CA TEST- III

Unit I

Overview of HTML, CSS and JavaScript: Fundamentals of HTML, Creating Style Sheet, CSS Box Model Border properties, padding properties, Margin properties, Introduction to JavaScript, Working with Web Forms and validating user input, JavaScript functions and events, JavaScript Timing Events, JavaScript Image Slideshow, Recursive function in JavaScript, Error handling in JavaScript **Unit II**

Document Object Model in JavaScript : Document Object Model, Programming HTML DOM with JavaScript, Assigning event handlers in JavaScript using DOM object property, addeventlistener and removeeventlistener in JavaScript, Event bubbling in JavaScript, Image gallery with thumbnails in JavaScript

Unit III

Working with jQuery and JSON : Basics of jQuery, jQuery Events, Benefits of using CDN, jQuery Selectors, jQuery input vs :input, jQuery DOM manipulation methods, jQuery Elements, Working with JSON Objects, JSON Arrays, Nested JSON object, Conversion of JSON object to string, Conversion of string to JSON object

Unit IV

Working with Bootstrap : Introduction to Bootstrap, Setting up Bootstrap, Bootstrap Grid System, Bootstrap Image Gallery, Bootstrap Typography, Bootstrap Blockquotes and Lists, Bootstrap Code Blocks, Bootstrap Table Classes, Bootstrap Button Classes, Bootstrap Dropdown, Create a customized application using Bootstrap

Unit V

Basics of Angular : Introduction to Angular, features, Installation, architecture, basics of TypeScript, modules, components, directives-ngIf, ngStyle, Databinding- string interpolation, event binding, property binding.

Unit VI

Handling forms and HTTP requests in Angular : Forms- reactive forms, template-driven forms, using angular pipes to transform output, HTTP requests, using services and Dependency Injection

Note : Kindly find the Documentation models and client approval form.

client approval.pdf

"SMART CHOICE"

Software Requirements Specification

01-11-2023

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12104809

Prepared for
Continuous Assessment 3 Autumn
2023

Revision History

Date	Description	Author	Comments
<date>	<Version 1>	<Your Name>	<First Revision>

Table of Contents

1. __Introduction__

__"Smart Choice"__ is an online shopping website which is created using HTML, CSS, JavaScript, and various front-end frameworks such as Bootstrap and Angular. HTML is used to structure the content of the website, while CSS is used to style the website's layout and appearance. JavaScript is used to add interactive features to the website, such as the ability to add items to a cart and process payments. Bootstrap is a popular front-end framework that provides a collection of pre-designed components and templates, making it easier to create a responsive and visually appealing website. Angular is another front-end framework that is used for building complex applications with components-based architecture.

The main objective of this application is to make it interactive and its ease of use. It would make searching, viewing and selection of a product easier. It contains a sophisticated search engine for users to search for products specific to their needs.

1.1 __Purpose__

The purpose of __" Smart Choice"__ website is to provide a platform for consumers to conveniently browse and purchase products or services over the internet. Online shopping websites offer several benefits, including:

- __Convenience:__ Customers can shop from anywhere and at any time, without the need to visit physical stores. This saves time and effort.
- __Wide Selection:__ Online shopping websites typically offer a vast range of products from various brands and categories, giving customers the opportunity to explore and compare different options.
- __Competitive Pricing:__ Online retailers often offer competitive prices and discounts due to lower overhead costs compared to brick-and-mortar stores.
- __User Reviews:__ Many online shopping websites feature customer reviews, allowing potential buyers to make informed decisions based on the experiences and feedback of others.
- __Easy Price Comparison:__ Online shopping enables customers to easily compare prices across different websites, helping them find the best deals and save money.
- __Home Delivery:__ Online shopping websites typically offer convenient home delivery options, allowing customers to receive their purchases directly at their doorstep.
- __Accessibility:__ Online shopping is accessible to people who may have mobility issues or live in remote areas with limited access to physical stores.

Overall, the purpose of this shopping website is to provide a convenient and efficient way for consumers to browse, compare, and purchase products or services from the comfort of their homes.

