

Tools Software Design Specification (SDS)

Project Name: Project 327

System Type: Web-based E-commerce Platform

Language/Frameworks: PHP, HTML/CSS, SQL, JavaScript (if any embedded)

Database: MySQL (based on the SQL script file)

Version: 1.0

1. Introduction

1.1 Purpose:

This document defines the structure, components, and data flow of the Project 327 E-commerce website. It serves as a technical blueprint for developers, testers, and stakeholders.

1.2 Scope:

The system allows users to browse products, manage their shopping cart, register/login, and place orders. It includes administrative back-end logic for order and product management.

2. System Overview

2.1 Main Components:

- Frontend Pages: index.php, shop.php, single_product.php, cart.php, checkout.php, etc.
- Authentication: login.php, register.php, account.php
- Database: 327_Table Create.sql
- Server Logic: connection.php, place_order.php, get_clothes.php, get_featured_products.php
- Assets: Images and styles under assets/
- Layouts: header.php, footer.php

3. System Architecture

3.1 MVC-style (loose):

- Model: PHP server scripts and SQL database
- View: HTML + CSS front-end files
- Controller: Core PHP pages and handlers

4. Functional Requirements

| Module | Description |
|----------------------|---|
| ----- | ----- |
| User Authentication | Register and login users, manage sessions |
| Product Browsing | Show products from database dynamically |
| Shopping Cart | Add/remove items, update quantities |
| Checkout | Collect user details, process orders |
| Order Handling | Save orders into database |
| Contact Page | Possibly a form for customer support |
| Product Details Page | Show images and descriptions |

5. Database Design (from 327_Table Create.sql)

Expected tables:

- users
- products
- orders
- order_items

6. Non-Functional Requirements

- Performance: Load featured products quickly on homepage
- Security: Passwords should be hashed (TBD if done)

- Scalability: Basic version; can scale with category-based filtering
- Responsiveness: Uses CSS, check if media queries or frameworks are applied

7. Assumptions & Limitations

- Admin panel not included or visible in current structure
- Product catalog is fixed unless database updated manually
- Image assets are served statically

8. Future Enhancements

- Add admin dashboard
- Include search and filter options
- Integrate payment gateway
- Add email notifications for orders