Topic – Shopp-E
Domain – E-Commerce

Project Abstract and Problem Statement:

Application to be developed is an E-Commerce Web Application. The product will provide platform for several individuals and companies to sell their products. The application is intended to be small and resource efficient. Application will implement all the CRUD operations on database with strict constriction to DRY principle. The goal of our application is to provide a quick and easy to use interface for all users. The system should be available to be used with the least number of variable factors that can affect it.

Online shopping application has 3 users:
1. Admin
2. Retailer
3. User

UI will be efficient and user-friendly with simple transitions and minimal fields in forms. User will be provided with a search bar to further ease the process of getting an eye on his need from the application. Also, breadcrumbs will be enabled on all navigations on an attempt to eliminate memory constraints and implementing forgiveness. Several features that'll help the user to customize his/her window or view (example sort, filter) will be implemented. Screen-reader will be implemented for visually impaired users. The application will be totally responsive thereby making it mobile.

Application will be enhanced to ease the cumbersome process of shopping from one website and comparing on the other. Equipping compare will help the user to better decide on their choice. User can compare up to four products of a single category. The system will be available to all users but compare and checkout component will require user to signup/login. Signup and login will contain minimal fields and data fed in the form will be secure. The cart page, along with other pages will also be dynamic. The user will have the option to update quantity on the cart page i.e. before he proceeds to checkout. Admin panel will also be integrated, so that the admin can decide/update on products, their quantity, revised prices and all other provisions that'll be needed by the companies that are using the platform to sell their products.

The product will be perennially exposed to enhancement. The goal of our system is not just to sell the product to the buyer, but also to make him aware of what he is buying. UI will be user-friendly, working will be efficient and data will be secure. The system will allow user to shop around with ease and open doors to many small retailers that would never be in business if they had to incur the high cost of owning a brick and mortar store.

Mandatory Modules:

1. Login: The user can login using email and password. If the user fails to enter correct email and password, the Forgot Password option can be clicked which will allow the user to reset the password with OTP. The user can purchase a product, compare or add to wish list only when he/she logins.

2. Signup: Users should enter their personal details like name, email id, address, mobile number. The user must choose a password for himself which will be used for future logins. The password will be encrypted before being fed in the DB. After successful registration, the user can login to the application.

3. User: The user will be provided with features like sort, filter, on the home page, to ease the search of the product. Sorting can be done either alphabetically based on product name or according to the product price (Low to High and High to Low). Filtering can be done with respect to price or brand of the product.
The user can search for a product by entering a keyword from either of its name or description. While going through the products if the user reaches the end of the scroll bar, the page will be refreshed to display more products. The user can see the magnified image of the product if mouse pointer is hovered on the product image.
If the user likes a product but does not wish to buy it now, he/she can add it to the wish list.
If a user is in a dilemma as to which product to choose, there is an add to compare option for each product wherein the user can select different products for comparison (maximum 4) from search result page, home page, product page or compare page itself. The user can also remove a product added to compare. A product can be added to cart if the user decides to purchase it. The user can update the quantity of the product using plus minus signs which will auto-update the price. The user can proceed to checkout when he decides to purchase product(s).
The User Profile will display wish list and details of the user.

4. Retailer: A retailer can update(add/modify/delete) stock as and when he wishes. The retailer can view product information and total revenue generated. The retailer has privileges to decide about the pricing of the products.

5. Admin: Admin can view all products and retailers, add or remove a retailer, verify legitimacy of updates done by a retailer. All the updates done by retailers have to be approved by the admin.

Sample Output Screen for reference:

(1) Homepage: Any user can initially see the home page

LOG	Products	Compare	Categories	CART	Login/SignU

Search Bar

Product Image Display
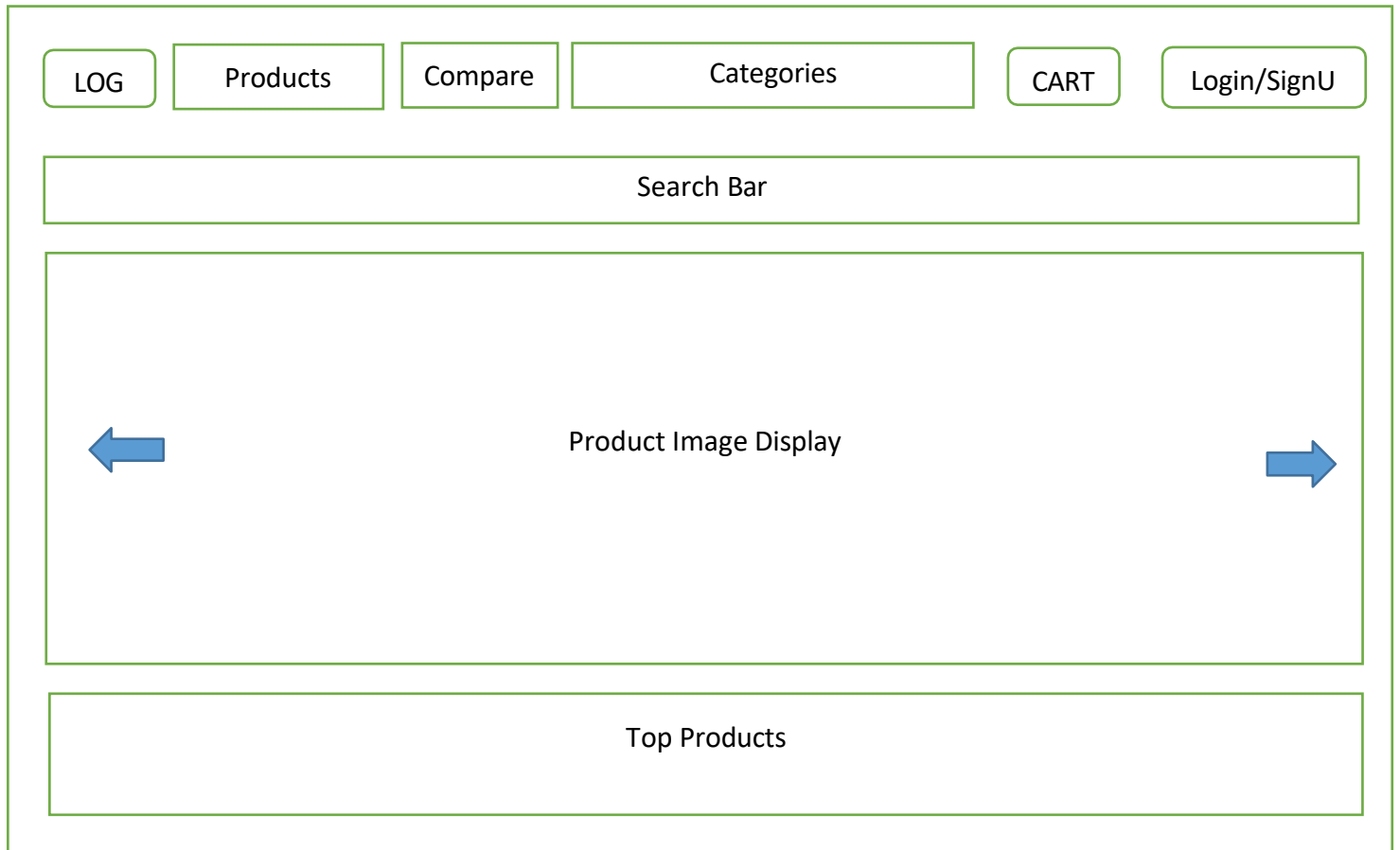
Top Products

(2) Login Page: Registered Users can Login to buy the products and add to wish list.

HEADER

E-Mail Id

Password

LOGIN   **FORGOT**

New user? Register

FOOTER

Forgot Password Page:

HEADER

Enter New Password

Confirm New

Enter OTP Code:

FOOTER

HEADER	

NAME:	YOUR NAME
MOBILE NO:	MOBILE NO
EMAIL ID:	EMAIL ADDRESS
PASSWORD:	PASSWORD
CONFIRM PASSWORD	CONFIRM PASSWORD

REGISTER

ALREADY HAVE AN ACCOUNT? SIGN IN.

FOOTER

(4) Registered User's Dashboard: Once user logs in, user can see the webpage along with the options to make the user profile, wish-list and options to change the password or to log out.