1.2 Scope

"Smart Choice" can offer a wide range of functionalities and benefits to its users. Here are some examples of what the software product(s) of the website that will typically do:

- **Product Catalogue:** The website will provide a comprehensive catalogue of products, including images, descriptions, prices, and other relevant details. Users can browse and search for products based on different categories, keywords, or filters.
- **User Registration:** The website will allow users to create accounts and log in securely.
- **Shopping Cart:** Users can add products to their shopping carts while continuing to browse the website. The website will keep track of the selected items, quantities, and prices until the user is ready to proceed to checkout.
- **Free Shipping:** This enhances customer satisfaction. It eliminates the frustration of unexpected costs and adds value to the shopping experience. Satisfied customers are more likely to return for future purchases and recommend the retailer to others, leading to strong brand loyalty and positive word-of-mouth marketing.
- **Customer Support:** The website will include customer support features such as FAQs, live chat, or contact forms, allowing users to seek assistance if they have any questions or issues with their orders.

  The current system is confined only to the shopping cart process. It can be extended to have a easy to use check out process.

1.3 Definitions, Acronyms, and Abbreviations

HTML – Hyper Text Markup Language

CSS- Cascading Style Sheets

JavaScript (JS)- Programming language used to create interactive and dynamic elements on websites.

Bootstrap, AngulaR, HTTPS(Hypertext Transfer Protocol Secure)

1.4 References

https://www.w3schools.com/

https://stackoverflow.com/

https://cdnjs.cloudflare.com/

https://angular.io/tutorial

https://getbootstrap.com/

http://help.github.com/ignore-files/

1.5 <u>Overview</u>

An online shopping website is a platform that allows users to browse and purchase clothes from the comfort of their homes. These websites typically offer a wide range of clothing options for men, women, and children, including various styles, sizes, and brands.

When you visit an online shopping website, you can explore different categories such as tops, bottoms, dresses, shoes, and accessories. Each category may have further subcategories to help you narrow down your search. You can browse through product listings, view images, read descriptions, and check for available sizes and colours.

Once you find a clothing item that you like, you have the option to add it to your shopping cart. The shopping cart acts as a virtual container where you can temporarily store your selected items before proceeding to the checkout process. This allows you to continue browsing and adding more items to your cart until you are ready to complete your purchase.

When you are ready to check out, you can review the items in your cart, make any necessary modifications, and proceed to the payment stage. Online shopping websites usually provide various payment options, such as credit/debit cards, digital wallets, and sometimes cash on delivery, to facilitate secure and convenient transactions.

After completing the payment, you will receive a confirmation of your order, along with an estimated delivery date. The website will typically provide order tracking functionalities so that you can monitor the status of your package until it arrives at your doorstep.

In addition to browsing and purchasing, online shopping websites often offer additional features. These may include customer reviews and ratings for products, size guides to help with determining the correct size, wish lists to save items for future reference, and customer support channels to address any queries or concerns.

2. <u>General Description</u>

This website is built using HTML, CSS, JavaScript, Bootstrap, and Angular, requires several factors to be considered for its successful development and functioning. These factors, while not specifying specific requirements, help in understanding the overall requirements of the website. This Online shopping website is designed to allow people to browse and purchase products from the comfort of their own homes. This website provides a platform where sellers can list their products, and customers can browse through the available options, add items to their cart, and make a purchase.

2.1 <u>Product Perspective</u>

This subsection of the SRS puts the product into perspective with other related products or projects. (See the IEEE Guide to SRS for more details).

The online shopping system provides the facility of 'Buying' items. All payment gateways are allowed. The user is allowed to add multiple choices in the cart and wish to checkout accordingly. This product aimed towards people who wish to save time and energy by not going to the shop instead ordering for products sitting at home. Also, some products may not be available in the store as a person, So, as a concern the proposed system is a solution to carry out buying/selling products online.

2.2 <u>Product Functions</u>

This subsection of the SRS should provide a summary of the functions that the software will perform.

- Website browsing: Users can visit an online shopping website through their computers or mobile devices. They can explore different categories of products such as clothing, shoes, etc. for men and women
- Product search: Users can search for specific products using keywords or browse through various categories.
- Product details: Each product listing includes details such as product images, descriptions, specifications, customer reviews, and ratings. Users can read this information to make an informed decision about whether to purchase the product.
- Adding products to the cart: If users find a product they want to buy, they can add it to their virtual shopping cart. The cart keeps track of the selected items and their quantities.
- Checkout process: Once users have finished shopping, they can proceed to the checkout page. Here, they enter their shipping address, payment details, and any applicable discount codes. The website then processes the payment securely.
- Customer can view the products and order the items that they choose to buy.

