Software Requirements Specification

for

Online Shopping System

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Revision History

Revision	Date	${f Author(s)}$	Description
1.0	12.03.2021	Shahriar Alam	Chapter 1 - Introduction, Chapter 4 - Non Functional Re-
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4.0	13.03.2021	Anika Tabassum	Chapter 3 - Functional Requirement (System Feature of
			Online shopping)
5.0	13.03.2021	Rafsan Jani	Chapter 3 - Functional Requirement (External Interface)

Introduction

1.1 Purpose

The purpose of this document is to act as an medium between popular clothing brand companies in Bangladesh and the stakeholder. This Online Shopping System will provide full opportunity to the stakeholders to shop, add product or maintain online easily and safely. Its aim is to discuss the motive and features of the app, the UI of the app, the functions of the app, the conditions under which it must operate and how the app will adapt to any changes. This document is intended for both the stakeholders and the developers of the app and will be appealed to the respective Faculty for its approval.

1.2 Intended Audience

This document is intended for both the stakeholders and the developers of this app. The stakeholders are the person who will participate in this app like Customer, Admin, Shop Manager, System, Shipping Clerk and Bank.

1.3 Intended Use

The developer and stakeholder are use it. This system provides an easy solution for customers to buy the product without going to the shop and also to shop owner to sale the product.

1.4 Product Scope

This app will act as a portal for customer to buy cloth or other straps from Aarong, Illiyeen, Yellow, Sailor etc those brand. This app will be designed to be incredibly user-friendly and flexible because it will provide a large number items to choose from quite easily and search those item directly what he/she want. It will provide the full specification, image and price of the product. Alongside, this app will provide a budget base search which will benefit the user to buy the best product in the lowest rate and if a customer select a product, how this product is shipped can track easily. In addition, if the customer has a problem with a product, he/she can talk to the shop manager directly on the phone/text or can also cancel this product. He/she will also be able to keep track of how much money he/she spent per month.

1.5 Risk Definition

Developer must work on sudden device failing and crush. To avoid the risk clients are heavily requested not to upload sensitive information such as credit card details, personal information, or any forms of IDs etc which are not required.

Overall Description

2.1 User Classes and Characteristics

There are three type of users for the proposed system.

- 1. Administrators: Administrator can create the categories of products, adds or removes products, sets the various search filters etc. They analyzed the part of shop that when their customers visit. they can see the number of orders, income, daily sell, stock products etc.
- 2. Sellers: They will show the products to the customers by add their products to the database, which will be seen in the website to the customers.
- 3. Customers: They can search the product easily and they will see the products price quality, pictures and buying the products in the website.

2.2 User Needs

User want to buy product at lower prices and want security for their buying product. They always want the original picture of the product so that they are not deceived.

2.3 Operating Environment

Operating system is following software components and applications. User browse it like chrome, Internet explorer, Mozilla Firefox etc

2.4 Constraints

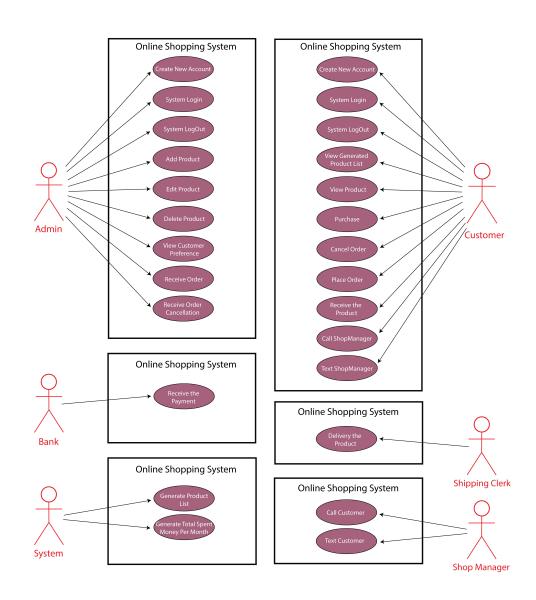
The system is working only single server and it will be English only.

2.5 Assumptions

Each product has require back-end database server SQL for storing the username and password for different types of user of the system. User must be trained for basic computer and must have the basic knowledge of English.

