

# Software Requirements Specification (SRS)

## Project Name: E-commerce Website System

### 1. Project Overview

In the 21st century, the advent of digital technology has revolutionized the way we shop and conduct business. To make online shopping seamless and efficient, this E-commerce Website System has been developed. The project focuses on creating an interactive platform where users can browse and purchase products with ease. It incorporates a login and registration system, a product catalog, a shopping cart, and a payment gateway, ensuring a smooth and secure shopping experience.

This system is designed to benefit both customers and administrators. Customers can register, log in, view products, add them to their cart, and proceed with a secure payment process. Administrators can manage products, users, and orders, ensuring the system runs smoothly. The project aims to deliver a user-friendly interface, efficient navigation, and secure transactions to enhance the overall online shopping experience.

### 2. Obstacles

- ❖ Understanding user requirements.
- ❖ Managing data with security.
- ❖ Handling complex product filtering and cart logic.
- ❖ Integrating payment gateways.

### 3. Features in Detail

#### ***General User Features:***

- ❑ **Home Page:** View featured products, offers, and navigation options.
- ❑ **User Registration:** Create a user account with:
  - ❖ Name (mandatory)
  - ❖ Email (mandatory)
  - ❖ Password (mandatory)
  - ❖ Phone Number (mandatory)
  - ❖ Address
- ❑ **User Login:** Access account via:
  - ❖ Valid email and password.
- ❑ **Product Browsing:**
  - View product categories and detailed descriptions.
  - Search and filter products by price, category, and rating.
- ❑ **Shopping Cart:**
  - Add/remove items.
  - View total cost.
- ❑ **Checkout:**
  - Select payment method.
  - Confirm order.
- ❑ **Order History:** View past orders and track delivery status.

#### ***Admin Features:***

- ❑ **Admin Dashboard:**
  - Add, edit, or delete products.
  - Manage user accounts and orders.
- ❑ **Analytics:** View sales reports and user activity.

- ❑ **Inventory Management:** Track product stock and availability.

## 4. Modules in Detail

### ***Visiting Website:***

- Browse product catalog.
- Filter and search products.
- View product details.

### ***User Registration and Login:***

- ❑ Register new users with validation.
- ❑ Login with secure authentication.
- ❑ Password recovery through email.

### ***Shopping Cart:***

- ❖ Add or remove products.
- ❖ Adjust quantities.
- ❖ Calculate subtotal, tax, and total.

### ***Payment Gateway:***

- ❖ Integration with third-party payment services (e.g., PayPal, Stripe).
- ❖ Ensure secure payment processing with encryption.

### ***Admin Dashboard:***

- ❖ Add/edit products with images, descriptions, and prices.
- ❖ Monitor user activity and orders.

## 5. UML Design

### *Use Case Diagram:*

#### ☐ **Actors:**

- ❖ User
- ❖ Admin

#### ☐ **Primary Use Cases:**

- ❖ Register/Login
- ❖ Browse Products
- ❖ Add to Cart
- ❖ Checkout
- ❖ Manage Products (Admin)

## 6. Technical Analysis

### *Software Requirements:*

- ☐ **Frontend:** HTML, CSS, JavaScript, Node.js .
- ☐ **Backend:** Node.js with Express.
- ☐ **Database:** MySQL (via XAMPP).
- ☐ **Frameworks:** React for UI, Bootstrap for styling.

### *Hardware Requirements:*

- ☐ Processor: Intel Core i3 or above.
- ☐ RAM: 4GB minimum.
- ☐ Storage: 20GB free space.

☐ Operating System: Windows 10 or higher.

7. Cost Analysis

Task	Estimated Cost (BDT)
Development	40,000
Testing	15,000
Deployment	5,000
Total Cost	60,000

8. Gantt Chart

Phase	Duration	Timeline
Requirement Analysis	7days	Week 1
Design	10 days	Week 2-3
Development	60 days	Week 4-12
Testing	20 days	Week 13-15
Deployment	7 days	Week 16

9. Deployment

The website will be deployed on a secure hosting platform, ensuring scalability and accessibility. The domain name and SSL certificate will be procured for secure transactions.

## 10. Testing

- ☐ Functional Testing: Verify all features work as intended.
- ☐ Security Testing: Ensure user data and payment transactions are secure.
- ☐ User Acceptance Testing: Collect feedback from real users.

## 11. Support

- ☐ 24/7 support available through email or chat.
- ☐ Bug fixes and updates included for the first 3 months.

## 12. Pricing

Payment Milestones	Amount (BDT)
Upon project agreement	<b>10%(6,000)</b>
After prototype approval	<b>50%(30,000)</b>
Post-testing	<b>25%(15,000)</b>
Final delivery	<b>15%(9,000)</b>

## 13. Responsibility

This E-commerce website is being developed by **[Sayed Ahamed khan]** under the supervision of **[Golam Robbany]**.

## 14. Contact us

For any queries, please contact us at:

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### Agreement Signed By:

**Client Signature:** \_\_\_\_\_

**Developer Signature:** \_\_\_\_\_