2.3 <u>User Characteristics</u>

This subsection of the SRS should describe those general characteristics of the eventual users of the product that will affect the specific requirements. (See the IEEE Guide to SRS for more details).

There are 2 kinds of users for this proposed system.

- **Administrators:** Administrators are the individuals who have the authority to add or administer the products in the system. They are responsible for managing the product inventory, updating product information, pricing, and other related details. Administrators have access to the backend of the system, typically through a secure login, where they can make changes, add new products, or perform administrative tasks.

- **End Users/Customers:** End users or customers are the individuals who visit the website or online platform and purchase products online. They are the target audience of the system and play a crucial role in generating sales. End users interact with the front-end of the system, browsing through product listings, searching for items, adding products to their shopping carts, and making online payments.

2.4 General Constraints

This subsection of the SRS should provide a general description of any other items that will limit the developer's options for designing the system. (See the IEEE Guide to SRS for a partial list of possible general constraints)

- There is no maintainability of backup so availability will get affected.
- Limited to HTTP/HTTPS.
- Real-Life credit card banking and validation is not implemented.
- No multilingual support.
- This website has been exclusively crafted utilizing front-end development techniques, rendering the backend infrastructure unnecessary in its entirety.
- Software does not require any specific operating system.
- A computer , mobile, or any electronic device is required to open a browser along with proper internet connectivity.

2.5 Assumptions and Dependencies

This subsection of the SRS should list each of the factors that affect the requirements stated in the SRS. These factors are not design constraints on the software but are, rather, any changes to them that can affect the requirements in the SRS. For example, an assumption might be that a specific operating system will be available on the hardware designated for the software product. If, in fact, the operating system is not available, the SRS would then have to change accordingly.

In the proposed system, an administrator role has already been created and managers are not able to act as customers. Additionally, users are not able to edit their account information. This helps maintain the integrity and security of the system, ensuring that user information is accurate and controlled by the administrators.

Furthermore, the details related to product information, customer payments, and service transactions are provided manually. This means that administrators are responsible for inputting and managing these details within the system. These tasks are predefined, meaning that administrators follow predetermined procedures and guidelines when handling product information, customer payments, and service transactions.

By having these predefined roles and tasks, the system can have a structured and standardized approach, ensuring consistency and accuracy in the handling of product details.

The customer must have a computer with a browser and have Internet connectivity.

3. Specific Requirements

This will be the largest and most important section of the SRS. The customer requirements will be embodied within Section 2, but this section will give the D-requirements that are used to guide the project's software design, implementation, and testing.

Each requirement in this section should be:
- Correct
- Traceable (both forward and backward to prior/future artifacts)
- Unambiguous
- Verifiable (i.e., testable)
- Prioritized (with respect to importance and/or stability)

- Complete
- Consistent
- Uniquely identifiable (usually via numbering like 3.4.5.6)

Attention should be paid to the carefuly organize the requirements presented in this section so that they may easily accessed and understood. Furthermore, this SRS is not the software design document, therefore one should avoid the tendency to over-constrain (and therefore design) the software project within this SRS.

The developed system is designed to run on any platform that supports a web browser. This includes platforms such as Unix, Linux, Mac, and Windows. As long as the platform has a compatible web browser, the system will be accessible.

The system utilizes HTML,CSS, JavaScript, Bootstrap, and Angular as its core technologies.

Various interfaces for the product could be:

1. Home page
2. Shop
3. About
4. Add to Cart
5. Sign In

3.1 External Interface Requirements

3.1.1 User Interfaces

The user interface of the system aims to be as user-friendly as possible, ensuring a seamless experience for users. To achieve this, the following design considerations have been implemented:

Fast and Easy Loading: The system utilizes efficient fonts and buttons that are designed to load quickly on web pages. This helps to optimize the performance and speed of the website.

Lightweight Pages: The pages are designed to be kept lightweight in terms of the amount of data they contain. By minimizing unnecessary content and optimizing images and assets, the load time of each page is reduced.

Home Page Display: The starting page of the system is the home page of the store. Here, all the available products are displayed, allowing users to easily browse and explore the product offerings.

Add to Cart Functionality: Each product listing on the home page will have an "Add to Cart" button. Users who are logged in to their accounts can click this button to add the product, along with the specified

quantity entered in the text box, to their cart. This feature streamlines the purchasing process and encourages users to add items to their cart.

