TechZilla,	$\mathbf{LL}$	C

# eShop

# Software Requirements Specification For Online Electronic Shopping

Version 1.0

grade: 95

comments: one of the best reports in this class. provided a good overall picture and nice details for each oval. minor drawbacks: 1. draw the use case diagram in the normal way (ordinary user on the left, insiders on the right); 2. for each use case/scenarios, should also provide exceptional ones on top of the regular ones to showcase your careful thoughts.

# **Prepared By:**

Amadou W Jallow Luigi G Otoya Sagun Pandey Pierce K Ruddock Taylor Hodgson C Tetteh

eShop	Version: 1.0
Software Requirements Specification	Date: 31/03/21
DI-V-310321	

**Revision History** 

Date	Version	Description	Author(s)
31/03/21	1.1	Initial Plan	Amadou Jallow
			Sagun Pandey
			Pierce Ruddock
			Luigi Otoya
			Hodgson C Tetteh

eShop	Version: 1.0
Software Requirements Specification	Date: 31/03/21
DI-V-310321	

# **Table of Contents**

1. Introduction	3
1.1 Purpose	3
1.2 Scope	3
1.3 Definitions, Acronyms, and Abbreviations	4-5
1.4 References	5
1.5 Overview	5
2. Overall Description	5
2.1 Use-Case Model Survey	6
2.2 Assumptions and Dependencies	7
3. Specific Requirements	7
3.1 Use-Case Reports	7-14
3.2 Supplementary Requirements	14
4. Supporting Information	14-17

eShop	Version: 1.0
Software Requirements Specification	Date: 31/03/21
DI-V-310321	

# **Software Requirements Specification**

## 1. Introduction

This document provides a detailed overview of the online computer store.

## 1.1 Purpose

The main purpose of this document is to provide an overview of how the software is to be developed and with accordance to the IEEE Recommended Practice for Software Requirements Specifications. Project managers and developers will have access to this document and use it as a guide/reference in the development of the system software. The Document describes the features, constraints, users, goals, and objectives of the software in development.

## 1.2 Scope

This Software Requirements Specification (SRS) document pertains to the project "Online Computer Store." The Online Computer Store will be an online marketplace for users to customize and complete computer builds for purchase or purchase individual parts. The users/Registered-Customers should be at the forefront of who this software is targeted to. The goal is to retain visitors/browsers to the store with the purpose of making them Registered-Users/Customers by including features that will maximize user interaction within the store. Regulated Discussion boards/forums will be available for users to increase interaction within the store. The discussion boards/forums must provide users with a healthy environment in which users can discuss computer parts, features of the store, and even list product-focused/general complaints. The delivery system shall function with two delivery companies competing with one another through bidding. The delivery company with the winning bid should have rights on the item to be delivered, else, there must be some justification as to why it is not.

eShop	Version: 1.0
Software Requirements Specification	Date: 31/03/21
DI-V-310321	

# 1.3 Definitions, Acronyms, and Abbreviations

Term	Definition	
Users	Includes users with a registered account to the webstore, first time visitors, users without an account, Store clerks, and Store Managers/Super-users.	
Registered User	A registered user is a user that has an account tied to the webstore.	
Registered Customer	A registered customer is a user with an account tied to the webstore who has previously purchased a product.	
Registered Customer/user	Registered User and Registered Customer.	
Visitor/Browsers	Visitors/Browsers are users that do not have an account tied to the webstore. Visitors/Browsers must create an account to become registered customers and to use all available features of the webstore.	
Store Clerk	Store clerks assist with the day to day operations of the store, including tasks with regulating discussion boards and/or responding to customer requests/complaints.	
Store Managers/Super-User	Store Managers/Super-users have profound understanding of the internal processes of the webstore and oversee improvement of the store.	
Delivery Companies	The companies responsible for the shipment of products available on the webstore	
Computer Parts Companies	The companies that develop the products that are available for purchase on the webstore.  E.g., Company: Microsoft, product: windows operating system	
Computer Parts	Includes the components that make up a functional computer:  • Central Processing Unit (CPU)  • Graphical Processing Unit (GPU)  • Power Supply (PSU)  • Random Access Memory (RAM)	

eShop	Version: 1.0
Software Requirements Specification	Date: 31/03/21
DI-V-310321	