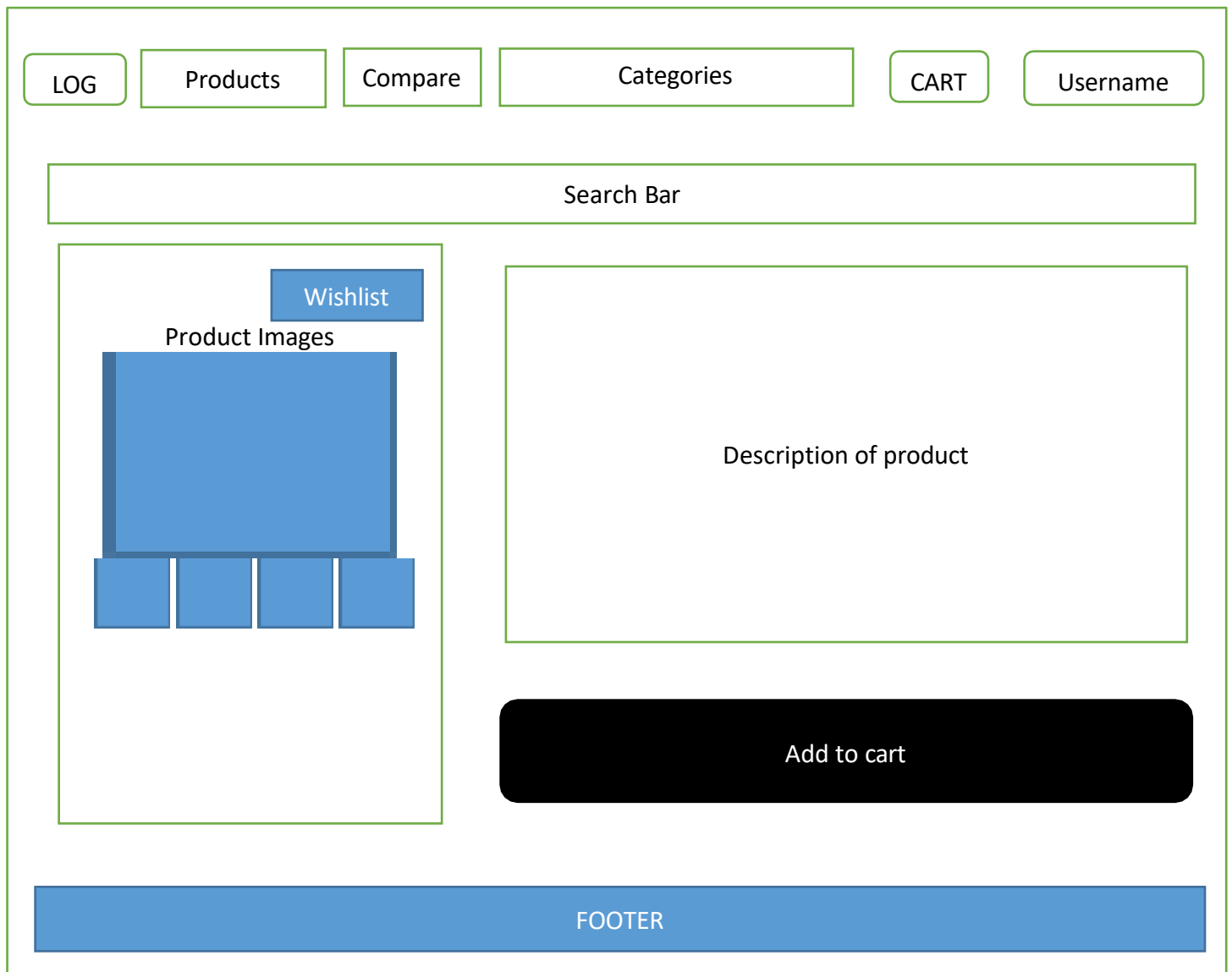| LOG	Products	Compare	Categories	CART	Username

Search Bar

Product Image Display

Top Products

(5) Category wise products display page: Once the user selects a particular category, user will be guided to the list of products available for the selected category along with filtering options like selecting a particular brand or price range, etc.

LOG	Products	Compare	Categories	CART	Username

Search Bar

SORT:

Name

Price

FILTER

Brand names

Price

PRODUCT 1

PRODUCT 2

Footer
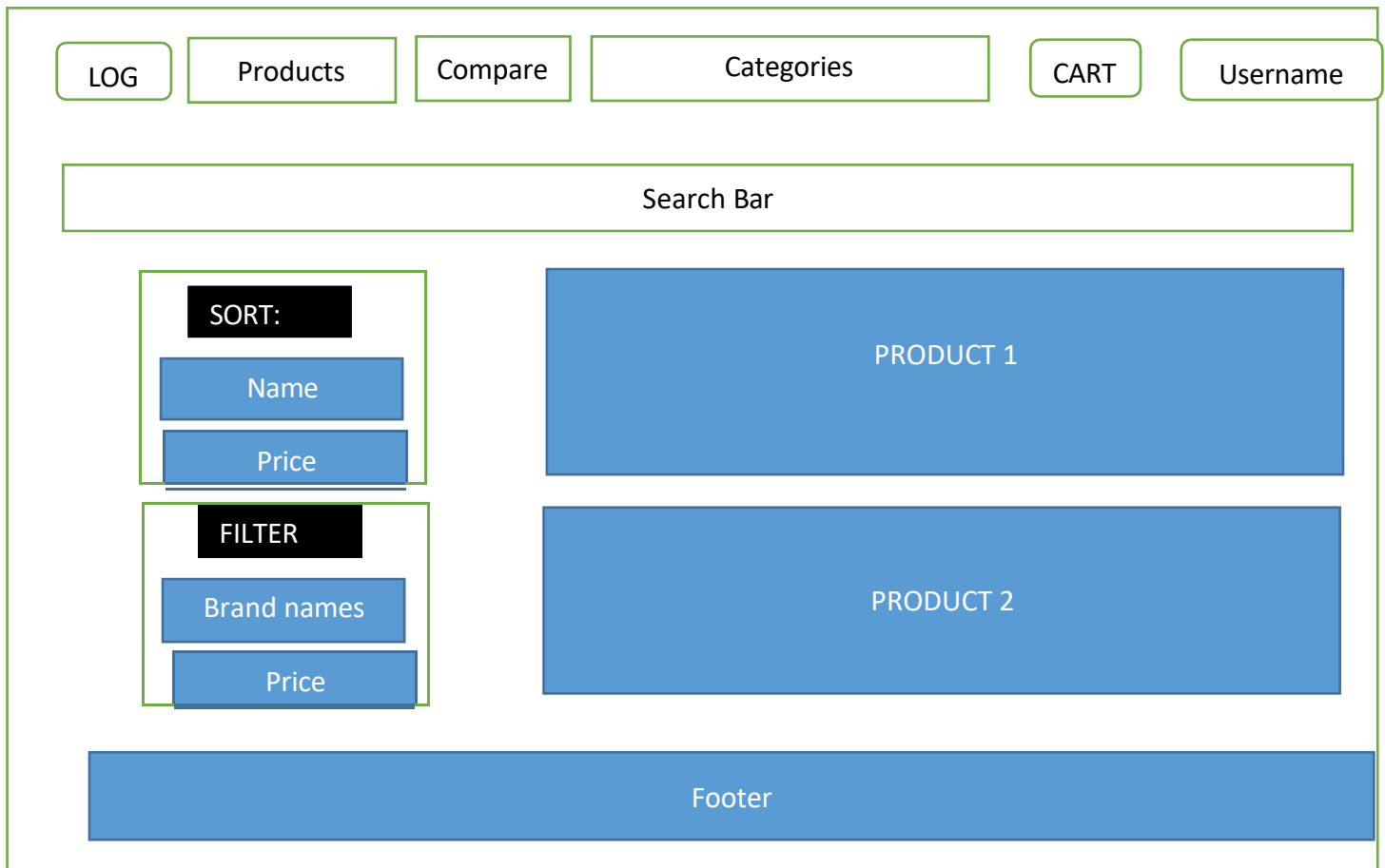
(6) Product description page: Contains various images of the product along with description, size, etc.

LOG	Products	Compare	Categories	CART	Username

Search Bar

Wishlist

Product Images

Description of product

Add to cart

FOOTER

(7) Compare Page: User can compare between different products.