Cart View and Purchase: Logged-in users have the option to view the items in their cart. They can access a dedicated page that displays the details of the items in their cart. From this page, users can proceed to purchase the items, completing the transaction.

By incorporating these design elements, the system aims to provide a user-friendly interface that is intuitive, efficient, and encourages users to browse, add items to their cart, and make purchases. The focus on fast loading and streamlined processes enhances the overall user experience.

3.1.2 Hardware Interfaces

Processor: Intel Pentium 4 or later

RAM: 2GB

NIC: For each party

Internet connection: Required

3.1.3 Software Interfaces

Operating System: Windows , Linux , MAC ,etc.

Development Tools: HTML,CSS, Java Script, Bootstrap, JSON.

3.1.4 Communications Interfaces

Individuals can effortlessly access the system through a web browser and an active internet connection, thereby gaining access to a plethora of online marketplaces and clothing retailers. These virtual platforms boast an extensive assortment of fashionable apparel catering to various tastes and preferences. Users can effortlessly peruse through a wide array of clothing options, facilitated by intuitive navigation, visually appealing interfaces, and seamless user experiences.

3.2 Functional Requirements
The functional requirements of the Smart Choice online shopping website include the below mentioned features.

3.2.1 < Sign-In #1>
3.2.1.1 Introduction
A Sign-in form on an online shopping website serves as the gateway for registered users to access their accounts. It requires users to input their unique credentials, typically a username or email address, along with a password. Upon submission, the login form verifies the entered information against the stored user data for authentication.
3.2.1.2 Inputs
User is required to give the username and password in order to sign-in to the website.
3.2.1.3 Processing
Users input would be processed and checked.
3.2.1.4 Outputs

User is successfully able to sign-in with a username and password.

3.2.2 <View the products #2>

3.2.2.1 Introduction

User can view various clothing like t-shirts for men, kurtas for women along with the ratings

3.2.2.2   Inputs

User is required to scroll down to view different types of clothing.

3.2.2.3 Processing

The webpage loads different varieties of t-shirts and clothing's according to the user.

3.2.2.4 Outputs

User will be able to various types of clothing like animal t-shirts, floral t-shirts, shaded t-shirts , and a large variety of styles

3.2.3 <Add to cart #3>

3.2.3.1 Introduction

In a shopping website, adding items to the cart is a fundamental functionality that allows users to collect desired products for purchase

3.2.3.2   Inputs

User is required to click on the add to cart symbol beside the product that they like and wish to buy.

3.2.3.3 Processing

By clicking on the add to cart symbol, the product gets added to the cart.

3.2.3.4 Outputs

The product gets added to the cart successfully.

3.2.3 < My Wishlist #4>

3.2.4.1 Introduction

User can be adding their favourites to their Wishlist so that they can order or view those products later some other time.

3.2.4.2   Inputs

User is required to add the product to Wishlist

3.2.4.3 Processing

Product will be adding to Wishlist.

3.2.4.4 Outputs

User can view the products added to the Wishlist from MY WISHLIST

3.2.3 < About Us #5>

3.2.5.1 Introduction

User can view about the webpage by clicking on the About button.

3.2.5.2   Inputs

User is required to click on the About button present in the header.

3.2.5.3 Processing

The webpage loads the page to show About.

3.2.5.4 Outputs

User can view About the webpage .

3.5 Non-Functional Requirements

- Secure access to customers confidential data.
- 24 x 7 availability.
- Better component design to get better performance at peak time.

3.5.1 Performance

3.5.2 Reliability

3.5.3 Availability

3.5.4 Security

3.5.5 Maintainability

3.5.6 Portability

3.7 Design Constraints

This basic website has been created using front-end tools, which focus primarily on the visual and interactive aspects of a website. Front-end tools encompass languages like HTML (Hypertext Markup Language), CSS (Cascading Style Sheets), and JavaScript, along with frameworks and libraries like Bootstrap , JSON. These tools enable developers to craft aesthetically pleasing and user-friendly interfaces, with attention to detail and responsive design.

However, with a deeper understanding of backend development, an even more comprehensive and robust website can be developed. The knowledge of backend technologies such as server-side programming languages (e.g., Python, Ruby, PHP) and frameworks (e.g., Django, Ruby on Rails, Laravel) allows for the creation of dynamic and interactive websites.