<ul><li>Operating System</li><li>Memory Storage</li></ul>
<ul> <li>Display</li> </ul>

## 1.4 References

- "IEEE Recommended Practice for Software Design Descriptions," in IEEE Std 1016-1998, vol., no., pp.1-23, 4 Dec. 1998, doi: 10.1109/IEEESTD.1998.88828.
- https://www.figma.com

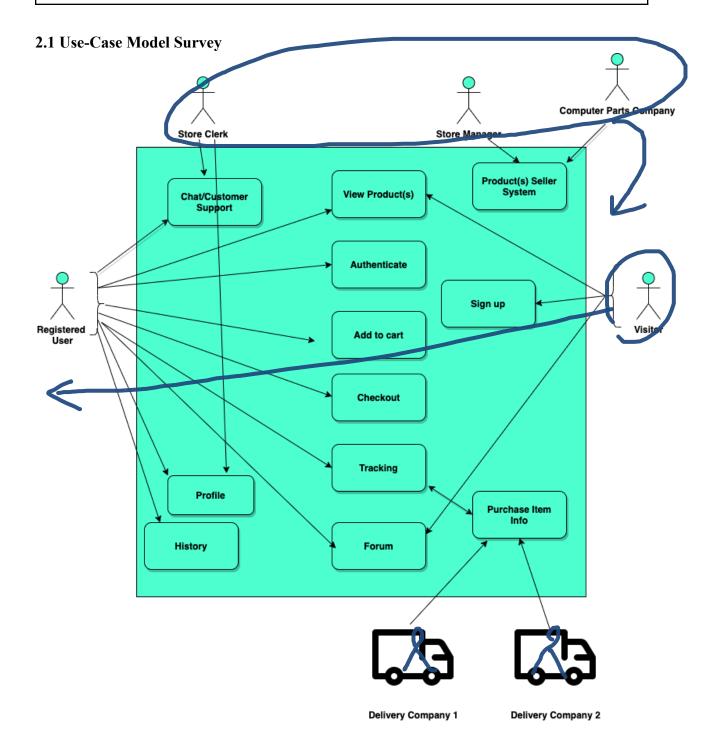
#### 1.5 Overview

The following three sections of the SRS document are summarized in this section. Section 2 contains the Overall Description which describes the general factors that will affect the webstore and its requirements. A Use-Case model listing the users, the features, and their relationships is available in 2.1, and 2.2 describes the dependencies of the project, such as the subsystems and technical circumstances in the implementation of the webstore. Section 3, the Specific Requirements section, contains relevant information for the developers, such as a detailed list of the functionality of the webstore and how users should be able to interact with the features present. Section 3.1 contains the Use-Case report for which describes in detail, the use case model presented in section 2.1. Section 3.2 includes in detail any additional functionality for which the use case model previously presented does not cover. Section 4 is the final section which is intended to increase readability and ease of use pertaining to this SRS document.

## 2. Overall Description

This website will help users buy pc parts, pc hardware and other accessories and get the parts assembled and sent to their address.

eShop	Version: 1.0
Software Requirements Specification	Date: 31/03/21
DI-V-310321	



Online Computer Store

eShop	Version: 1.0
Software Requirements Specification	Date: 31/03/21
DI-V-310321	

## 2.2 Assumptions and Dependencies

- The User has a web-browser on their device.
- The User has access to an internet connection.
- The Registered Customer/user uses a payment method that is, but, not limited to credit cards, gift cards, and vouchers.
- Development Dependencies includes knowledge in:
  - React Library
  - o JavaScript
  - o Git

# 3. Specific Requirements

This section describes the functional and non-functional requirements of the system.

