

# SOFTWARE REQUIREMENT SPECIFICATION (SRS)

## ONLINE ECOMMERCE SHOPPING STORE

Version 1.0

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# Chapter 1

## Introduction

Online shopping is the process whereby consumers directly buy dresses or accessories from online shop, without an intermediary service, over the Internet using a web browser . It is a form of electronic commerce. An online shop, or web shop evokes the physical analogy of buying products or services in a shopping centre. In this section, a brief overview of the software such as the scope of the product, intended audience, acronyms and an overall document overview is mentioned in detail.

### 1.1 Document Purpose

This document is meant to delineate the features of OSS, so as to serve as a guide to the developers on one hand and a software validation document for the prospective client on the other. The Online Shopping System (OSS) for clothes is intended to provide complete solutions for customers through a single get way using the internet. It will enable customers to browse through the shop and purchase them online without having to visit the shop physically.

### 1.2 Product Scope

Online shopping is rising day by day in today's world where computer user's are increasing day by day so as the online shopping trends are also increasing. This project covers the online selling of dresses and accessories. The project shows the product category and then product details. From the product details, the product can be added to cart and can be bought.

## 1.3 Intended Audience and Document Overview

This document is intended to serve as a guide to developers and clients. The rest of this SRS is organized as follows:

- Section 2 provides an overview description of the software. It gives the proficiency level to be expected of the user, some general constraints, assumptions and dependencies that are presumed while making the software. A DFD of software is also given. It gives a basis to establish the technical requirements in the next chapter.
- Section 3 contains most important features presented with detailed description, and requirements. It gives specific requirements which the software is expected to deliver. Functional requirements are given in this section along with the External Interface Requirements. Wire-framing is also done to design a UI of the website. A Use case Diagram is also illustrated to give a clear idea of the software to be developed.
- Section 4 specifies the Non-Functional requirements. Performance, safety and requirements are mentioned over here. In addition, Software Quality Attributes have been discussed in detail.

## 1.4 Definitions, Acronyms and Abbreviations

- CSS: Cascading style sheet.
- DFD: Data Flow Diagram.
- Firebase: The Firebase Realtime Database is a cloud-hosted NoSQL database that lets you store and sync data between your users in real-time.
- HTML: Hypertext markup language.
- IDE: Integrated Development Environment.
- JavaScript: JavaScript, often abbreviated as JS, is a high-level, interpreted scripting language.
- Latex: A document formatting tool to prepare documents.
- OS: Operating System.
- OSS: Online Shopping System.

- PC: Personal Computer.
- UI: User Interface.

## **1.5 Document Conventions**

### **1.5.1 Formatting Conventions**

- Use Arial font size 11, or 12 throughout the document for text.
- Document text is single spaced and maintain the 1" margins.

### **1.5.2 Naming Conventions**

- Use italics for comments.
- Use bold text for headings.

## **1.6 References and Acknowledgments**

- IEEE. IEEE Std 830-1998 IEEE Recommended Practice for Software Requirements Specifications. IEEE Computer Society, 1998.

# Chapter 2

## Overall Description

### 2.1 Product Perspective

The Online Shopping system enables customers to browse through the shop, and a system administrator to maintain lists of shop categories. Also the developer is designing an online shopping site to manage the items in the shop and also help customers to purchase them online without visiting the shop physically. The online shopping system will use the internet as the sole method for selling goods to its consumers.

This product aimed toward a person who don't want to visit the shop as he might don't get time for that or might not interested in visiting there and dealing with lot of formalities.

### 2.2 Product Functionality

The online shopping system would have the following basic functions:

- Allow users to view items.
- Allow users to add selected items in cart.
- Proceed to checkout successfully if the user has already logged in otherwise ask the user to login or sign up.
- Display login page or sign up option, ask for credentials and continue to checkout.
- Allow the administrator to add new items to the existing list of available items.

- Allow users/administrator to remove items.
- Allow the administrator to modify the price of each item.
- Allow the administrator to update the description about each item.
- Allow the administrator to view and edit information about each user that checkouts the items from the system.

