

# **Clothing Store Website (FASHION WORLD)**

## **Software Requirements Specification**

**Course Code:** INT 219 & INT220

**Course Name:** Front-End Web Developer  
&  
Server-Side Scripting

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## 1. Introduction

### 1.1 Purpose

The purpose of this Software Requirements Specification (SRS) is to provide a comprehensive and detailed overview of the online clothing store application titled "**Fashion World**". This document serves as a formal agreement between the development team and stakeholders, ensuring a shared understanding of the system's objectives, features, and constraints. It is intended to guide software engineers in the design, development, and testing phases, as well as provide clarity to testers, project managers, and potential users regarding the capabilities and limitations of the product. The SRS acts as a foundational reference to ensure that the final product meets user expectations and business goals.

### 1.2 Scope

The application is a web-based platform designed to serve as an online clothing store. It enables users to browse a diverse range of clothing items, select desired products, add them to a shopping cart, and complete purchases through a secure and user-friendly checkout process.

The system is focused on providing a seamless shopping experience for customers and does not encompass inventory management or supplier logistics, which will be managed externally. By maintaining a clear focus on user interaction and purchase facilitation, the application aims to deliver a robust and efficient solution for online clothing retail.

### 1.3 Definitions, Acronyms, and Abbreviations

- **UI** – User Interface
- **PHP** – Hypertext Preprocessor
- **DB** – Database
- **SRS** – Software Requirements Specification

### 1.4 References

- Tailwind CSS Documentation
- PHP Manual
- MySQL Documentation
- IEEE SRS Template

## 1.5 Overview

This document outlines the comprehensive requirements and specifications for the development of a clothing store website. It provides detailed information necessary for software engineers to design and implement the system effectively. The document begins with general descriptions that set the context for the project, followed by specific requirements which encompass both functional and non-functional aspects of the website. Furthermore, it specifies external interface requirements to ensure compatibility across user interfaces, hardware, software, and communication protocols. Analysis models, such as Data Flow Diagrams (DFD), are included to illustrate system workflows and interactions. Additional references and appendices ensure clarity and traceability throughout the document. The SRS is organized in a manner that facilitates ease of access, ensuring consistency and completeness while adhering to industry standards for software requirement specifications.

## 2. General Description

### 2.1 Product Perspective

The Fashion World clothing store system is a standalone, web-based application designed to facilitate online shopping for fashion products. The system will be developed using HTML, Tailwind CSS, JavaScript, and PHP, and it will interface with a MySQL database to manage and store essential data such as user information, product listings, cart details, and order transactions.

This application operates independently and is not part of a larger software suite. However, it follows modular design principles to ensure future scalability and integration possibilities, such as adding an admin dashboard, payment gateway, or inventory management system.

The product is intended to provide a seamless user experience across multiple platforms (desktop, tablet, and mobile devices) and will employ responsive design practices. The frontend (user interface) is focused on ease of navigation and visual appeal using Tailwind CSS, while the backend, built with PHP, handles data processing, validation, and database operations.

### 2.2 Product Functions

- Browse products by category
- Add products to cart
- Update cart (modify quantity or remove items)
- Checkout and submit orders
- Display order confirmation

## 2.3 User Characteristics

The primary users of the clothing store website include customers and admin users:

### 1. Customers:

- Expected to have basic web browsing knowledge, including familiarity with navigating websites, searching for products, and completing online transactions.
- Users are likely to access the website on a variety of devices, such as desktops, tablets, and smartphones.

### 2. Admin Users:

- Responsible for managing product listings and other administrative tasks through a backend system.
- Interaction with the backend system is optional and assumes fundamental knowledge of operating such tools.

## 2.4 General Constraints

- Internet access required
- Mobile responsive layout
- PHP & MySQL hosting needed

## 2.5 Assumptions and Dependencies

- The system will run on Local Host.
- Tailwind CSS is used for frontend styling
- Payment gateway integration is not included in this version

# 3. Specific Requirements

## 3.1 External Interface Requirements

### 3.1.1 User Interfaces

- HTML pages styled with Tailwind CSS.
- JavaScript for interactivity (cart updates).
- PHP for server-side logic and database interaction.

### **3.1.2 Hardware Interfaces**

- Client devices: desktop, tablet, mobile.
- Server hosting with PHP and MySQL support.

### **3.1.3 Software Interfaces**

- MySQL for database management
- PHP for backend logic

### **3.1.4 Communications Interfaces**

- HTTP/HTTPS protocols

## **3.2 Functional Requirements**

### **3.2.1 Product Browsing**

#### **3.2.1.1 Introduction**

This feature allows users to seamlessly explore the clothing store's product catalog, enhancing the shopping experience through easy navigation and visual appeal.

#### **3.2.1.2 Inputs**

- User action to navigate to the "Shop" or "Browse" section
- User selection of a category (e.g., Men, Women, Kids, Accessories, etc.)

