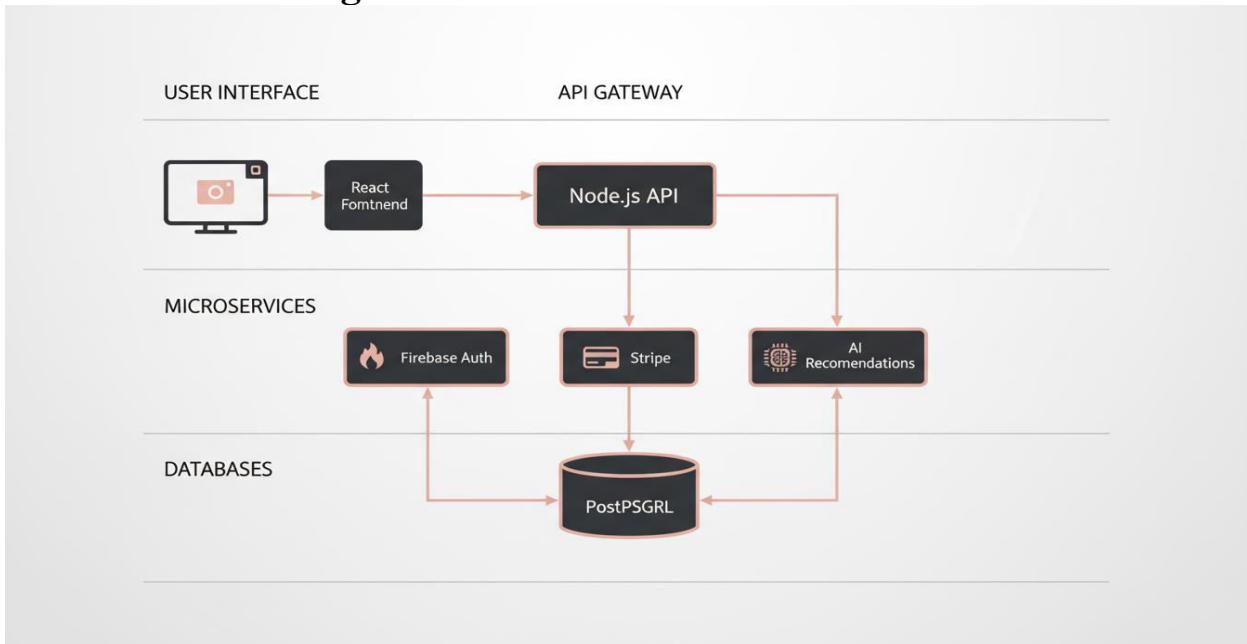
3. System Architecture

The system uses a simple three-tier architecture to separate user interface, business logic, and data storage.

