1. Introduction

The purpose of this document is to outline the requirements for the development of an E-commerce website. The website will allow users to browse and purchase products online. The website will include features such as user registration, product catalog, shopping cart, payment processing, order management, and customer support.

2. Scope

The E-commerce website will be developed for a company that sells products online. The website will be accessible to users worldwide and will support multiple languages and currencies. The website will be developed using the latest web technologies and will be optimized for performance and security.

3. Functional Requirements

3.1 User Registration

- The website will allow users to create a new account.
- Users will be required to provide their name, email address, and password to create an account.
- Users will be able to sign in to their account using their email address and password.

3.2 Product Catalog

- The website will display a catalog of products available for purchase.
- Products will be categorized and displayed in a user-friendly manner.
- Users will be able to browse products by category, brand, and price range.
- Users will be able to view product details such as description, price, availability, and reviews.

3.3 Shopping Cart

- The website will allow users to add products to their shopping cart.
- Users will be able to view their shopping cart at any time.
- Users will be able to update the quantity of products in their shopping cart.
- Users will be able to remove products from their shopping cart.

3.4 Payment Processing

- The website will support secure payment processing.
- Users will be able to choose from multiple payment methods such as credit card, PayPal, and bank transfer.
- The website will use SSL encryption to protect sensitive user data.

3.5 Customer Support

- The website will provide customer support via email and chat.
- Users will be able to submit support requests and receive timely responses.
- The website will provide a frequently asked questions (FAQ) section to address common user questions.

4. Non-Functional Requirements

4.1 Performance

- The website will be optimized for fast page load times.

- The website will be scalable to handle high traffic volumes.

- The website will use caching to minimize server requests.

4.2 Security

- The website will be developed using secure coding practices.

- The website will use SSL encryption to protect sensitive user data.

- The website will implement password policies to ensure user accounts are secure.

4.3 Usability

- The website will be designed with a user-friendly interface.

- The website will be accessible to users with disabilities.

- The website will be optimized for mobile devices.

5. Assumptions and Dependencies

- The website will be hosted on a reliable web hosting service.

- The website will use a payment gateway service to process payments.

- The website will use a shipping carrier service to deliver products to customers.

6. Constraints

- The website must comply with applicable laws and regulations.

- The website must be developed within a specific budget and timeline.

- The website must be compatible with popular web browsers and devices.

7. Conclusion

This Software Requirements Specification document outlines the requirements for the development of an E-commerce website. The website will allow users to browse and purchase products online, and will include features such as user registration, product catalog, shopping cart, payment processing, order management, and customer support.

The functional requirements of the website include user registration, product catalog, shopping cart, payment processing, order management, and customer support. The website must also be optimized for performance, security, and usability.

The non-functional requirements of the website include performance, security, and usability. The website must also comply with applicable laws and regulations, be developed within a specific budget and timeline, and be compatible with popular web browsers and devices.

Assumptions and dependencies of the website include web hosting service, payment gateway service, and shipping carrier service.

Constraints of the website include compliance with applicable laws and regulations, development within a specific budget and timeline, and compatibility with popular web browsers and devices.

Overall, this Software Requirements Specification document provides a comprehensive overview of the requirements for the development of an E-commerce website.

8. Acceptance Criteria

The following acceptance criteria will be used to determine whether the website meets the requirements outlined in this SRS document:

- User registration: Users can successfully create an account, sign in, and update their account information.

- Product catalog: Products are displayed in a user-friendly manner, with categories, brands, and price ranges. Users can browse and search for products, view product details, and add products to their shopping cart.

- Shopping cart: Users can view and update their shopping cart, and proceed to checkout to purchase products.

- Payment processing: Users can choose from multiple payment methods, including credit card, PayPal, and bank transfer, and complete a successful payment transaction.

- Order management: Users can view their order history, track the status of their orders, cancel orders, and request returns or exchanges.

- Customer support: Users can submit support requests and receive timely responses, and find answers to common questions in the FAQ section.

- Performance: The website has fast page load times, is scalable to handle high traffic volumes, and uses caching to minimize server requests.

- Security: The website is developed using secure coding practices, uses SSL encryption to protect sensitive user data, and implements password policies to ensure user accounts are secure.

- Usability: The website has a user-friendly interface, is accessible to users with disabilities, and is optimized for mobile devices.

9. Project Timeline

The project timeline for the development of the E-commerce website is as follows:

- Requirements gathering and analysis: 2 weeks

- Design and prototyping: 4 weeks

- Development and testing: 12 weeks

- Deployment and launch: 2 weeks

10. Conclusion

This SRS document outlines the requirements for the development of an E-commerce website. The website will allow users to browse and purchase products online, and will include features such as user registration, product catalog, shopping cart, payment processing, order management, and customer support. The website must also be optimized for performance, security, and usability. The project timeline for the development of the website is 20 weeks.

11. Glossary

- E-commerce: Electronic commerce, the buying and selling of goods and services over the internet.

- User registration: The process of creating a user account on the website, which enables users to access certain features and services.

- Product catalog: A collection of products offered for sale on the website, including product details, images, and pricing information.

- Shopping cart: A virtual shopping basket that allows users to store products they wish to purchase and proceed to checkout to complete their order.

- Payment processing: The process of accepting and processing payment from users for their purchases on the website.

- Customer support: The assistance provided to users who require help or have questions related to the website or their purchases.

- Password policy: A set of rules that govern the creation and use of passwords, aimed at increasing the security of user accounts.

- Scalability: The ability of the website to handle increasing amounts of traffic and data without compromising its performance or stability.

- Accessibility: The degree to which the website is usable by individuals with disabilities, such as visual or hearing impairments.

12. References

- The World Wide Web Consortium (W3C) Web Content Accessibility Guidelines (WCAG): https://www.w3.org/WAI/standards-guidelines/wcag/

- The Payment Card Industry Data Security Standard (PCI DSS): https://www.pcisecuritystandards.org/pci-security-standards/

- The Open Web Application Security Project (OWASP) Top Ten: https://owasp.org/Top10/

- The International Organization for Standardization (ISO) 9001:2015 Quality Management System: https://www.iso.org/standard/62085.html

13. Appendices

The E-commerce website will be developed using the following technical specifications:

- Programming languages: HTML, CSS, JavaScript, NodeJS, ExpressJS.

- Frameworks and libraries: Bootstrap, jQuery.

- Database management system: MongoDB.

- Payment gateway: Razor Pay.

- Web server: Apache.

- Hosting service: On-Render.

- Version control: Git.

The website will be compatible with the following web browsers:

- Google Chrome (latest version)

- Mozilla Firefox (latest version)

- Microsoft Edge (latest version)

- Apple Safari (latest version)

The website will be optimized for the following devices:

- Desktop computers

- Laptops

- Tablets

- Smartphones