Software Requirements Specification

for

E-commerce Website

Prepared by

Ismat Jahan (1821318042) Labiba Islam (1821924042) Fahim Sikder (1822119042) Mahmud Hasan (1821448042) Sabbir Hossain (1821101042)

 $North\ South\ University \\ Software\ Engineering\ (CSE\ -\ 327)$

 $9~\mathrm{July}~2021$

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Revision History

Revision	Date	Author(s)	Description
1.0	06.07.2021	Fahim Sikder	Chapter 1 - Introduction
2.0	07.07.2021	Ismat Jahan,	Chapter 2 - Overall Description
		Labiba Islam	
3.0	09.07.2021	Mahmud Hasan,	Chapter 3 - Requirements
		Sabbir Hossain	
4.0	09.07.2021		Final Version

Chapter 1

Introduction

The Software Requirements Specification is designed to describe the agreement between the customer and the developer regarding the software product specification's specification. Its primary objective is to provide a clear and descriptive "statement of user requirements" that can be used as a reference in the further development of the software system. This document is broken into several sections used to separate the software requirements into easily referenced parts logically. This Software Requirements Specification tries to specify the Functionality, External Interfaces, Attributes, and Design Constraints imposed on the software system detailed throughout the rest of the document throughout implementation. The language and terminology used in the description of the software system should be clear and consistent throughout the paper.

1.1 Purpose

This project aims to develop an Electronics E-Commerce System that is significant to those people who use the Internet. It is a website that can be accessed by anyone with a stable internet connection and can save their time instead of doing traditional shopping. Online—shopping is the process where consumers go through to purchase products or services over the Internet. Consumers find a product of interest by visiting the website or search many different vendors using a shopping search engine. Especially in this pandemic situation, it is difficult for people to go out and shop, maintaining social distance. So, this will save them from the virus and save their time and the hassle of doing traditional shopping.

1.2 Intended Audience

- Developers
- Project Testers
- Marketing Departments

1.3 Intended Use

- Developers: Developers can use this SRS to easily understand what's the project about, which part they should focus more, which part to improve, find if there is any scope to add new features or function for any upgrade.
- Project Testers: Testers can use this SRS to test the software as per requirements. This will make the testing more organized as from SRS testers can easily get the idea where to look and what error or bug they should be looking for.

• Marketing Departments: Marketing department can use this SRS to get an idea about what they are going to promote and what are the features of this project and how this feature will help the clients or users.

1.4 Product Scope

This E-commerce website is for the users who do not like the hassle of traditional shopping and sellers who want to sell their products. This is an entirely new website that we will build from scratch, which will contain some features and will help both customers and sellers to buy and sell online without any physical contact.

Benefits of this E-commerce website:

- 1. User can sell any type of electronic products if he is an authorized seller.
- 2. A seller user can have the facility in giving all type of updates to his product range.
- 3. User can buy electronic products according to his preferences.
- 4. User can see reviews of other users.
- 5. User can get an overview of market price of the products to compare with other websites.
- 6. User can use discount code to reduce the price of their order.
- 7. User can keep their wish list and can have changes any time they want.
- 8. User can choose different payment method.
- 9. User can select how they want to get their product.
- 10. User can get detailed virtual receipt during their purchase.
- 11. User can return their product if it is defected.
- 12. An admin user can manage buyers' and sellers' information.
- 13. An admin user can manage contents.
- 14. An admin user can manage orders and shipping, and payments.
- 15. An admin user can manage discounts and promotions of the E-commerce website.

Objective of our E-commerce website is:

- 1. To give customers faster buying process, flexibility, lower cost, product and price comparison, several payment methods and open 24/7.
- 2. To give sellers affordable advertising and marketing, no reach limitation, and grow their business.

Goals:

- 1. Our goal is to ensure that buyers and sellers do not get cheated.
- 2. Buyers can easily search their desired product with low cost by comparing the same product from a different seller.
- 3. Sellers can reach vastly to buyers even with their geographical limitation and get reviews from customers so that they can improve their product.

