Functional Specification Document (FSD): Online Apparels Shopping Website

1. Introduction and Project Scope

This document details the functional specifications for the development of the **Online Apparels Shopping Website**, an e-commerce platform intended to transform the client's offline apparels business into an online model[1]. The scope includes designing and developing a frontend website for buyers and a web-based backend/admin panel for the business owner.

1.1 Project Objectives

The primary objectives are to:

- Enhance the client's offline business by launching an online e-commerce website for apparels[3].

- Provide an online platform for buyers to search for, select (e.g., Shirts, Jeans), and order apparels with online payment[4].

- Enable the business owner (Admin) to manage products, categories, prices, sizes, and colors, and handle order delivery/shipment[5].

- Allow customers to track their order shipments[6].

1.2 Out-of-Scope Functionality

The following features are explicitly **not** within the scope of this project:

- Ordering customized products[7].

- Real-time order tracking[8].

- Cash on delivery (COD) payment option for buyers[9].

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2. System Users and Roles

The system supports three main user roles with distinct access and functionalities:

Role	Description
Visitors/Guest User	Can search products by keyword/category, view product descriptions, ratings/reviews, share products on social media, and check shipping availability by PIN code.
Buyers (Registered Customers)	All Visitor functions, plus: Login/Registration, advanced product search (filters/sorting), viewing product listings/details, adding to wishlist/cart, checkout, online payment, posting ratings/reviews, managing their account/address book, and tracking orders.
Admin/Owner	Responsible for managing the entire website backend: managing products, categories, orders, customers, shipping, payments, CMS, statistics/reports, and system roles/permissions.

3. Functional Specifications (Frontend: Buyer/Guest)

This section details the functions accessible to buyers and guest users, based on the BRD's functional requirements (FR-001 to FR-013).

3.1 Account Management (Login/Registration)

Req #	Priority	Specification Detail
FR-001	Critical (1)	**Login:** Users shall be able to log in using their registered email and password. A 'Reset Password' option shall be available. Users must also be able to log in using **Facebook** and **Google** accounts[14].
FR-002	Critical (1)	**Registration:** Buyers must register using a simple form (First name, Last name, Email ID, Contact number, Password, Conform password). They must accept terms and conditions. **Email ID**

Req #	Priority	Specification Detail
		verification (via a link sent to the registered email) is mandatory before the user can log in[15].
FR-010	Critical (1)	**My Account:** Logged-in buyers can access and manage their Profile details (email, phone number), change password, view/manage Addresses, My Orders, My Wishlist, Shopping Cart, and Ratings and reviews[16].

3.2 Product Discovery and Shopping

Req #	Priority	Specification Detail
FR-003	Critical (1)	**Product Search:** Buyers/Guests can search for products by **keyword**, browsing **category/sub-category**, and using **filters and sorting** options. Searching is available without login[17].
FR-004	Critical (1)	**Product Listing:** The product listing page (visible to Buyer/Guest without login) shall display the **Product title**, **Thumbnail image**, **Price**, and **Ratings & reviews**[18].
FR-005	Critical (1)	**Product Details:** The product details page (visible to Buyer/Guest without login) shall display **Product title**, **Thumbnail image**, **Product images**, **Product description**, **Price**, available **Sizes/colors** (variations), and **Ratings & reviews**. Users can check shipping availability by entering a **PIN code**[19].
FR-006	High (2)	**Wishlist:** Requires Buyer registration/login. Buyers can view, add, or delete products from their wishlist. Products in the

Req #	Priority	Specification Detail
		wishlist can be moved to the shopping cart for checkout[20]. **Note:** Adding to wishlist is not possible without login[21].
FR-007	Critical (1)	**Shopping Cart:** Requires Buyer registration/login. Users can add/remove items and update the quantity of items. The cart shall display the item price, sub-total, and total price[22].

3.3 Checkout and Order Management

Req #	Priority	Specification Detail
FR-008	Critical (1)	**Checkout & Payment:** Requires Buyer login. Before payment, the buyer must enter **billing and shipping addresses**. Payment methods must include **Credit card/debit card** and **Net banking**. The order summary shall display Item total, Sub-total, Shipping cost, Tax, and Order total[23]. **Stripe** payment gateway will be integrated for online payment[24].
FR-012	Critical (1)	**Order History & Tracking:** Buyers can view a list of all past orders and detailed information (total amount paid, shipping address, items, price per unit). Users can **track the status** of their current orders and **reorder** items from past order details[25]. Order status updates will trigger **email notifications**[26].

