



Software Requirements Specification (SRS)

Group 07

Project Name: E-commerce Website

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1 Introduction

1.1 Purpose

The purpose of this document is to outline the requirements for the development of an online platform that facilitates user interaction with products, orders, and profiles. This platform aims to provide a seamless experience for users, administrators, and retailers.

1.2 Scope

The scope of this project includes the development of user authentication, profile management, product management, cart functionality, order management, search options, and potential future extensions such as a payment gateway and recommendation system.

1.3 Overview

This document will detail the specific requirements for each user type (customer, admin, and retailer), along with functional, performance, design constraints, and external interface requirements.

2 Overall Description

2.1 Product Perspective

The platform will serve as an intermediary between customers, administrators, and retailers, facilitating interactions related to product browsing, purchasing, and management.

2.2 Product Functions

- User Authentication: Allows users to register, login, and manage their accounts securely.
- Profile Management: Enables users to view and edit their profile information.
- Product Management: Provides administrators and retailers the ability to add, edit, and delete product listings.
- Cart Functionality: Allows users to view cart contents, add items to the cart, and remove items from the cart.
- Order Management: Enables users to view order history and generate invoices.
- Search Option: Allows users to search for products within the platform.

2.3 User Characteristics

2.3.1 Customer Characteristics

- Requires authentication for accessing platform features.
- Can browse products, add them to the cart, and place orders.
- Can view and edit their profile information.

2.3.2 Admin Characteristics

- Requires authentication for accessing platform features.
- Can manage products, including adding, editing, and deleting listings.
- Can view order history and generate invoices.

2.3.3 Retailer Characteristics

- Requires authentication for accessing platform features.
- Can manage products, including adding, editing, and deleting listings.
- Can edit their profile information.

2.4 Principal Actors

- Customers: Users who interact with the platform to browse and purchase products.
- Admins: Users responsible for managing the platform, including product listings and orders.
- Retailers: Users who list their products on the platform for sale.

2.5 General Constraints

- The platform must ensure secure user authentication and data management.
- Performance must meet acceptable standards for response times and system reliability.

2.6 Assumptions and Dependencies

- The platform will be developed using appropriate technologies and frameworks.
- Integration with external services such as payment gateways may be required for future extensions.

3 Specific Requirements

3.1 Functional Requirements

3.1.1 Authentication

- Users (Customer, Admin, Retailer) must be able to register, login, and logout securely.

3.1.2 Profile Management

- Users must be able to view and edit their profile information.

3.1.3 Product Management

- Admins and Retailers must be able to add, edit, and delete product listings.

3.1.4 Cart Functionality

- Users must be able to view cart contents, add items to the cart, and remove items from the cart.

3.1.5 Order Management

- Users must be able to view order history and generate invoices.

3.1.6 Search Option

- Users must be able to search for products within the platform.

3.2 Performance Requirements

- The platform should have minimal response times for user interactions.
- System downtime should be minimized to ensure availability.

3.3 Design Constraints

- The platform's design should be user-friendly and intuitive.
- The platform should be scalable to accommodate future growth and feature expansions.

3.4 External Interface Requirements

- The platform must integrate with external services for functionalities like payment processing and recommendation systems in potential future extensions.

3.5 Use Cases

3.5.1 Use Case 1: User Authentication and Account Creation

Primary Actor: User (Customer)

Preconditions: Internet connection available

Main Scenario:

1. User navigates to the platform's homepage.
2. User selects the "Login" option.
3. User enters their credentials (username/password).
4. System authenticates the user's credentials.
5. If authentication is successful, user gains access to their account.

Alternate Scenario:

1. User selects the "Sign Up" option.
2. User provides necessary information (e.g., email, password) and completes the signup process.
3. System verifies the provided information.
4. If successful, user is redirected to their profile page.

3.5.2 Use Case 2: View/Edit Profile Information

Primary Actor: User (Customer)

Preconditions: User logged into their account

Main Scenario:

1. User navigates to their profile page.
2. User selects the "Edit Profile" option.
3. User updates their profile information (e.g., name, address, contact details).
4. User saves the changes.

Alternate Scenario:

1. User navigates to their profile page.
2. User views their profile information without making any changes.

3.5.3 Use Case 3: Product Management

Primary Actor: Admin, Retailers

Preconditions: User logged into their admin/retailer account

Main Scenario:

1. Admin/Retailer navigates to the product management section.
2. Admin/Retailer selects the appropriate option (e.g., Add Product, Edit Product, Delete Product).
3. Admin/Retailer provides necessary information about the product (e.g., name, description, price).
4. Admin/Retailer saves the changes.

Alternate Scenario:

1. Admin/Retailer navigates to the product management section.
2. Admin/Retailer views the existing products without making any changes.

3.5.4 Use Case 4: Cart Management

Primary Actor: User (Customer)

Preconditions: User logged into their account, Products available for purchase

Main Scenario:

1. User browses products and adds desired items to the cart.
2. User navigates to the cart page to view the added items.
3. User has the option to remove items from the cart if needed.
4. User proceeds to checkout to finalize the order.

Alternate Scenario:

1. User navigates to the cart page but decides not to proceed with the checkout process.

3.5.5 Use Case 5: Order Management

Primary Actor: User (Customer)

Preconditions: User logged into their account, Orders placed

Main Scenario:

1. User navigates to the order management section.
2. User views the order history containing details of past purchases.
3. User has the option to view order details and generate invoices if needed.

Alternate Scenario:

1. User navigates to the order management section but does not view any past orders.

3.5.6 Use Case 6: Search for Products

Primary Actor: User (Customer)

Preconditions: User logged into their account, Products available on the platform

Main Scenario:


1. User enters a search query in the search bar.
2. System searches for products matching the query.
3. System displays relevant search results to the user.