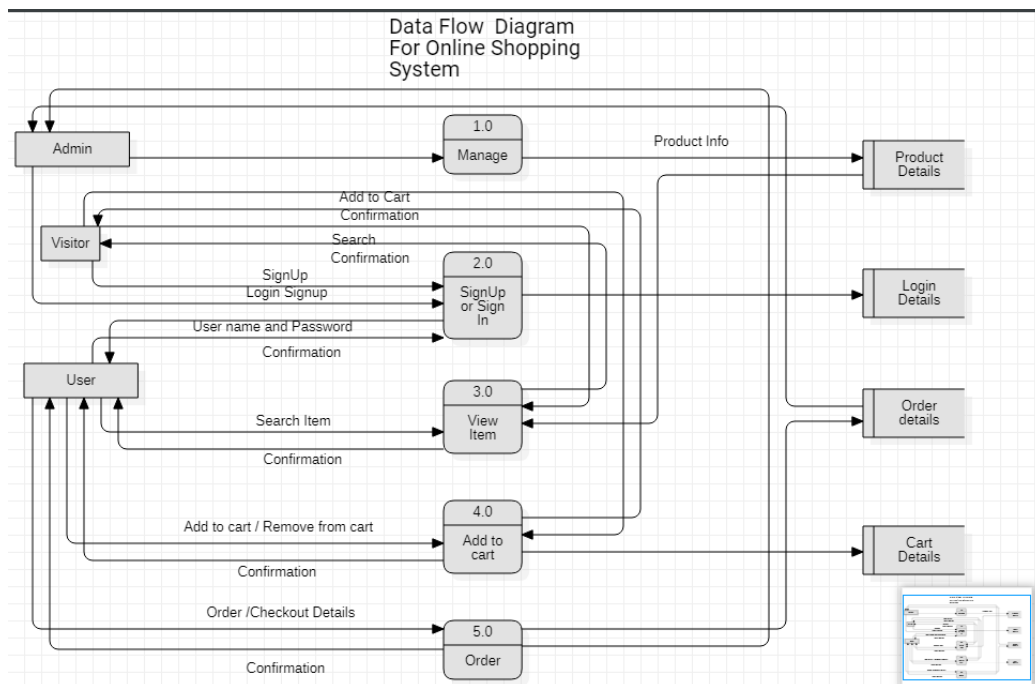


Figure 2.1: DATA FLOW DIAGRAM LEVEL 1

## 2.3 Users and Characteristics

The users of the online shopping cart application, based on their roles, are customers (users) and the administrator (owner). These users are identified based on their experience and technical expertise.

### 2.3.1 Admin

The Administrator is the person or people who will have any and all the privileges of all other user types. They will also have the authority to view



and edit the Webpage the history of the customers who purchased the items. Also, He would be responsible for assigning the price of the items, updating the items in the list, and deleting the items.

### **2.3.2 User**

The users of this online shopping cart application are all customers who would shop to test the application. They would use the webpage most frequently as compared to all other users.

## **2.4 Operating Environment**

The system operates with the following software components and applications: A full internet connection is required for online shopping system and any operating system and a browser like chrome, Mozilla Firefox, and internet explorer, etc.

## **2.5 Design and Implementation Constraints**

### **2.5.1 Hardware Constraints**

The minimum hardware requirement for the system is 128 MB of Ram and a 32-MB hard disk drive.

### **2.5.2 Internet Constraint**

It requires the availability of Internet access at all time. Without connection to the Internet, the system would be futile.

### **2.5.3 JavaScript Constraint**

Newest versions of the browser should be available which supports JavaScript.

### **2.5.4 Browser Constraint**

Installation of a web browser is necessary for the working of Online Shopping Website. If a browser isn't installed, then a user must install it in his/her laptop, PC, or Smart Phone. Internet Browsers such as Google Chrome, Mozilla Firefox, Microsoft Edge etc.

## **2.6 User Documentation**

To shop online through our website, there is no as such need for any documentation, since it is targeted towards common customers. The GUI environment is user-friendly and understandable.