#### **3.2.1.3 Processing**

- Fetch relevant product data from the MySQL database based on the selected category
- Filter products dynamically using JavaScript for instant feedback
- Display products with images, names, prices, and brief descriptions using HTML and Tailwind CSS

#### **3.2.1.4 Outputs**

- A visually organized list/grid of clothing items categorized appropriately.
- Real-time filtering based on category and subcategory.
- Option to view product details by clicking on a specific item.

### 3.2.1.5 Error Handling

- If no products are available under a selected category, a user-friendly message is displayed: *"No products found in this category."*
- In case of server/database failure, an error message will be shown: *"Unable to load products. Please try again later."*

## 3.3 Non-Functional Requirements

### 3.3.1 Performance

- Load time < 3 seconds for all pages.

### 3.3.2 Reliability

- 99% uptime for hosted application.

### 3.3.3 Availability

- Accessible 24/7 online.

### 3.3.4 Security

- Basic form validation and input sanitization.

### 3.3.5 Maintainability

- Modular code with comments.

### 3.3.6 Portability

- Fully functional on modern browsers and devices.

## 3.4 Design Constraints

The development of the Stylish Threads clothing store website is subject to the following design constraints:

- **Technology Stack Constraints:**
  - The frontend must be developed using HTML, Tailwind CSS, and JavaScript to ensure responsiveness, maintainability, and modern UI/UX design.
  - The backend must be implemented using PHP to handle server-side logic, data processing, and database connectivity.



- **Hosting Environment:**

- The application must be hosted on a server that supports PHP and MySQL, such as an Apache-based LAMP (Linux, Apache, MySQL, PHP) stack. Compatibility with PHP 7.4 or later is required.

- **Responsiveness Requirement:**

- The user interface must be fully responsive and optimized for mobile, tablet, and desktop devices using Tailwind CSS utility classes.

- **Database Constraint:**

- MySQL is the designated database management system and must be used for storing and retrieving all application data.

- **Browser Compatibility:**

- The website must function consistently across modern browsers, including Chrome, Firefox, Edge, and Safari.

## 4. Analysis Models

This section provides a visual representation of the data flow within the Stylish Threads clothing store system. The Data Flow Diagrams (DFDs) illustrate how information moves between processes, data stores, and external entities. These models aid in understanding system behaviour and support the design and implementation of various components.

### 4.1 Data Flow Diagrams (DFD)

#### Level 0 – Context Diagram

The Level 0 DFD provides a high-level overview of the system. It identifies the major processes and interactions between the user and the system components.

**Flow:**

User → *Browse & Select Products* → System → *Add to Cart* → *Checkout* → *Order Confirmation*

**Diagram Description:**

- User interacts with the system to:
  - View product listings
  - Add selected products to the cart

- Proceed to checkout
- Receive order confirmation

## **Level 1 – Detailed Diagram**

The Level 1 DFD breaks down the core functionalities of the system into more detailed processes and data stores.

### **Processes:**

#### **1. Product Management**

- Fetch product details from the Product Database

#### **2. Cart Operations**

- Add, update, or remove products from the Cart Data Store

#### **3. User Management**

- Authenticate or register user information from the User Database

#### **4. Checkout & Payment**

- Validate cart and process order
- Store finalized order details in the Order Database