Alternate Scenario:

1. System does not find any products matching the search query.

These use cases cover various functionalities outlined in your project, including user authentication, profile management, product management, cart management, order management, and product search.

4 Sample Interfaces



Sign in to your account

Email address

Password [Forgot password?](#)

[Sign in](#)

Not a member? [Register Now](#)

Figure 1: Sign In Interface

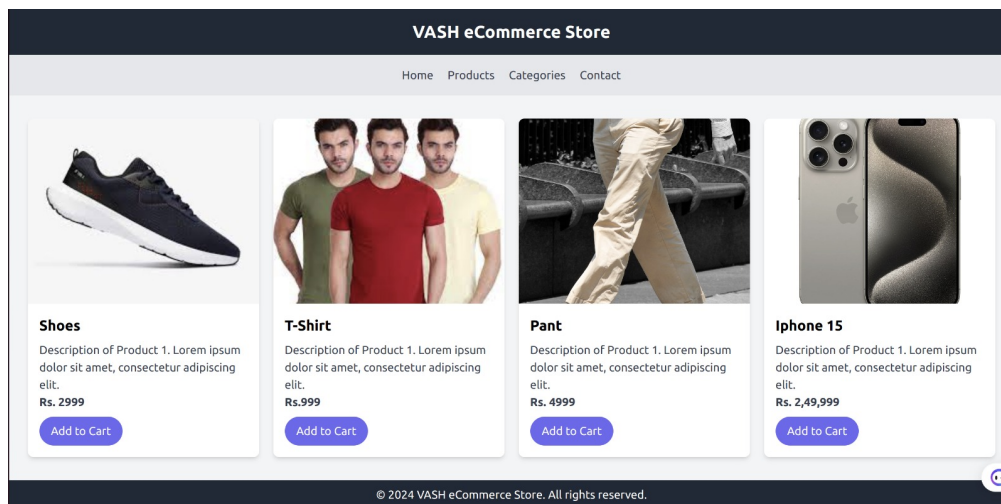


Figure 2: Dashboard Interface

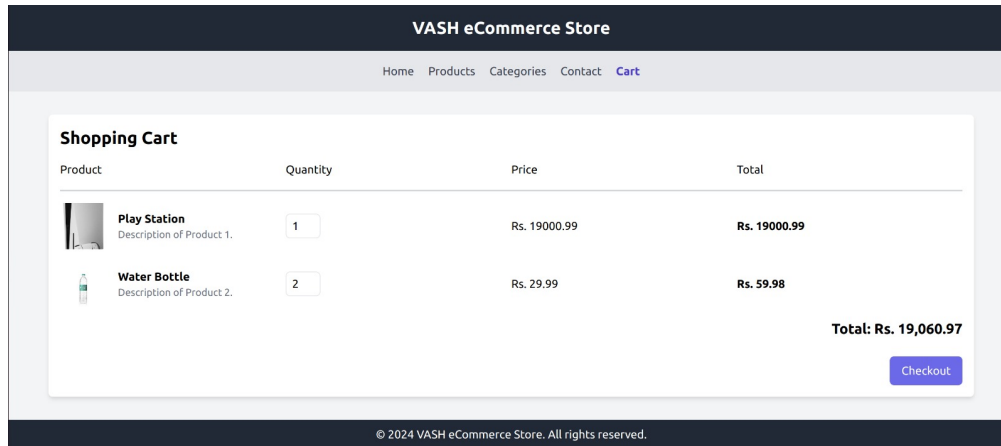


Figure 3: Cart Interface

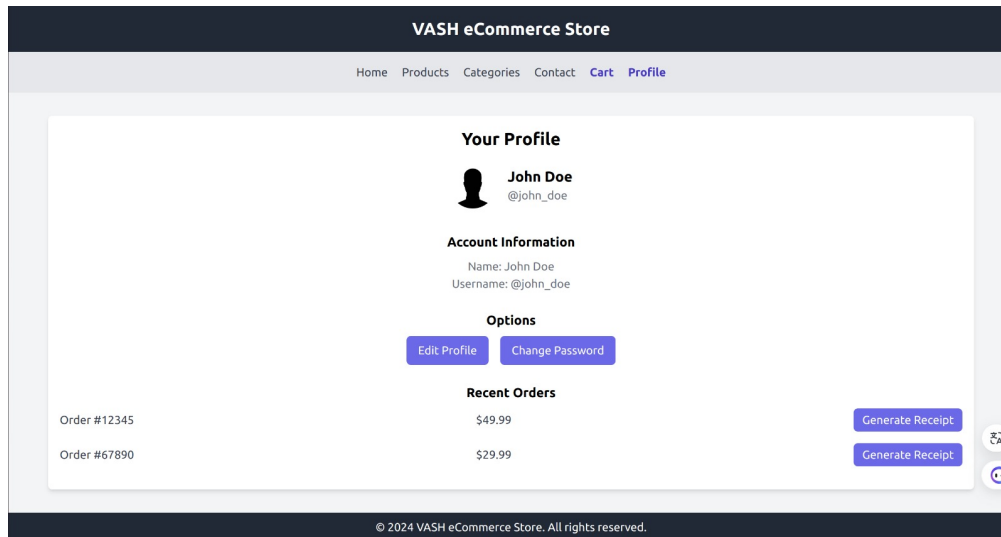


Figure 4: Profile Interface

5 Future Extensions

- Payment Gateway: Integration with a secure payment gateway for online transactions.
- Recommendation/View Similar Items: Implement a recommendation system based on user preferences and browsing history.
- Daily Revenue for Admin: Provide a feature for admins to track daily revenue and sales statistics.

Note: This SRS document provides an outline of the requirements for the development of the online platform. Detailed specifications, design, and implementation will be further elaborated during the development process.