## **2.7 Assumptions and Dependencies**

### **2.7.1 Assumptions**

- A web browser must be installed on the laptop, PC, or Smart Phone.
- If it is being used on a laptop or Smart Phone then it must be charged.
- If it is being used on a PC then a stable power must be supplied.

### **2.7.2 Dependencies**

Working of Online shopping system depends on internet connection, so the user should have a computer/mobile and good internet connection.

# Chapter 3

## Specific Requirements

### 3.1 External Interface Requirements

#### 3.1.1 User Interfaces

The customer interface will contain three screens. All three screen will have a consistent layout.

1. Home Screen This is the main navigation page. In this screen, page shows a menubar. Each button will redirect the user to a new link to pages of dresses, accessories, and login.
2. Dresses Screen: In this screen user can see a number of dresses and can add them to cart.
3. Accessories Screen: In this screen user can see a number of accessories and can add them to cart.
4. Login: User can login using credentials.
5. Cart: It shows a list of selected items user can also delete items from their cart.
6. Checkout: Here user enter respective details for checkout.

#### 3.1.2 Hardware Interfaces

There are no hardware interfaces in our system as OSS is a website and doesn't require the usage of any hardware component.

## Shopping Store

[Home](#) [Dresses](#) [Accessories](#) [Contact](#) [SignUp](#)



### ACCESSORIES *collection*



#### CUSTOMER CARE

[Shipping & Handling](#)  
[Exchange Policy](#)  
[Order Cancellation Policy](#)  
[Privacy Policy](#)  
[Terms of Use](#)  
[FAQ's](#)

#### MY ACCOUNT

[Sign In](#)  
[Create an Account](#)  
[View Cart](#)  
[My Wishlist](#)

#### COMPANY INFORMATION

[About Us](#)  
[Contact Us](#)  
[Careers](#)  
[Our Store Locations](#)  
[Blogs](#)

#### FOLLOW US



#### WE ACCEPT

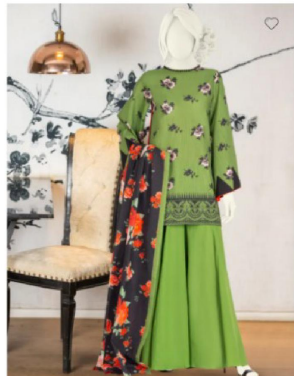


## Shopping Store

[Home](#) [Dresses](#) [Accessories](#) [Contact](#) [SignUp](#)



Price :  
color



price: RS: 200/-  
black lawn dress

### CUSTOMER CARE

[Shipping & Handling](#)  
[Exchange Policy](#)  
[Order Cancellation Policy](#)  
[Privacy Policy](#)  
[Terms of Use](#)  
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### MY ACCOUNT

[Sign In](#)  
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### FOLLOW US



### WE ACCEPT



### **3.1.3 Software Interfaces**

This section lists the requirements that are needed to run the system efficiently. The operating system needed for the system to run effectively, the integrated development environment to develop the system, etc.

- Operating System: Windows (Vista/Windows 7 or above) or MAC OS or Linux OS.
- Web Brower: Google Chrome, Internet Explorer, or Mozilla Firefox.
- IDE for Development (Visual Studio Code)
- Database(Realtime Firebase Database)
- Version Control System (Git, GitHub Desktop)
- Documentation (Latex)
- Use case and Data Flow Diagrams (StarUML)

### **3.1.4 Communications Interfaces**

It is an online shopping website so the user needs a web browser and thus internet access is required for communication over the network and communication between the servers.

## **3.2 Functional Requirements**

### **3.2.1 Home Page**

#### **User Requirement**

1. The user will access the home page of OSS.

#### **System Requirement**

- (a) The user will click on any of the four options given on menu bar of home page.
  - option 1 is home.
  - option 2 is dresses.
  - option 3 is accessories.
  - option 4 is signin.

- (b) After clicking on any of the aforementioned options, the user will be redirected to a new page as per the selection.
- (c) User can also see advertisement on home page.

