**ASSIGNMENT 2 FRONT SHEET**

|  |  |  |  |
| --- | --- | --- | --- |
| **Qualification** | **BTEC Level 5 HND Diploma in Computing** | | |
| **Unit number and title** | 10: Website Design & Development | | |
| **Submission date** | 25/12/2022 | **Date Received 1st submission** |  |
| **Re-submission Date** | 05/01/2023 | **Date Received 2nd submission** |  |
| **Student Name** | BUI TRAN PHUONG THAO | **Student ID** | GCC210031 |
| **Class** | GCC1001 | **Assessor name** | TRAN THI KIM KHANH |
| **Student declaration**  I certify that the assignment submission is entirely my own work and I fully understand the consequences of plagiarism. I understand that making a false declaration is a form of malpractice. | | | |
|  |  | **Student’s signature** |  |

**Grading grid**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| P5 | P6 | P7 | M4 | M5 | D2 | D3 |
|  |  |  |  |  |  |  |

|  |  |  |
| --- | --- | --- |
| **❒ Summative Feedback: ❒ Resubmission Feedback:** | | |
| **Grade:** | **Assessor Signature:** | **Date:** |
| **Signature & Date:** | | |

|  |
| --- |
| **Submission Format:** |
| *Format:*   1. A report document including below sections    * Section 1: A review of appreciate web design principles, standards and guidelines.    * Section 2: Design document for online shopping website.    * Section 3: Implementation of website design.    * Section 4: Test plan and test evaluation. 2. A compressed file that encapsulates all source code and particular necessary resources including files of images, style sheets, java script and other files to support to install multipage website such as sql script and installation guide.   *Submission*   * Students are compulsory to submit the assignment in due date and in a way requested by the Tutor. * The form of submission will be a soft copy posted on [http://cms.greenwich.edu.vn/.](http://cms.greenwich.edu.vn/) * Remember to convert the word file into PDF file before the submission on CMS.   *Note:*   * The individual Assignment *must* be your own work, and not copied by or from another student. * If you use ideas, quotes or data (such as diagrams) from books, journals or other sources, you must reference your sources, using the Harvard style. * Make sure that you understand and follow the guidelines to avoid plagiarism. Failure to comply this requirement will result in a failed assignment. |

|  |
| --- |
| **Unit Learning Outcomes:** |
| **LO3** Utilise website technologies, tools and techniques with good design principles to create a multipage website.  **LO4** Create and use a Test Plan to review the performance and design of a multipage website. |
| **Assignment Brief and Guidance:** |
| **Assignment scenario**  You currently work for a software training company that produces courses and topic presentations to established companies and, importantly, to new start-ups. MWS wishes to pursue a bespoke web-based e-commerce solution. MWS were impressed with your presentations and wishes to continue with the design and development of an e-commerce website.  A sister company develops web solutions and you have been tasked with taking the lead on the MWS solution you outlined previously.  You are now required to design and create an interactive website with the emphasis being on the production of a set of simple dynamic web pages, which embody good design principles. The site will be themed around a template which would be most appropriate to MWS, with placeholders for text and content. Images and icons will be used, to give MWS a feel for the proposed website design. You will also include a membership area, where users can register to have access to restricted areas.  You will base on *MWS-CaseStudy.docx* for more information. |

|  |  |  |  |
| --- | --- | --- | --- |
| **Learning Outcomes and Assessment Criteria (Assignment 2):** | | | |
| Learning Outcome | Pass | Merit | Distinction |
| LO3 | **P5** Create a design document for a branded, multipage website supported with medium fidelity wireframes and a full set of client and user requirements. | **M4** Compare and contrast the multipage website created to the design document. | **D2** Critically evaluate the design and development process against your design document and analyse any technical challenges. |
|  | **P6** Use your design document with appropriate principles, standards and guidelines to produce a branded, multipage website supported with realistic content. |  |  |
| LO4 | **P7** Create a suitable Test Plan identifying key performance area and use it to review the functionality and performance of your website. User Experience (UX) and User Interface (UI). | **M5** Evaluate the Quality Assurance (QA) process and review how it was implemented during your design and development stages. | **D3** Critically evaluate the results of your Test Plan and include a review of the overall success of your multipage website; use this evaluation to explain any areas of success and provide justified |
|  |  |  | recommendations for areas that require improvement. |