3.9 Other Requirements

Additionally, Backend development plays a critical role in transforming a basic webpage into a truly well-rounded website, enhancing its functionality and delivering a seamless user experience. By leveraging backend technologies, developers can implement robust server-side logic and data management capabilities, ensuring the website operates smoothly and efficiently.

4. <u>Analysis Models</u>

Welcome to the official website of "Smart Choice." This beautifully crafted homepage showcases the seamless integration of cutting-edge front-end technologies, including HTML, CSS, JavaScript, JSON,
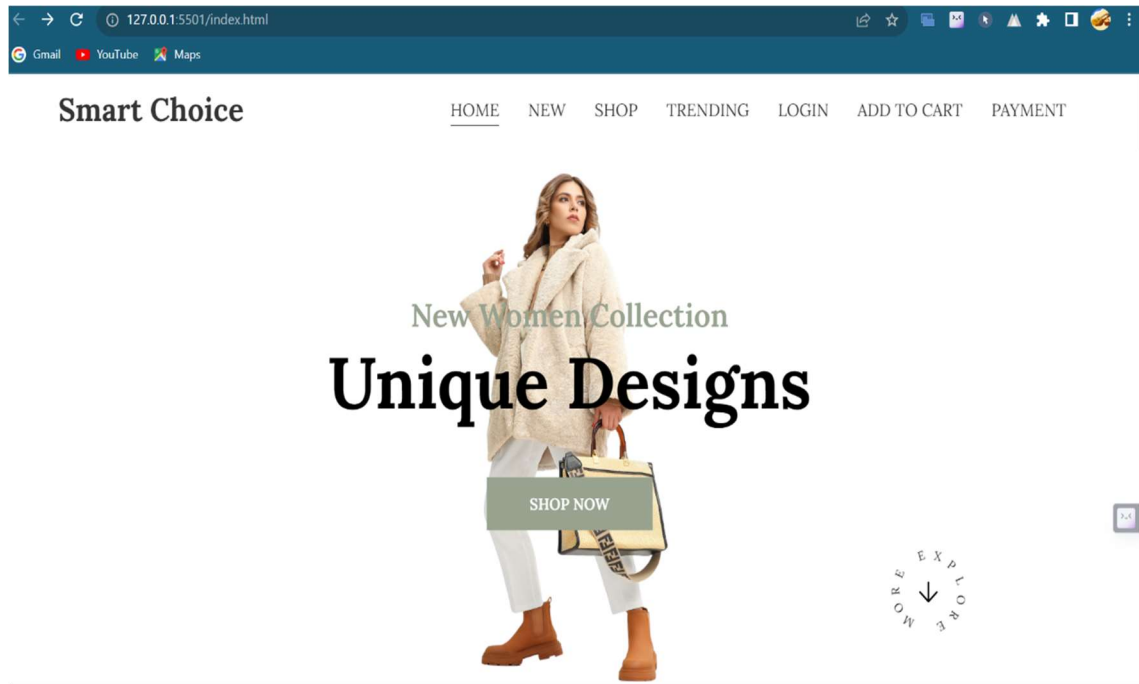
Bootstrap. Navigate through our engaging sections, such as New, Shop, Trending, Login, Add to Cart, Payment and take advantage of our convenient Sign In option. Experience the elegance and functionality of our website as you explore our wide range of products and valuable content.