Functional Requirements

3.1 Use Case Diagrams

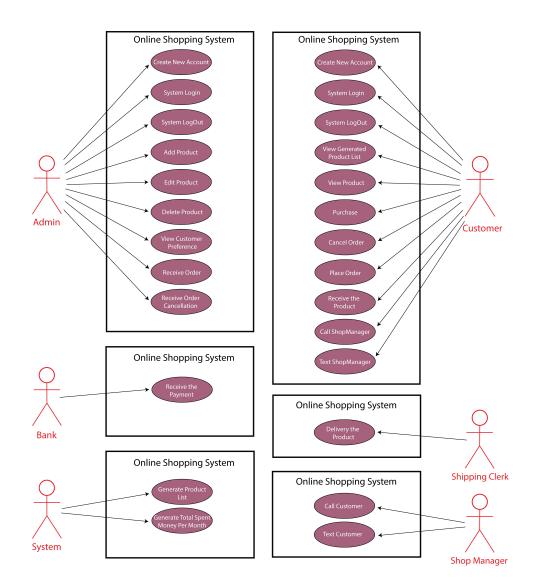


3.2 Use Case Diagram

- 5.1) Extended Use Case (User Log in to the System) Use case Name: User Log in to the System Actor: Customer(Primary Actor), Admin Description: 1. Input user ID and password 2. Check User ID and password 3. Save ID and password 4. Remember password Exception: 1. Required page not found 2. No database connection Pre Condition: 1. Have a user account Post Condition: 1. Successful log in successfully 2. Unsuccessful- log in failed
- 5.2) Extended Use Case (Create New User Account) Use case Name: Create New User Account Actor: Customer(Primary Actor), Admin Description: 1. Input user ID, password, confirm password, name, address, date of birth 2. Check User ID(unique or not) 3. Store new User account into database Exception: 1. Required page not found 2. No database connection Pre Condition: 1. age must be above 12 Post Condition: 1. Successful create new account successfully 2. Unsuccessful- create new account failed
 - 5.3) Extended Use Case (Subscribe the Application) Use case Name: Subscribe the Application Actor: Customer(Primary Actor), Admin Description: 1. Customer input user id, password. 2. Customer See the three subscription plan in details 3. Customer choose subscription plan 4. Customer pay for the subscription 5. Store new premium member into database 6. Customer get confirmation email Exception: 1. Required page not found 2. No database connection Pre Condition: 1. Have a user account Post Condition: 1. Successful subscription successful 2. Unsuccessful- subscription failed
- 5.4) Extended Use Case (Search Product) Use case Name: Search Product Actor: Customer(Primary Actor) Description: 1.input product name and preferences 2. check the product name and preferences(match or not) 3. show the matched product Exception: 1.Required page not found 2.No database connection Pre Condition: 1. Have a account 2. Log in Post Condition: 1. Successful product found successfully 2. Unsuccessful- product not found
- 5.5) Extended Use Case (Place Order) Use case Name: Place Order Actor: Customer(Primary Actor), Shop-Manager(Secondary Actor) Description: 1. Customer select the product 2. Customer input shipping address, phone number, quantity 3. Customer make payment 4. Customer get confirmation email 5. Shop manager get order placed email Exception: 1. Required page not found 2. No database connection Pre Condition: 1. Customer must view the products Post Condition: 1. Successful order place successfully 2. Unsuccessful- order place failed
- 5.6) Extended Use Case (Cancel Order) Use case Name: Cancel Order Actor: Customer(Primary Actor), Shop-Manager(Secondary Actor) Description: 1.Customer input password, product details 2. Remove the product from the database 3. Send confirmation mail to customer and shop- manager. Exception: 1. Required page not found 2. No database connection Pre Condition: 1. URL of "place order" hyperlink page Post Condition: 1. Successful order cancel successfully 2. Unsuccessful- order cancellation failed 5.7) Extended Use Case (Call Shop-Manager) Use case Name: Call Shop-Manager Actor: Customer(Primary Actor), Shop-Manager(Secondary Actor) Description: 1. Make call 2. Connect call Exception: 1. Required page not found Pre Condition: 1. select product Post Condition: 1. Successful -make call successfully 2. Unsuccessful- failed to make call 5.8) Extended Use Case (Text Shop-Manager) Use case Name: Text Shop-Manager Actor: Customer(Primary Actor), Shop-Manager(Secondary Actor) Description: 1. Input text 2. Send text Exception: 1. Required page not found 2.No database connection Pre Condition: 1. Have a user account Post Condition: 1.Successful send text successfully 2. Unsuccessful-failed to text
 - 5.9) Extended Use Case (Budget Product Suggestion) Use case Name: Budget Product Suggestion Actor: Customer(Primary Actor) Description: 1. Input the price 2. Check to match with the price 3. Show the product Exception: 1. Required page not found 2.No database connection Pre Condition: 1. URL of "place order" hyperlink page Post Condition: 1.Successful show products successfully 2. Unsuccessfulfailed to show products 5.10) Extended Use Case (User's total spent money per month) Use case Name: User's total spent money per month Actor: Customer(Primary Actor) Description: 1. Store all payment records 2. Input month 3. Check to match the month 4. Show the total amount spent that month with details Exception: 1. Required page not found 2. No database connection Pre Condition: 1. Place order