### **3.2.2 Shop now**

#### **User Requirement**

1. The user can buy dresses or accessories.

#### **System Requirement**

- (a) The user can view the list of items with their details.
- (b) Each item have a button add to cart to select the items for buying.
- (c) User can also adjust the quantity of each item.

### **3.2.3 Checkout**

#### **User Requirement**

1. The user can successfully checkout.

#### **System Requirement**

- (a) User see the list of selected items.
- (b) The user will click on the option.
  - option 1 checkout.
- (c) The user will redirect to the page for taking the shipping details of the customer.

### **3.2.4 Login**

#### **User Requirement**

1. The user can login to their account.

#### **System Requirement**

- (a) Two textboxes are display on the screen.
  - textbox 1 user name.

- textbox 2 password.
- (b) These credentials should be verified from the stored database.

<b>Function</b>	<b>Shop now</b>
<b>Description</b>	Customer will be routed to dresses or accessories page as per selection where customer will be able to view the desired items
<b>Input</b>	Click button to display Dresses or accessories page
<b>Source Input</b>	Mouse /Touch input
<b>Output</b>	Dresses or accessories page is displayed as per selection by the customer
<b>Action</b>	The customer view's the advertisement of dresses and accessories and selects the shopnow button as per his/her selection if the shopnow button for dresses is selected, dresses section is displayed otherwise accessories page is displayed
<b>Pre-condition</b>	The customer must be present on the homepage of the online shopping page
<b>Post-condition</b>	----



<b>Function</b>	<b>Add to cart</b>
<b>Description</b>	selected items can be saved in cart and the quantity of each item can be adjusted.
<b>Input</b>	The customer adds item to cart which he wants to buy .
<b>Source Input</b>	Mouse/cursor/touch input.
<b>Output</b>	Items are added to cart which can be viewed or edit later at checkout time.
<b>Action</b>	The customer view's the selected items and then those items which the customer wants to buy are added to the cart.
<b>Pre-condition</b>	The item added to cart must be present in the database.
<b>Post-condition</b>	The item is added to cart and the total cost is added to the previous amount.

<b>Function</b>	<b>SignIn /SignUp</b>
<b>Description</b>	Customers can signin /signout using their name and password.
<b>Input</b>	Name and Password /Confirm password in case of Signup.
<b>Source Input</b>	Customers give input through keyboard and mouse.
<b>Output</b>	Confirmation message is displayed.
<b>Action</b>	The credentials added must match credentials from stored database if matched the customer should be signed in else error message should be prompted. In case of signup new credential should be saved in database.
<b>Pre-condition</b>	Data must be saved in database for signin.
<b>Post-condition</b>	New credentials should be saved in case of signup .

<b>Function</b>	<b>Checkout</b>
<b>Description</b>	At the time of checkout customer enter the shipping details and the bill is generated.
<b>Input</b>	Shipping details are entered by the customer.
<b>Source Input</b>	Customers give input through keyboard and mouse.
<b>Output</b>	Confirmation message should be displayed.
<b>Action</b>	Check whether the customer entered proper shipment details or not, then the confirmation message appears.
<b>Pre-condition</b>	Items must be selected (i.e cart should not be empty). Customer must sign in to complete this action.
<b>Post-condition</b>	Items The shipping details are to be added in the database.