3.4 Communication and Engagement

Req #	Priority	Specification Detail
FR-011	High (2)	**Ratings & Reviews:** Requires Buyer registration/login. Users can only post ratings and reviews for products they have previously **ordered** from the website[27].
FR-009	Low (4)	**Social Media Sharing:** Buyers/Guests can share products on social media. Login is **not mandatory**[28].
FR-013	High (2)	**Contact Support:** Buyers/Guests can contact support via email for queries/complaints by submitting their name, email, contact number, and message. Admin will receive an email with the complaint details[29].

4. Functional Specifications (Backend: Admin/Owner)

This section details the functions accessible via the web-based admin panel, based on the BRD's functional requirements (FR-014 to FR-026).

4.1 Admin Access and Dashboard

Req #	Priority	Specification Detail
FR-014	Critical (1)	**Admin Login:** Admin/Sub-users can log in using a username and password. A 'Reset Password' option shall be available[30].
FR-015	Critical (1)	**Dashboard:** The Admin Dashboard shall display key metrics: Total no. of active and inactive registered buyers, Total no. of Products uploaded, and Total Revenue (today/this month)[31].

4.2 Core Business Management

Req #	Priority	Specification Detail
FR-019	Critical (1)	**Products Management:** Admin can Add/Edit/Active/Inactive products in the catalog. Information managed includes Product name, Images, Description, Keywords, and **Variations (color, size)**[32].
FR-018	Critical (1)	**Product Categories Management:** Admin can Add/Edit/Active/Inactive product categories and sub-categories[33].
FR-017	Critical (1)	**Orders Management:** Admin can view a list of all orders with their current status, view/edit order details, and **update the order status**. Possible statuses are: Open, Confirmed, In process, Shipped, and Delivered[34].
FR-017	Critical (1)	**Shipping Management:** Admin is responsible for order shipment and shall maintain shipment details: **Shipping carrier**, **Tracking ID**, **Current status of shipment**, **Delivery location/address**, and **Shipping cost**[35].
FR-016	Critical (1)	**Buyers Management:** Admin can view/edit/activate/inactivate buyer account information, including profile details, address, orders, wishlist, and items in cart[36].
FR-020	Medium (3)	**Ratings & Review Management:** Admin can **approve/reject** ratings and reviews posted by the buyers for products[37].
FR-019	Critical (1)	**Payment Management:** Admin can view/edit bank account details (to receive payments) and view the **payment status** of each order. **Stripe** payment gateway will be used[38].

4.3 System Configuration and Reporting

Req #	Priority	Specification Detail
FR-024	Critical (1)	**CMS Management:** Admin can edit the content for the following CMS pages: About us, Contact us, Privacy policy, and Terms and conditions[39].
FR-021	High (2)	**Statistics & Reports:** Admin can view reports on **Products uploaded** (filterable by Date: From-To, Month, Year) and **Revenue/total sale** (filterable by Today, Current week, Date: From-To, Month, Year). Reports can be exported to **PDF** and **Excel** formats[40].
FR-022	High (2)	**System Users Management:** Admin can create/edit/delete/activate/inactivate **sub-users** for various sectional operations[41].
FR-023	High (2)	**Roles Management:** Admin can add/edit/delete/activate/inactivate sub-admin users with **role-based access**[42].
FR-026	High (2)	**Complaints/Feedbacks:** Admin can view queries/complaints/feedbacks received from buyers (via FR-013). The admin will also receive an email notification for each submission[43].
FR-025	Medium (3)	**Email Management:** Admin can add/edit/delete content for emails to be sent to buyers regarding new product launch, offers, and promotions[44].

5. Non-Functional Requirements (NFR)

The following non-functional requirements must be met:

ID	Requirement	Specification
NFR-001	**Scalability**	The website repository shall accommodate up to **100 concurrent users**[45].
NFR-002	**Speed/Performance**	Web pages should load in **less than 3 seconds** under good internet speed[46].
NFR-003	**Reliability/Availability**	Web pages must not display "page not found" errors for non-existent pages[47].
NFR-004	**Security**	**SSL security and encryption** are mandatory for online payments[48].