| LOG | Products | Compare | Categories | CART | Username |

Search Bar

Product Images

Product Descriptions

Footer
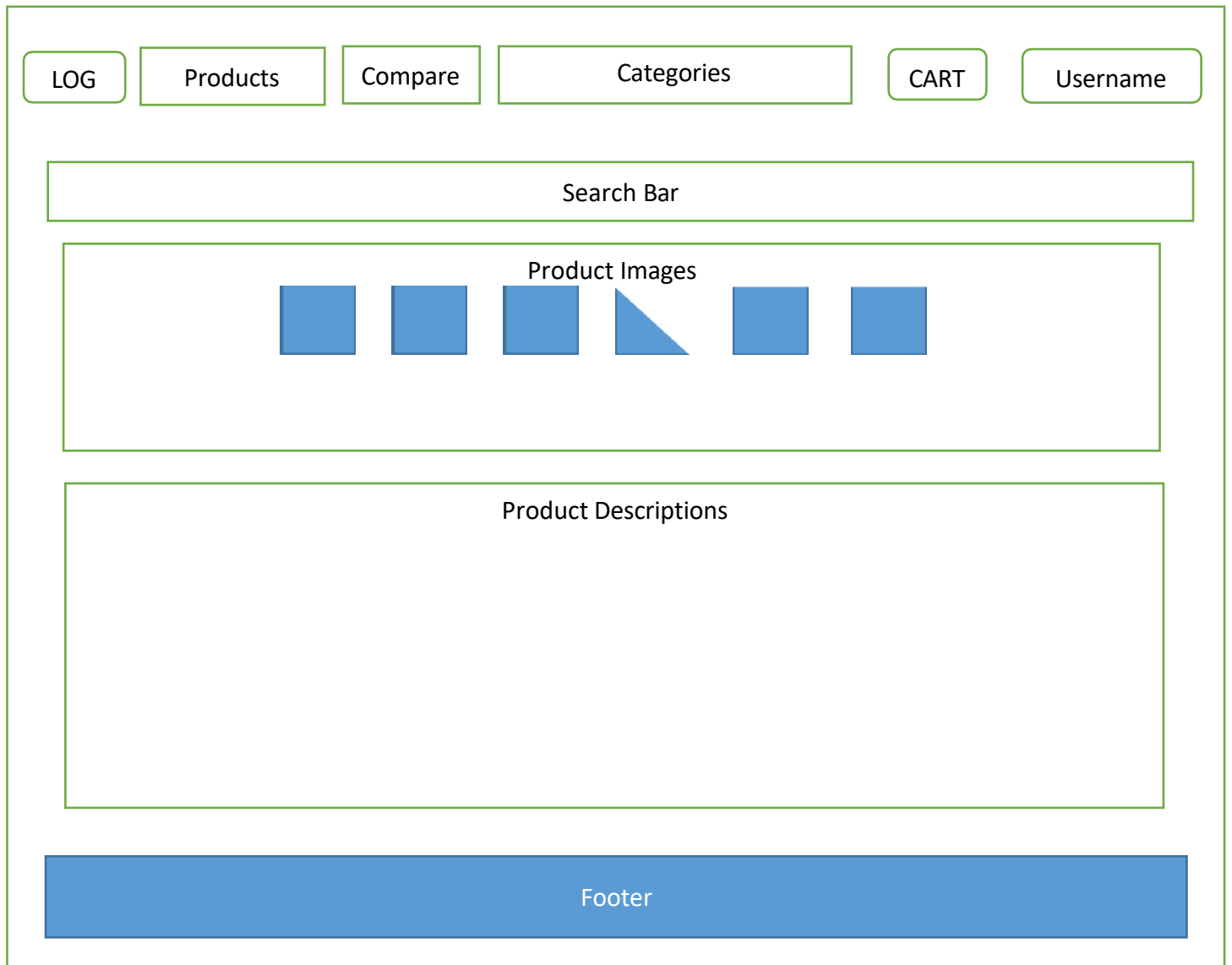
(8) Cart Page: Cart page shows the selected products to be purchased and price details.

| LOG | Products | Compare | Categories | CART | Username |

Search Bar

Price Details

| Product Image | Product Name | Price | - Quantity + |
| Product Image | Product Name | Price | - Quantity + |