## 3.1 Use-Case Reports

## **Use Case # 1:** Authenticate

## **Description:**

The Authenticate feature proves that a user is a registered user. It allows a registered user to retrieve and enter their previously made account profile. If no account exists at the time of authentication, then the user may use the sign-up feature to create a new account, thus becoming a registered user.

### **Actors:**

Registered Customer/user

#### Scenario:

- Input
  - User enters specific keywords including Name, Username, or phone number
- Process
  - Validation of input data
  - Search user data available
- Output
  - Present the user with their account, allowing the user to view profile features, make purchases, track packages and discuss with other Registered-Users/Store-Clerks in the forum.

eShop	Version: 1.0
Software Requirements Specification	Date: 31/03/21
DI-V-310321	

## **Use Case #2:** Sign-up

## **Description:**

This feature is necessary for a user to become a Registered Customer/User and use all the available features of the webstore. The User is required to provide information needed to make an account/profile on the webstore.

#### **Actors:**

Visitor/browser

#### Scenario:

- Input:
  - o Feature requires user to enter name
  - o Date of Birth
  - o Phone number
  - o Gmail
  - Address
- Process
  - Validates user info
  - Check if user has account
  - Sends error message if abnormal inputs are given
  - Make new profile for user
- Output
  - Takes the user to the newly made profile

## **Use Case #3:** Profile

## **Description:**

The Profile feature of the online webstore grants the Registered Customer/user access and functionality related to their account. The profile contains sections that give the Registered Customer/user access to information such as purchase history, home address, money/credit, and filed complaints.

### Actors

Registered Customer/User

eShop	Version: 1.0
Software Requirements Specification	Date: 31/03/21
DI-V-310321	

#### Scenario:

- Input
  - Registered Users access their profile section within the online webstore while authenticated.
- Process
  - Registered User waits for a system response
- Output
  - Registered Users are given their account profile with all the features listed in the description above..

## **Use Case #4:** History

## **Description:**

Registered Customers/users can view a list of all the previous purchases made in their account over a certain time period.

#### **Actors:**

Registered Customers/users

## **Scenario**

- Input
  - Registered user goes to account profile
  - Registered user goes to history in account profile
- Process
  - Purchase history is retrieved.
- Output
  - List of order history is shown

## **Use Case #5:** Forum

## **Description:**

The forum shall work as a form of discussion board where Registered Customers/users may interact with other Registered Customers/users and Store Clerks. Registered Customers/users will be able to inquire or discuss any relevant products or features pertaining to the webstore.

eShop	Version: 1.0
Software Requirements Specification	Date: 31/03/21
DI-V-310321	

Visitors/browsers to the webstore will also have access to the forum of the webstore, but with limited functionality. A visitor/browser shall only be able to view the forum; to gain full functionality of the forum, a visitor/browser must create an account and become a registered user.

#### **Actors:**

Registered Customers/users, Visitors/browsers, Store Clerks.

#### Scenario:

## • Input

- Registered Customer/user has a comment/inquiry/complaint over a particular product, feature, or customer. Writes to the discussion board.
- Visitor has an inquiry over a product/feature.

#### Process

- Registered Customer/user waits for other registered users to respond through the discussion board.
- Visitor/browser reads the discussion board.

### • Output

- Registered Customer/user responds to the discussion board answering an inquiry, or following up on a comment or complaint.
- Visitor/browser finds a comment by a registered Customer/user that answers their inquiry.
- Store Clerks may answer inquiries.
- Store Clerks answer complaints.
- Store Clerks may follow up with comments.

## **Use Case #6:** Chat/Customer Support

## **Description:**

Chat/Customer Support is a feature of the webstore that allows Registered Customers/users and visitors to interact with the Store Clerks of the webstore. The inquiries can be of questions relating to products, tracking information, profile information, or even how to create an account.

#### **Actors:**

Store Clerk, Registered Customer/user, and Visitors/Browsers

#### Scenario:

#### • Input

eShop	Version: 1.0
Software Requirements Specification	Date: 31/03/21
DI-V-310321	

• A Registered Customer/user or visitor/browser submits an email to a Store Clerk with any inquiry they may have.