#### **5. Confirmation Notification**

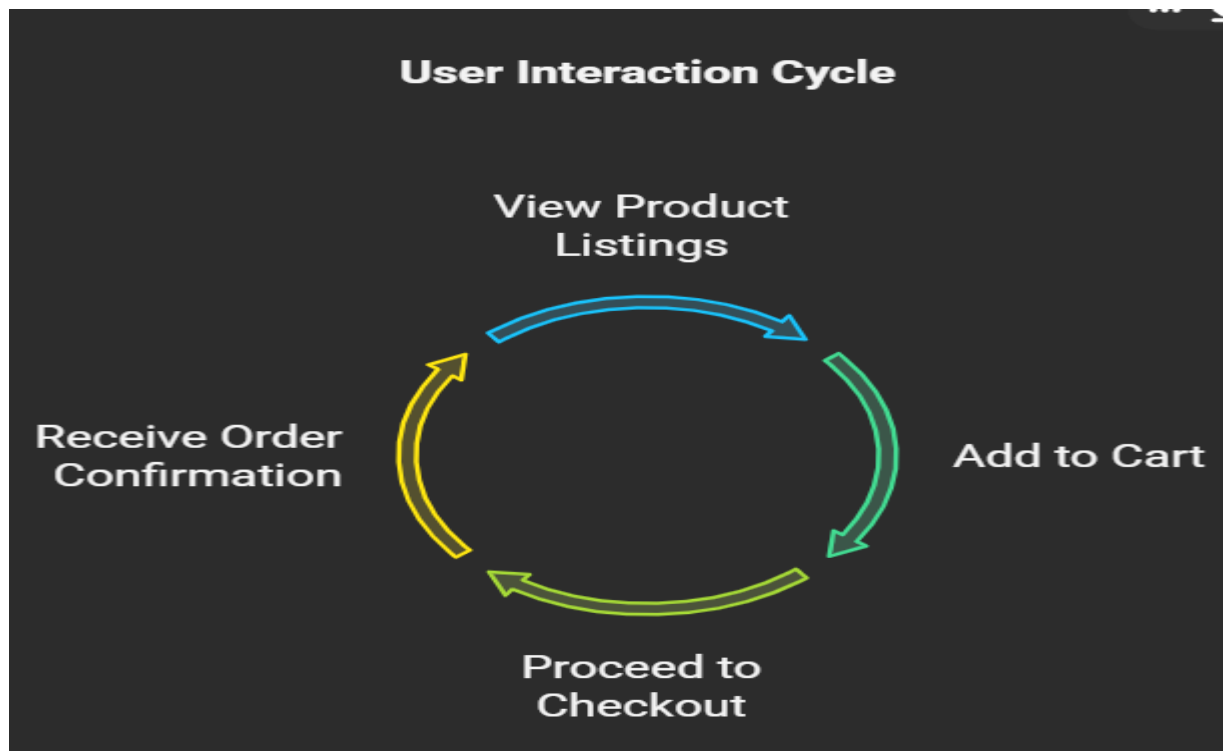
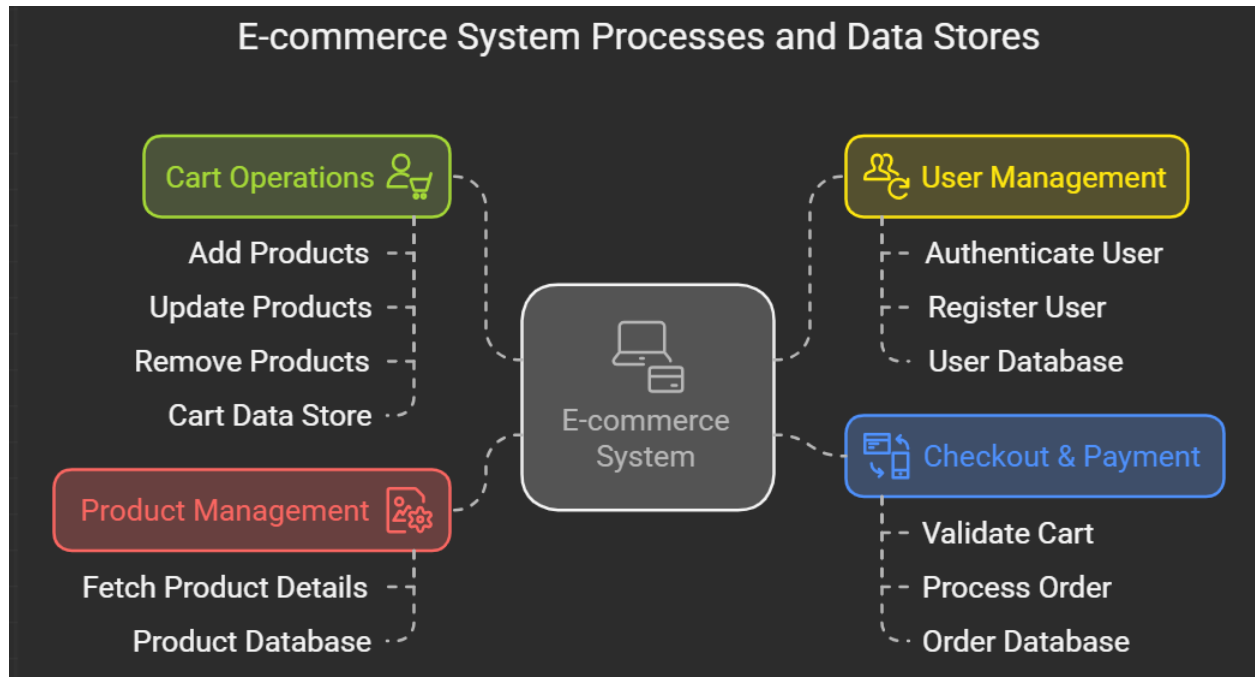
- Generate order summary and display confirmation to user

#### **6. Data Stores:**

- Product DB
- Cart DB
- User DB
- Order DB

### **External Entity:**

- User (Customer)



## **5.GITHUB LINK:**

<https://github.com/ankitgithub12/Clothing-Management-System>

## **6.VIDEO LINK:**

[https://www.linkedin.com/posts/ankit-kumar-77637a289\\_fashionworld-ecommercelaunch-onlineshopping-activity-7318978564618362880-tSR1?utm\\_source=share&utm\\_medium=member\\_desktop&rcm=ACoAAEX\\_8soBYsfeEpIjtMexlhQPAiyignerCp0](https://www.linkedin.com/posts/ankit-kumar-77637a289_fashionworld-ecommercelaunch-onlineshopping-activity-7318978564618362880-tSR1?utm_source=share&utm_medium=member_desktop&rcm=ACoAAEX_8soBYsfeEpIjtMexlhQPAiyignerCp0)