Total Price

Continue Shopping

Place Order

Total

Footer
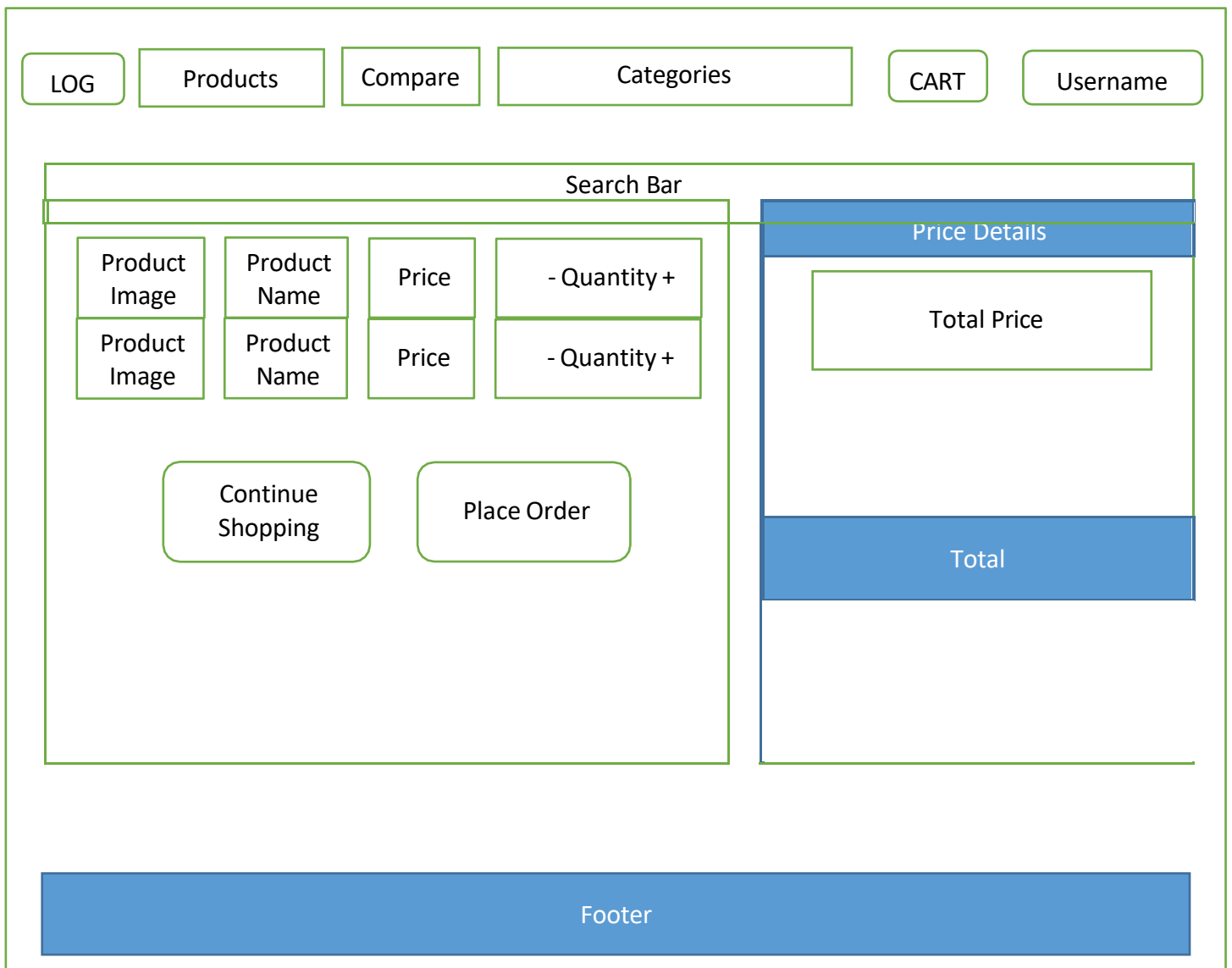
(9) User Profile:

HEADER

User Details My Orders Change Password	Values Displayed

(10) Retailer's Dashboard:

HEADER

	Add Product
Retailer's Details Change Password Delete Account	Values Displayed

ADD PRODUCT	
Product Name	Entered Product Name
Product Image	Entered Product Name
Product Description	Entered Product Name
Product Price	Entered Product Name
	Submit

(11) Admin's Dashboard:

HEADER

Admin' Profile

Add Retailer

Retailer's Id	Retailer's Name	Edit Product	Notification To Verify	Delete
1				x
2				x
3				x
4				x

FOOTER

ADD RETAILER	
Retailer's ID	Entered Retailer's ID
Retailer's Name	Entered Retailer's Name
Retailer's E-mail	Entered Retailer's E-mail
Retailer's Mobile No.	Entered Retailer's Mobile No.
	Submit

Agile Methodology:

Abstract:

Agile development is a group of software development methodology based on iterative and incremental development, in which requirements and solutions evolve through collaboration between self-organizing, cross-functional teams.

Steps to follow in Agile methodology:
- You need to identify various user stories and its modules/tasks which needs to be implemented in the project as a part of Sprint planning.
- Divide all the user stories in two Sprints. Duration of each Sprint will be 3 days.
- Any backlogs of Sprint 1 should be included in Sprint 2 along with stories of Sprint 2.
- You need to prepare Scrum boards for each sprint. You can include both sprints in one scrum board if there is enough space for the same.

Instructions for writing scrum board:
- Chart papers, sketch pens, measurement scale and sticky notes will be provided for scrum board preparation.
- You need to decorate your scrum board well and it should be clean, visible and self-explanatory.
- Discover a unique name for your project.
- Mention Group Number, TL and group member's name in the scrum board.

Format for Scrum Board:

Your Project Name					
Team Leader: <Name> Group Members: 1. 2. 3.					Logo, if any
User Story	TO DO	In Progress	Impediments	To Verify	Done