1.5 Risk Definition

- 1. Unstable network can cause disruption for the buyer and site would not load.
- 2. If the security is not good, then customers data can get stolen.
- 3. Too much traffic can crash the site.

Chapter 2

Overall Description

We are going to build a website based on an E-commerce platform. The key purpose of this platform is to give buyers and sellers an opportunity to buy and sell electronic products online. This website will allow people to do business hassle-free of time and distance. This will be an entirely new product and we will develop everything from the very beginning using various tools.

2.1 User Classes and Characteristics

This E-commerce website will help authorized electronic sellers to sell products also via online. Likewise, it will aid common people to purchase electronic goods according to their necessities using this platform. It will be a user-friendly platform for both buyers and sellers.

- User can be an authorized electronic seller
- User can be a common buyer
- User can be a visitor
- User can be an administrator

2.2 User Needs

- As a seller, user will have access to add new products, update and remove products without facing technical issues. User will know the percentage of profit he needs to provide to website. A user needs the access to see all products and updates of other sellers.
- As a buyer, user can search for products by brands, names, and related words. This website will enable the user to see product price, product description, product image and product reviews from authentic sources. User can add or remove products from his cart, and can place order. User needs to get a virtual receipt which will be provided by this website. If a user wants to add reviews to a product, this website will give access to it.
- As a visitor, user can compare prices of same products of different sellers, explore reviews and get information about market prices.
- As an administrator, user will have the full authority and administrative rights over the website. User will
 be able to manage buyers and sellers, contents, orders and shipping, payments, discounts and promotions
 of the E-commerce website.

2.3 Operating Environment

Operating environment for the Electronics E-commerce Website is as listed below:

• Operating system: any kind of OS which supports browsing

• Database: MySQL

• Platform: Laravel, html, CSS, php

2.4 Constraints

- We have to develop the website using php, html and CSS language.
- The developed system must work in client's operating environment, which is Windows.
- We must finish the project within 2 months.

2.5 Assumptions

- Users understand English.
- Users are familiar with browsing website.
- Users have basic functional knowledge regarding E-commerce website.
- Users have smart devices with internet service.

Chapter 3

Requirements

3.1 Functional Requirements

1. As a buyer,

I want to create my account

so that, I can get membership in this website.

Confirmation:

- Buyer has to give his personal information.
- Buyer has to put a password.
- Buyer has to confirm his password.
- Buyer will be verified by email or text message.

2. As a buyer,

I want to buy my product

so that, I can use that product.

Confirmation:

- Buyer has to log in.
- Buyer has to search for a product by name or by category.
- Buyer has to choose the right product.
- Buyer can see the price of that product.
- Buyer has to add that product into the cart.
- Buyer has to submit his order.

3. As a buyer,

 ${f I}$ want to remove product from the cart

so that, I can delete that product which I added mistakenly into the cart.

Confirmation:

- Buyer has to log in.
- Buyer has to view his cart carefully
- Buyer has to remove his unwanted product.
- Buyer has to submit his order.

4. **As a** buyer,

I want to save products into wish list

so that, I can buy that product later.

Confirmation:

- Buyer must be logged in.
- Buyer should put his desired products into his wish list.

5. **As a** buyer,

I want to give review about a product which I bought in the past so that, I can share my experiences about that product.

Confirmation:

- Buyer has to search that product by name.
- Buyer must be logged in.
- Buyer has to give his opinion into the review section.

6. **As a** seller,

 ${f I}$ want ${f to}$ create my account

so that, I can sell my products.

Confirmation:

- Seller has to give his personal information.
- Seller has to give his trade license number.
- Seller has to provide his TIN number (Tax Identification Number).
- Seller has to put a password.
- Seller has to confirm his password.
- Seller will be verified by email or text message.

7. **As a** seller,

I want to upload my product into the website

so that, buyers can see my products and they can buy those.

Confirmation:

- Seller must be logged in.
- Seller has to upload a decent photo of his product.
- Seller has to set his price.
- Seller has to wait for the confirmation of the administration.