Indulge in a sartorial feast with our exquisite selection of apparel, meticulously curated to cater to your discerning taste. Each garment boasts its own unique allure and meticulously crafted details that are sure to captivate. Discover the perfect fusion of style and affordability as you peruse our diverse range of clothing, with transparent pricing and comprehensive customer ratings. Elevate your wardrobe with our exceptional offerings and immerse yourself in a world of fashion-forward choices. User can choose various clothes and add to cart. Embrace the art of dressing with our collection, where quality meets design and fashion knows no bounds.
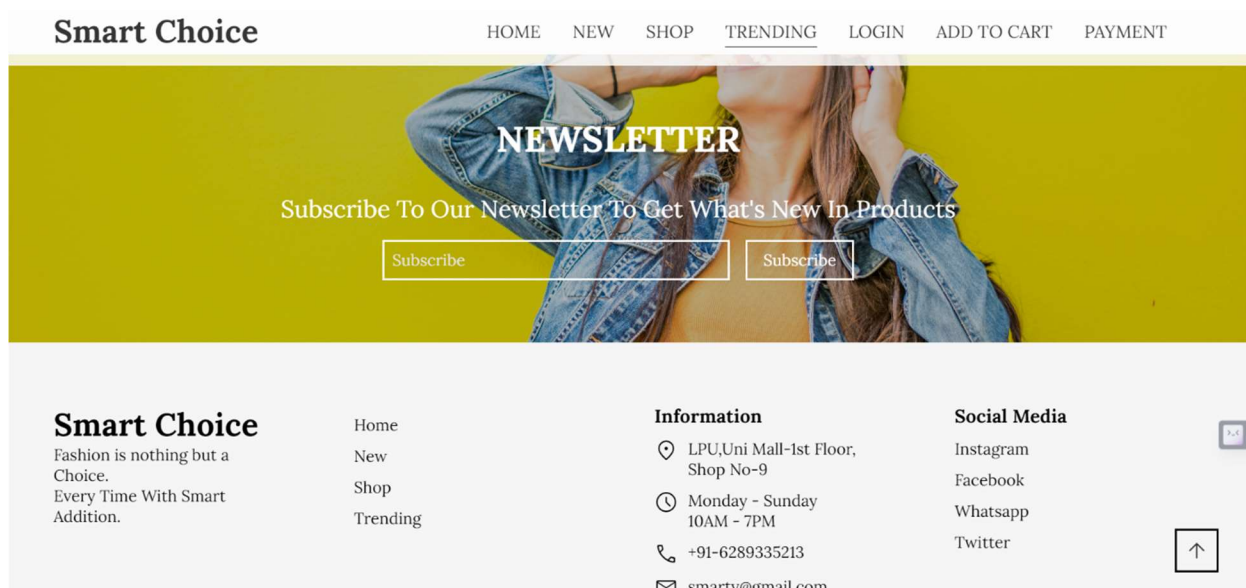
Unlock a world of irresistible savings with our exclusive limited-time offer: Up to an astounding 70% to 80% off on all T-shirts and accessories! Embrace this unrivalled opportunity to revamp your wardrobe with exceptional style and unbeatable prices.

Leveraging the power of HTML, CSS, and JavaScript, an array of meticulously-crafted components has been seamlessly integrated into the Angular framework. These dynamic elements elevate the user experience by adding visually stunning and interactive features to your web application.

The versatility and responsiveness of our website are enhanced by the implementation of Bootstrap, a powerful front-end framework. With Bootstrap's fluid grid system, our website effortlessly adapts to various screen sizes, including mobile resolutions, ensuring a seamless browsing experience. The mobile-friendly design intelligently adjusts the layout, optimizing content visibility and readability on smaller devices. This responsiveness is achieved through the implementation of CSS media queries, providing an aesthetically pleasing and user-friendly interface across all screen sizes. Embrace the convenience and accessibility of our website as it seamlessly fits into mobile resolutions, courtesy of Bootstrap's cutting-edge technology.