3.1 Architectural Design

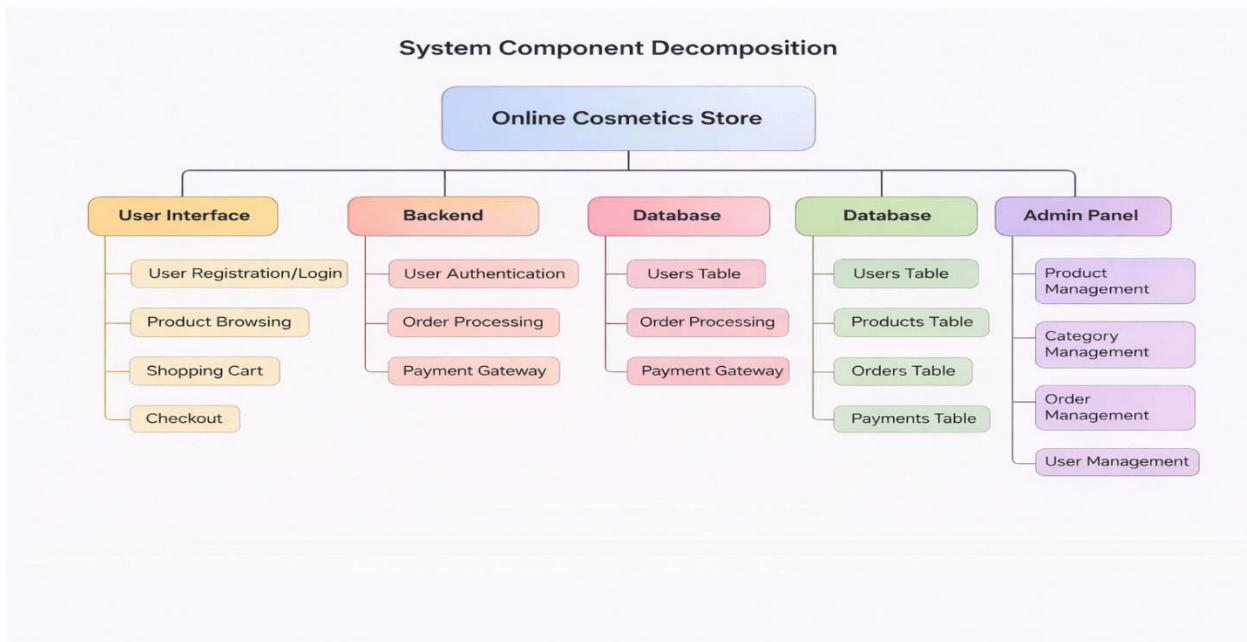
The architecture consists of three layers: the presentation layer (web interface), the application layer (business logic), and the database layer (data storage).

Architectural Design



3.2 Decomposition Description

The system is divided into modules such as User Management, Product Management, Order Management, Payment Processing, and Admin Management.



3.3 Design Rationale

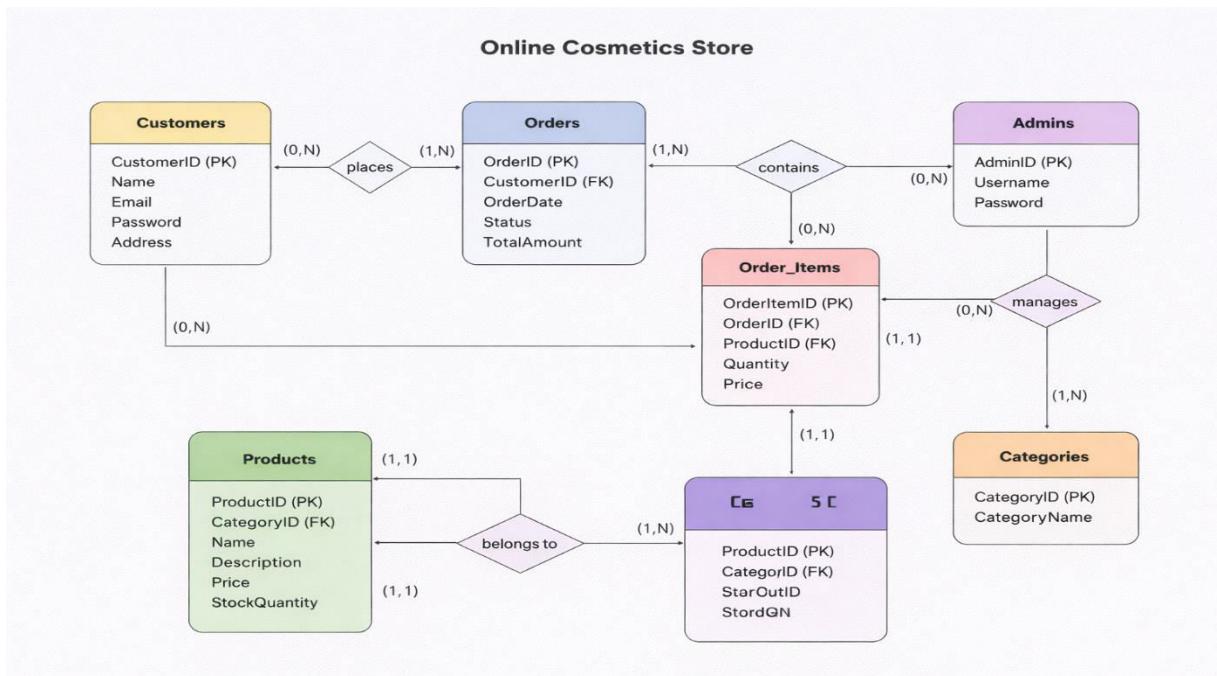
This design is chosen to make the system easy to understand, maintain, and scale. Separating components improves performance and security.