and buy product Post Condition: 1. Successful – total amount calculated successfully. 2. Unsuccessfultotal amount calculation failed.

• 5.11) Extended Use Case (User Log Out from the System) Use case Name: User Log Out from the System Actor: Customer(Primary Actor), Admin Description: 1. Customer click log out 2. System logs out the user and redirect back to the homepage Exception: 1. Required page not found Pre Condition: 1. Log in Post Condition: 1. Successful - log out successfully 2. Unsuccessful - log out failed



3.3 System Feature of Online shopping

- Registration: A new user will have to register in the system by providing essential details in order to view the products in the system. The admin must accept a new user by unblocking him. System must be able to verify and validate information. The system must encrypt the password of the customer to provide security
- Create new account: A new will have to create a new account to log in this app. User must have to use his/her valid Mail account with proper information. User also have to give his/her Name, active mobile number, present address how he/she wants to pay that's method. By giving this information user can create new account for log in the app.

- Log in: A user must login with his user name and password to the system after registration.
- Search product: Users can search for a particular product in the list by name. User can view the list of products based on their names after successful login. In shopping app there are different kind of product are available. So this is not possible to find product by scrolling up down. To make it easier search option is here. User can find those product whatever they want to see or buy can easily find buy searching in the list by name. A detailed description of a particular product with product name, products details, product image and price can be viewed by users.
- Budget product suggestion: Sometimes some customer are get confused what product they should buy with their budget. Here some of our expert can help by giving suggestions. They can give advice to the customer what will be best within their range.
- Order place cancellation: The user place order by add the desired product into his cart by clicking add to cart option on the product. He can view his cart by clicking on the cart button. All products added by cart can be viewed in the cart. After confirming the items in the cart the user can submit the cart by providing a delivery address. On successful submitting the cart will become empty. User can also cancel an item or the whole cart from the cart by clicking remove.
- Per month shopping cost: user can check their per month shopping list cost in their account.
- Call text shopkeeper: user can also call or text the shopkeeper if they want to know some information about their order.
- Logout: A user can also logout from the app by confirming password.

3.4 User Interface

Users can manipulate and control software and hardware by means of a user interface. User interfaces are: 1. Attractive: colourful and friendly. 2. Simple to use: Without complication the app is going to be used simple. 3. clean to understand.

3.5 Hardware Interface

Two parties should be connected by Lan or Wan for the communication purpose.

3.6 Software Interface

For android.

3.7 Communication interface

Users can connect with system using internet.

Non Functional Requirements

4.1 Performance Requirements

It provides a detailed analysis of the user interaction with this app and measurements placed on this app performance. The performance requirements are:

- This app will load and be usable within 3 seconds to make it more flexible.
- This app will update the interface depending on any interactions within 2 seconds for a good performance speed.
- The database will be normalized to prevent redundant data and improve performance.

4.2 Safety Requirements

To ensure that there is no loss of data due to any external or internal issues, the data will be stored in cloud storage like Firebase. This allows a safe storage as well as easy accessibility.

4.3 Security Requirements

This app will not disclose any personal information about the users/clients. This app will not grant any access to an unauthorized user and will not communicate with any other devices during its usage.

4.4 App Quality Attributes

- AVAILABILITY: This app is accessible as an android version. It is very user-friendly and easy to handle.
- RELIABILITY: This app is very reliable because the admins will be updating the product list and details periodically. No data will be lost.
- FLEXIBILITY: As it is user-friendly, there are no restrictions, so the customer will be able to access the server with much difficulty.
- USABILITY: Users with basic English knowledge will be able to access this app and use it easily.

4.5 Business Rules

This is a free app and will not endorse any adverts.

Appendices

Appendix A

Glossary