### 3.3 Behaviour Requirements

#### 3.3.1 Use Case View

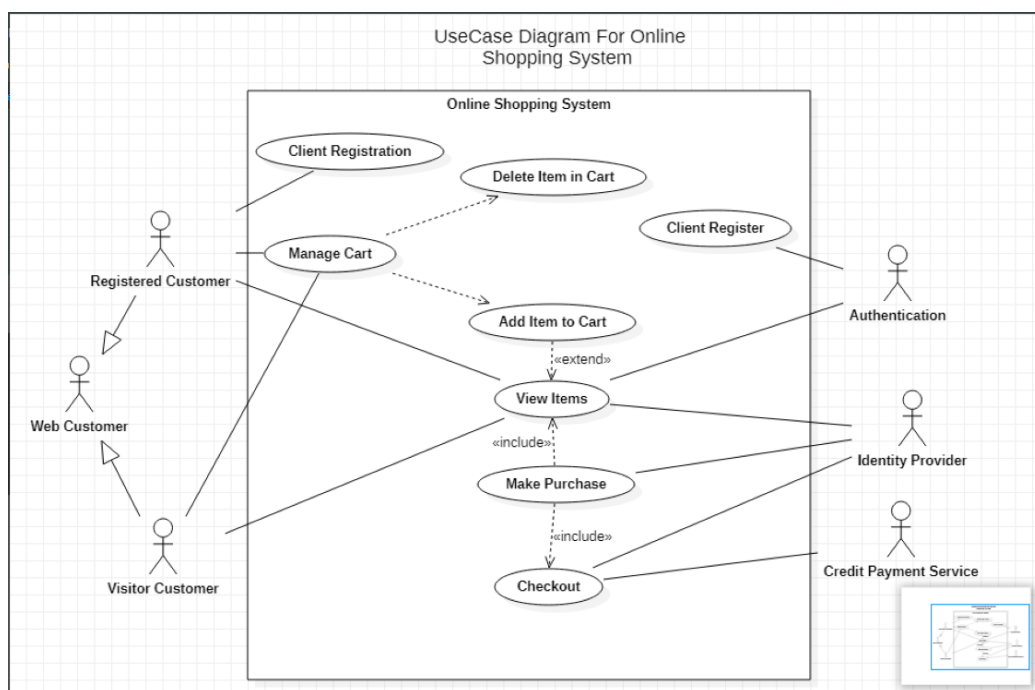


Figure 3.1: USECASE DIAGRAM

# Chapter 4

## Other Non-Functional Requirements

### 4.1 Performance Requirements

This section lists the performance requirements expected from the online shopping system.

- The users shall be able to add an item to the
- cartcart in fewer than 5 seconds.
- The users shall be able to view information about an item in fewer than 5 seconds.
- The users shall be able to check out the items in the shopping cart within 10 seconds after completing the order form.
- The navigation between pages shall take fewer than 5 seconds.
- The application shall be able to do a validation check on the information provided in the user-authentication form and the place-order form to avoid false or incomplete information.

### 4.2 Safety and Security Requirements

**Safety:** There are no safety requirements for this tool other than the normal hazards of a computer system, like, using the tool for too long which might cause a strain to the eyes.

**Security:** System will allow only valid users to access the system when

making purchases. Access to any system resource will depend upon user's designation. Security is based upon the individual username and password.

## **4.3 Software Quality Attributes**

### **4.3.1 Adaptability**

There can be a change in the information stored in the database as user might add item to cart but later on delete it.

### **4.3.2 Availability**

The web application should be available anywhere and anytime.

### **4.3.3 Correctness**

The ordered items should be received by the specified customer to ensure this we maintain database for the list of selected items by respective customer.

### **4.3.4 Reliability**

Data validation and verification need to be done at every stage of activity where it is necessary.

### **4.3.5 Interoperability**

The data is transferred from the database to the web server and vice versa. This way data is transferred from one part of the system to another.

### **4.3.6 Portability**

Software can be easily used on devices and would work smoothly according to the requirement.

### **4.3.7 Useability**

Interface of the software must be easy to use. It would not be complex since common customers have a view, so interface should be simple and user-friendly.

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## **3.1 External Interface Requirements**

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- Web Brower: Google Chrome, Internet Explorer, or Mozilla Firefox.
- IDE for Development (Visual Studio Code)
- Documentation (Latex)
- Use case and Data Flow Diagrams (StarUML)
- State management (Redux)
- UI (bootstrap)
- Version Control System (Git, Sourcetree)

## **3.2 Functional Requirements**

### **3.2.5 WishList**

#### **User Requirement**

1. The user can maintain the wishlist.

#### **System Requirement**

1. Their should be add to wishlist button on product details page.
2. user can add that product to wishlist by clicking add to wishlist button.
3. user can visit his wishlist by clicking the wishlist logo.
4. user can also remove products from his wishlist.