4. Data Design

The data design defines how information is stored, accessed, and managed in the database.

4.1 Data Description

The database stores user details, product information, orders, payments, and admin records.



4.2 Data Dictionary

The data dictionary describes database tables and fields such as User, Product, Order, Payment, and Admin with their attributes.

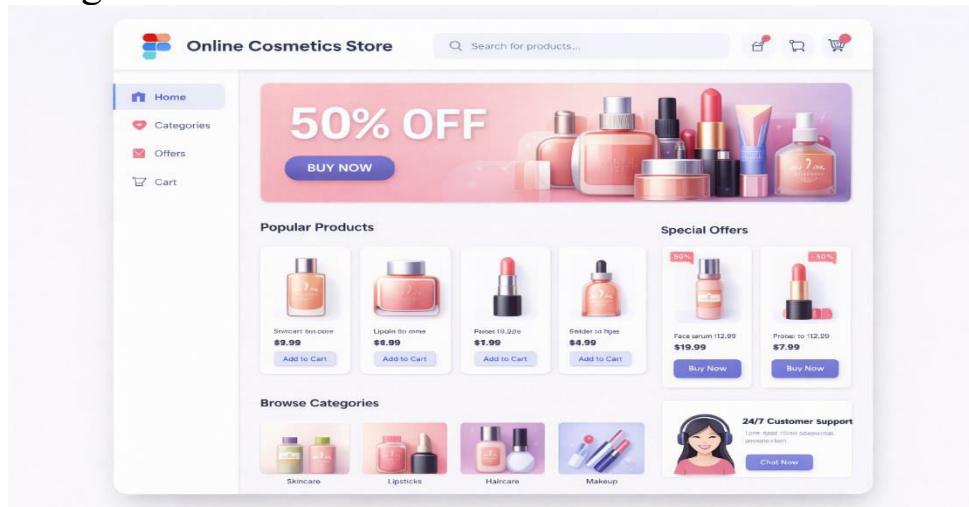
Entity	Attribute	Description
User	User ID	Unique user identifier
User	Name	User full name
User	email	User email address
Product	Product ID	Unique product identifier
Product	price	Product price
Order	Order ID	Unique order identifier
Order	Total amount	Total order cost
Payment	Payment method	Payment type (Card/Cash)
Admin	Admin ID	Unique admin identifier

5. Component Design

Each component handles a specific function such as login, product listing, cart handling, checkout, and order tracking.

6. Human Interface Design

The interface is designed to be simple, user-friendly, and easy to navigate.



6.1 Overview of User Interface

The user interface includes pages for login, product browsing, cart, checkout, and admin dashboard.

6.3 Screen Objects and Actions

Screen objects include buttons, text fields, menus, and images. Actions include clicking buttons, submitting forms, and navigating pages.

7. Requirements Matrix

Requirement ID	Requirement Description	Requirement Type
FR-1	The system shall allow users to register and log in.	Functional
FR-2	The system shall display cosmetics products with details	Functional
FR-3	The system shall allow users to add products to cart.	Functional
FR-4	The system shall process online orders and payments	Functional
FR-5	The admin shall manage products and categories.	Functional
NFR-6	The system shall respond within 2 seconds.	Nonfunctional
NFR-7	The system shall ensure data security and privacy.	Nonfunctional

The requirements matrix maps system requirements to their related design components to ensure all requirements are fulfilled.

8. Appendices

This section includes additional information such as diagrams, references, and supporting documents.

