## SRS For E-commerce Web Application

### Version 1.1

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## ****1. Introduction****

### ****1.1 Purpose****

The purpose of this Software Requirement Specification Document is to establish the requirements for the E-commerce web application. In that respect, this document outlines the functional and non-functional requirements that make this web application user-friendly to merchants and customers. The identified stakeholders are the customers, the merchants, and the system administrators.

### ****1.2 Product Scope****

The E-Commerce Application is an online store where business enterprises can expose their products for sale. Some objectives include:

* Simplify the processes of product and inventory management for sellers.
* Offering users a smooth shopping experience.
* Making e-transactions more secure.
* Offering reliable facilities for order tracking and reporting.

### ****1.3 Definitions and Terminology****

* **Product**: This refers to anything which could be sold through the site
* **User**: Visitors and registered customers fall in this category.
* **Shopping Cart**: A virtual cart is used for temporary storage of items to be purchased.
* **Administrator**: User role responsible for maintenance of the system, user accounts, and the catalog.

### ****1.4 Referenced Documents****

* IEEE 29148-2011: Software Requirements Specification Standard.
* Examples of e-commerce websites: Amazon, eBay.

## ****2. Overall Description****

### ****2.1 Product Perspective****

The e-commerce platform will be made available as a multi-channel retail interface, accessible through computers and mobile devices. The system shall also interface with payment gateways and analytics systems.

### ****2.2 Product Functions****

* Registration of users and its management.
* The browsing of products by category.
* Management of shopping cart.
* Checkout and making payments in a secured fashion.

### ****2.3 User Characteristics****

* **Visitors**: Users who can view the various products on offer and look at reviews.
* **Registered Customers**: Purchase Items, add reviews, manage his profile.
* **System Administrators**: User account management, product and order management.

### ****2.4 Constraints****

* Compatible with major browsers: Chrome, Firefox, Safari, and mobile devices.
* Secure data of users and any financial transactions.
* The system shall be highly available, and the chances of downtime must be minimal.

## ****3. Functional Requirements****

### ****3.1 Account Management****

* Users shall have account creation using email and password.
* Users shall be able to update their personal information.
* Provide secure login and logout.

### ****3.2 Product Management****

* Products shall be visible along with all details such as images, pricing, and ratings.
* Products shall be categorized for ease of browsing.
* Search based on keywords shall be allowed.

### ****3.3 Shopping Cart****

* Products shall be added/removed from/to the shopping cart.
* Change quantities and amount is updated.
* Tax and shipping to be shown.

### ****3.4 Checkout Process****

* Multiple payment methods to be presented to the user, for example, through credit card and digital wallet.
* The user can select shipping methods.
* Order confirmation via email.

### ****3.5 Reviews and Ratings****

* The users can submit product reviews and ratings.
* The reviews will be up alongside product details.

## ****4. Non-Functional Requirements****

### ****4.1 Performance****

* The time taken for a page to load, less than 3 seconds.
* Can hold up to 10,000 users simultaneously.

### ****4.2 Security****

* Sensitive user data is encrypted.
* Payment gateways are SSL-secured.

### ****4.3 Compatibility****

* Our website works across all major browsers.
* Responsive design on mobile devices including tablets and smartphones.

### ****4.4 Design and User Experience****

* Navigation should be easy to use and follow.
* Attractive in look while meeting the accessibility guidelines.

## ****5. Special Requirements****

### ****5.1 Customer Support****

* Customers will be supported through the implementation of Live Chat, Email, or Ticketing.

### ****5.2 Regular Updates****

* The system should provide for periodic updates to fix bugs and fine tune the system.

### ****5.3 Reporting and Analytics****

* Administration to have reports of sales performance and traffic.