8. **As a** visitor,

I want to search for products

so that, I can find my desired products which I might want to buy.

Confirmation:

- Visitor has to search for a product by name or by category.
- Visitor has to view his intended searched product.
- Visitor has to view images and details for each product.

9. **As a** visitor,

I want to see the shipping details

so that, I can be sure about how my product will be delivered to me if I wish to buy from the website.

Confirmation:

- Visitor has to navigate to the shipping details page.
- A shipping details section will be provided with all the necessary shipping options with approximate delivery date.

10. **As a** visitor,

I want to see the return policy

so that, I can be sure of all the necessary requirements to return any product.

Confirmation:

- Visitor has to navigate to the return policy page.
- A return policy page will be provided with ample information about the terms, conditions and requirements of returning any purchased products from the website.

11. As a visitor,

I want to see the payment option

so that, I can be sure of all the available payment options to purchase any product if I choose to buy from this website.

Confirmation:

- Visitor has to search for a product by name or by category.
- Visitor has to view his intended searched product.
- Visitor has to view images and details for each product.
- Visitor will then add to cart from search or product detail page.
- In customer checkout, visitor will be prompted to choose any one of the available payment options presented there.

12. **As an** administrator,

I want to manage the customers

so that, I can keep track of all the customers' information.

Confirmation:

- Admin has to open his/her dashboard panel.
- Admin has to navigate to customer management.

13. **As an** administrator,

I want to manage the contents of the website

so that, I can customize the pages and user reviews.

Confirmation:

- Admin has to open his/her dashboard panel.
- Admin has to navigate to content management.

14. **As an** administrator,

I want to manage the orders and shipping of all the customers

so that, I can keep track of all the order and shipping details of each customer.

Confirmation:

- Admin has to open his/her dashboard panel.
- Admin has to navigate to order and shipping management.

15. **As an** administrator,

I want to manage discounts and promotions

so that, I can show possible discounts, promotions and occasional offers in the website.

Confirmation:

- Admin has to open his/her dashboard panel.
- Admin has to navigate to discount and promotions management.

16. **As an** administrator,

I want to manage payments and taxes

so that, I can keep track of all of the customers' payments and taxes.

Confirmation:

- Admin has to open his/her dashboard panel.
- Admin has to navigate to payment and tax management.

3.2 Non Functional Requirements

Usability Requirements

- A customer will find the website easy to use and will be able to find his/her desired products and make the purchase without contacting us.
- A customer should be able to find his/her desired products faster.
- A customer should be able to perform the required tasks in the store without any interruption.
- A customer should find the user experience less faulty and limited errors.

Security Requirements

- Administrators can assign certain roles and change access permissions of the website.
- The website will use a secure database and must be resilient to possible hacking and user data violations, personal data theft, account hacking etc.
- The system should be able to detect and prevent frauds.

Performance Requirements

- The website's homepage should load in less than 3-4 seconds of time on 3G-4G networks.
- Response time in using any set of features of the website should not take longer than 3 seconds.

Maintainability Requirement

- The website should be easy to maintain and manage its features.
- Website's back-end complexity should be minimum for future engineers to work on.

Appendices

Appendix A

Glossary

SRS: A software requirements specification (SRS) is a description of a software system to be developed. The software requirements specification lays out functional and non-functional requirements, and it may include a set of use cases that describe user interactions that the software must provide to the user for perfect interaction.

NID: The National Identity Card (NID) is a compulsory identity document issued to every Bangladeshi citizen upon turning 18 years of age. The NID is a government issued photo ID just like the Bangladeshi Driver's licence, which is also a bio-metric, microchip embedded, smart identity card. The NID is required by Bangladeshi citizens for multiple essential public services, such as obtaining utility connections, as well as private services, such as opening bank accounts, in Bangladesh.

TIN: Tax Identification Number, also known as TIN which is an identification number issued to an individual or a company to track tax payments to the government. In Bangladesh The National Board of Revenue (NBR) is the only authority to provide TIN Certificate to the applicant.