4.1 Data Flow Diagrams (DFD)

1st Level User side DFD
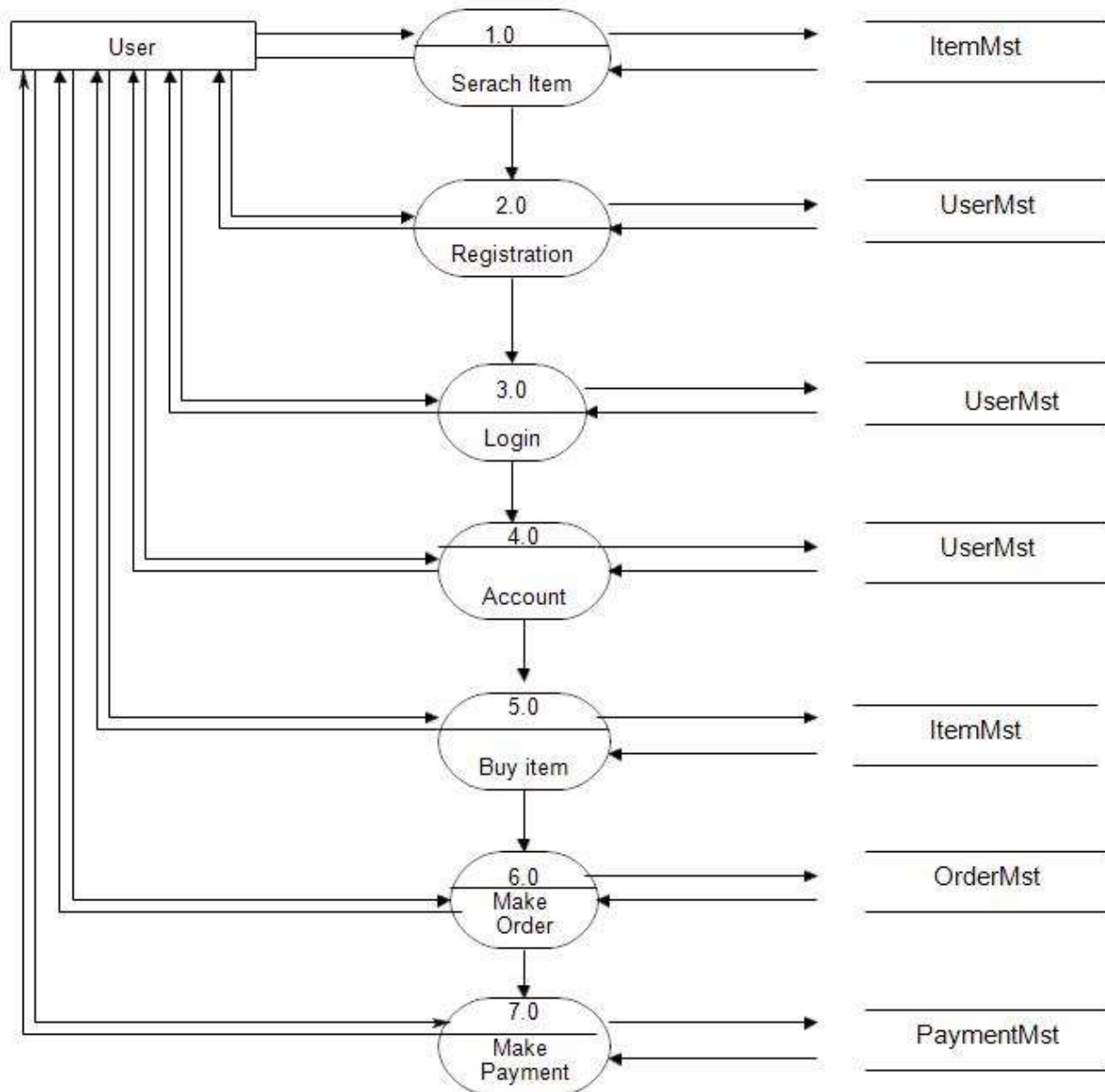
2st Level User DFD - (5.0)
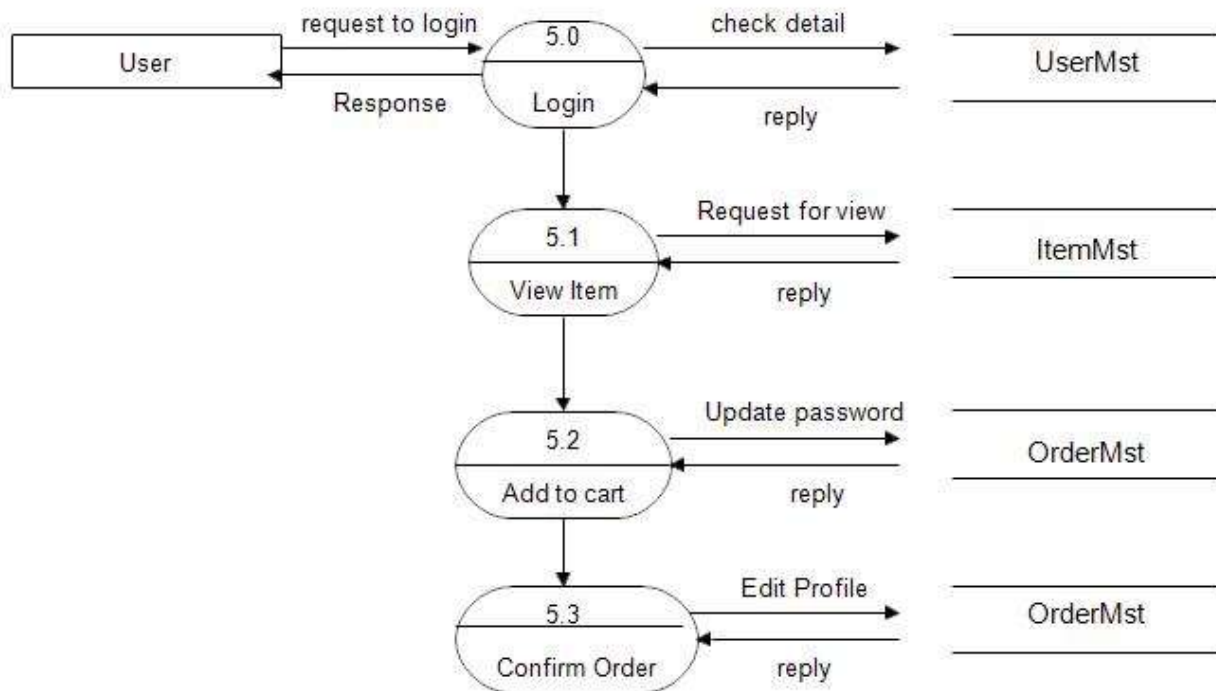
A. Appendices