#### Process

- The email is processed and then read.
- The email is read by a Store Clerk.
- The Store Clerk formulates an appropriate response.

## Output

 A Store Clerk responds to the email of the registered user or visitor/browser, by sending an email that answers the inquiry.

## **Use Case #7:** View Products

## **Description:**

This feature allows a Registered Customer/User or Visitor/browser to browse the listings of the online webstore. Any user is free to browse/view the many computers and computer parts listed for sale.

#### **Actors:**

Visitor/browsers and Registered Customers/users

## Scenario:

- Input
  - A Registered Customer/user or Visitor/browser enters in search criteria for the desired item.
- Process
  - A database is combed with the filters entered in by the user.
- Output
  - A list of computer/parts is shown from the users search criteria.

## **Use Case #8:** Add To Cart

## **Description:**

This feature will be used as a Registered Customer/user is browsing the items of the webstore. Upon finding any item the Registered Customer/user is interested in, whether for purchasing or not, the Registered Customer/user may add the item to the cart. When the Registered Customer/user is ready to make a purchase decision, they may purchase or remove the items previously added to the

eShop	Version: 1.0
Software Requirements Specification	Date: 31/03/21
DI-V-310321	

cart.

#### Actors:

Registered Customer/user

#### Scenario:

### Input

 The Registered Customer/user clicks on the "add to cart" button on the desired item listing.

#### Process

• The item listing is loaded onto the cart container.

### Output

- The cart icon shows the increment of the carts value by the number of items added to the cart.
- The item listing is added to the cart.

## Use Case #9: Checkout

This feature is for when a Registered Customer/user is ready to make a purchase on an item. The Registered Customer/user enters the checkout page and confirms the purchases of the desired items present in the cart.

## Actor:

Registered Customer/user

### Scenario:

## Input

- The Registered Customer/user provides a working credit card or has sufficient money in account in order to complete the order.
- The Registered Customer/user clicks on the complete order button.

#### Process

 At the submission of purchase decision, the total amount will be checked against the Registered Customer/user's account or credit. If not sufficient enough money or credit, the submission is returned with a warning message. Else the amount will be charged.

#### Output

- The system confirms the completed purchase.
- The system sends the purchase to the delivery subsystem.

eShop	Version: 1.0
Software Requirements Specification	Date: 31/03/21
DI-V-310321	

## **Use Case #10**: Tracking

This feature comes into play when a Registered Customer/user has purchased an item. Using this feature allows the Registered Customer/user to track the items that have been purchased.

#### **Actors:**

Store Clerk, Registered Customer/user, Delivery Companies

#### Scenario:

- Input
  - Registered Customer/user purchases an item.
- Process
  - Delivery companies bid over the item.
  - Store Clerk picks which delivery company to use.
- Output
  - Registered User receives info on which company is in charge of delivering the item.
  - Registered User receives tracking information.

#### **Use Case # 11:** Purchase Item Info

## **Description:**

Purchase Item Info is a feature that allows Delivery Companies to view the purchase information of an item by a Registered Customer. The available information pertaining to the Registered Customer includes the name, address, phone number, and other contact information. The product information available to the Delivery Companies includes the product item itself and the tracking information of the product purchased by a Registered Customer.

#### **Actors:**

**Delivery Companies** 

#### Scenario:

- Input
  - Registered Customer/user makes a purchase.
- Process
  - Delivery companies bid over order.
- Output
  - Delivery Company that wins bid receives the purchase item information pertaining to the Registered Customer and product purchased.

eShop	Version: 1.0
Software Requirements Specification	Date: 31/03/21
DI-V-310321	

## **Use Case #12:** Product(s) Seller System

## **Description:**

This feature is for the Store Manager to help them organize documents, manage vendors, salespeople contacts, products and sales process in an efficient way to have a systematic selling system. Using this system, store managers can track the inventory documents, best selling products or sales deals, and save their time.

#### **Actors:**

Store Manager, Computer Parts Companies

#### **Scenario:**

- Input
  - Salespeople/Vendors offering product deals automatically to the system.
- Process
  - Store manager accepts/declines the offer.
- Output
  - The system keeps records of documents, contact information, and products.

## 3.2 Supplementary Requirements

- Visitors/browsers will be required to sign-up to the webstore if they want full functionality and access to all the features.
- Registered Customers/Users will have the option of logging in to the webstore. They must do so if they wish to access their account or use other features, such as the forum.
- When logging in, the system should have personalized recommendations to the Registered Customer/User based on their product history. If the history has been previously cleared, then the webstore will show the latest or newest items.

# 4. Supporting Information

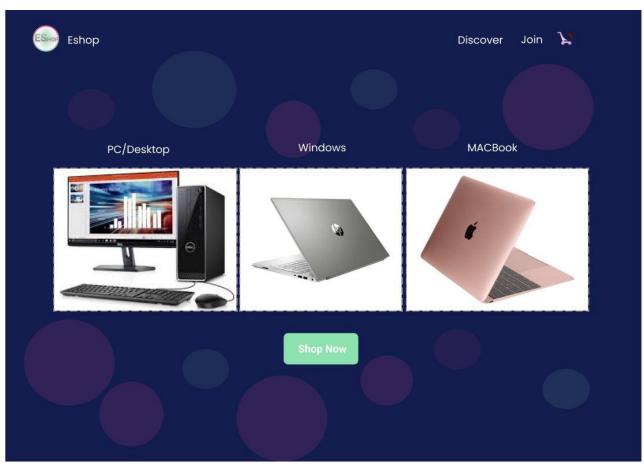
As our supporting documents, we have created a user-interface prototype for the home page and login page. We used figma to design these prototypes. Figma is a vector graphics editor and prototyping tool which is primarily web-based. The following contents are just a rough draft to show how the store is going to function. It may look different later in the future.

**Domain:** https://eshop.com (this is not our actual domain but just a sample)

eShop	Version: 1.0
Software Requirements Specification	Date: 31/03/21
DI-V-310321	

## Home page:

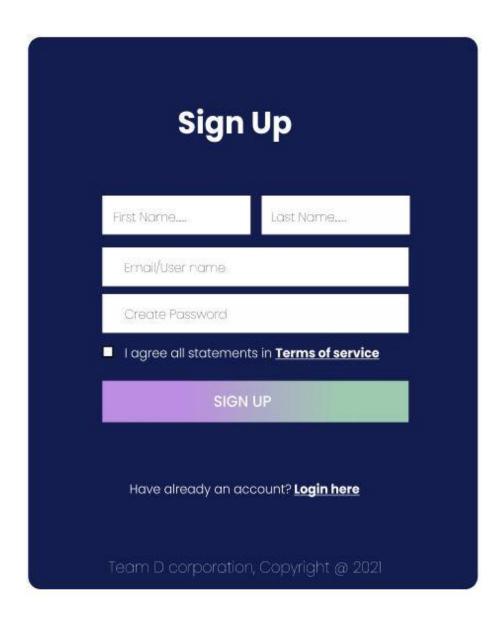
This is the main page of our Computer Store. On Click of "Shop Now", users will be directed to join. After that, users will be directed to the "Sign Up" page.



## Sign Up Page:

Here, users can create an account using any email address. A confirmation email will be sent to their email address. If the email address is used already, you can log in to your previous account by clicking Login here.

eShop	Version: 1.0
Software Requirements Specification	Date: 31/03/21
DI-V-310321	



## **Login Page:**

When the "Log in here" is clicked, users will be directed to the Login page as shown below. Users can enter their email addresses and password to login into their eshop account. If the password doesn't match, you have an option to click on "forgot password" which will send you a password reset link to your email address. By clicking the link from your email, users can easily reset their passwords.

eShop	Version: 1.0
Software Requirements Specification	Date: 31/03/21
DI-V-310321	