Appendices may be used to provide additional (and hopefully helpful) information. If present, the SRS should explicitly state whether the information contained within an appendix is to be considered as a part of the SRS's overall set of requirements.

Example Appendices could include (initial) conceptual documents for the software project, marketing materials, minutes of meetings with the customer(s), etc.

A.1 Appendix 1 :

To Be Determined List Appendix 1: Username and Password

- Each user must have a distinct username.
- Every user's password must be exclusive and not shared with others.
- The password you choose must meet the following criteria: it should be between 6 and 20 characters long, contain at least one letter, and include at least one digit.
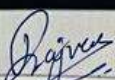
A.2 **Appendix 2**

Information required:

- Provide your email address and create a password. Please ensure that your password meets the following criteria: it should be between 6 and 20 characters long, contain at least one letter, and include at least one digit.
- We also need the following details for your membership:
    - Full Name
    - Surname

SIMPLE PROJECT APPROVAL FORM TEMPLATE

PROJECT NAME	SMART CHOICE
JOB LOCATION	LOVELY PROFESSIONAL UNIVERSITY , 144411

EST. START DATE	14-10-23	**EST. FINISH DATE**	01-11-23
PROJECT LEADER	DEEPIKA CHINTADA	**COMPANY**	SMART CHOICE
CONTACT NAME	RAJVEER GILL	**ADDRESS**	UNI-MALL, 1st FLOOR, LOVELY PROFESSIONAL UNIVERSITY, PHAGWARA, INDIA
PHONE	+91- 6289335213		
EMAIL	gillraj523@gmail.com		

SUMMARY	"SMART CHOICE" IS A ONLINE SHOPPING WEBSITE WHICH IS CREATED USING VARIOUS FRONT-END FRAMEWORKS.
DESIRED OUTCOME	A SIMPLE ONLINE WEBSITE WITH VARIOUS VARIETIES OF CLOTHING AND VARIOUS OFFERS.
ACTION TO COMPLETION	TO VIEW VARIETY OF CLOTHING FOR MEN AND WOMEN AND TO ADD TO CART.
BENEFITS OF PROJECT	• BUILD A SKILLED AND RESPONSIVE FRONT-END WEBPAGE. • STAY AHEAD WITH CURRENT TRENDS.
PROJECTED SCHEDULE	DISCOVERY AND PLANNING : 15-10-23 TO 20-10-23 (ROUGHLY) DESIGN AND DEVELOPMENT : 22-10-23 TO 30-10-23 (ROUGHLY) TESTING : 31-10-23 TO 1-11-23 (ROUGHLY)
PROJECTED BUDGET	ZERO BUDGET
PROJECTED TEAM AND RESOURCE REQUIREMENTS	OPERATING INDIVIDUALLY WITHIN A PROJECT TEAM. RESOURCE REQUIREMENTS : FRAMEWORKS LIKE HTML, CSS, JS, BOOTSTRAP, ANGULAR IN VS CODE.
PROPOSAL MAY BE WITHDRAWN IF NOT ACCEPTED BY DATE OF	02-11-23

ACCEPTANCE OF PROPOSAL

AUTHORIZED CLIENT SIGNATURE	*Rajveer*	**DATE OF ACCEPTANCE**	15-10-23