Table of Contents

[I. A REVIEW OF APPRECIATE WEB DESIGN PRINCIPLES, STANDARDS AND GUIDELINES. 7](#_Toc122894406)

[1. Principles for a good website design 7](#_Toc122894407)

[2. Web design Standards. 8](#_Toc122894408)

[3. Web design guideline 10](#_Toc122894409)

[II. DESIGN PLAN (P5) 13](#_Toc122894410)

[1. Users’ Requirements 13](#_Toc122894411)

[2. Architecture of the Application 15](#_Toc122894412)

[3. Usecase diagram. 16](#_Toc122894413)

[4. Database diagram. 17](#_Toc122894414)

[5. Site map 18](#_Toc122894415)

[6. Wire frames and specific explanation 19](#_Toc122894416)

[III. IMPLEMENTATION OF WEBSITE DESIGN(P6) 25](#_Toc122894417)

[1. Website implementation 25](#_Toc122894418)

[IV. Test Cases (P7) 55](#_Toc122894419)

[References 60](#_Toc122894420)

# A REVIEW OF APPRECIATE WEB DESIGN PRINCIPLES, STANDARDS AND GUIDELINES.

## Principles for a good website design

* **Alignment:**

Alignment as an effective web design principle allows us to make conscious decisions about how and where elements are placed on the page. Taking advantage of strategic placement helps us to craft stronger and more compelling compositions and utilizing a grid system provides a standard guide for element placement. Without an alignment strategy we would end up with arbitrarily placed elements, with little or no connection to additional or similar features. Without alignment, the look and feel of your website would be a haphazard assortment of open-ended disorder.

(Anon., 2022)

* **80/20:**

The 80:20 rule is one of those principles which many of us seem to know about (if only vaguely) but not always what to do with. If you’re not familiar with it, let me explain. Essentially the 80:20 rule states that 80% of the effects are produced by 20% of the causes. There are lots of complicated math to underpin this but it is a proven real-life rule. For example, 80% of the world’s income comes from 20% of its population. You spend 80% of your time in 20% of your house. 80% of software crashes are caused by 20% of bugs. 80% of crimes are committed by 20% of criminals. You wear 20% of your wardrobe 80% of the time.

(Anon., 2022)

* **Whitespace:**

Actually it’s really hard to overestimate the importance of white space. Not only does it help to reduce the cognitive load for the visitors, but it makes it possible to perceive the information presented on the screen. When a new visitor approaches a design layout, the first thing he/she tries to do is to scan the page and divide the content area into digestible pieces of information. Complex structures are harder to read, scan, analyze and work with. If you have the choice between separating two design segments by a visible line or by some whitespace, it’s usually better to use the whitespace solution. Hierarchical structures reduce complexity (Simon’s Law): the better you manage to provide users with a sense of visual hierarchy, the easier your content will be to perceive. White space is good. Cameron.io uses white space as a primary design element. The result is a well-scannable layout which gives the content a dominating position it deserves.

(Anon., 2022)

* **Color/highlighting:**

Color has the power to communicate messages and evoke emotional responses. Finding a color palette that fits your brand will allow you to influence your customer’s behavior towards your brand. Keep the color selection limited to less than 5 colors. Complementary colors work very well. Pleasing colour combinations increase customer engagement and make the user feel good.

(Anon., 2022)

* **Organization:**

The website's layout provides the user with a conceptual framework that is both clear and consistent. Consistency, screen layout, connections, and navigability are important organizational factors. Site organization may impact user experience, which ultimately impacts conversions and bounce rate even if it may not have a direct impact on site traffic or rankings.

(Anon., 2017)

* **Symmetry:**

Symmetry is a visual mathematical rule which states that if a line is drawn through the center of an image, both sides will be very similar if not identical. This line can be drawn horizontally, vertically, or diagonally, therefore leading to horizontal symmetry, vertical symmetry, and diagonal symmetry. These three are considered as ‘reflectional symmetry’ because it’s like the image reflects itself.

(Anon., 2022)

* **Consistency:**

Consistency is critical in web design. But it’s important to note that this means more than just keeping fonts, colors, and icons uniform across branding. It also means keeping the spacing consistent in layouts, too. This helps give the website a polished and professional feel, which boosts brand credibility.This is evident in this website design for the electronic library company, Bookworm. While they have used a range of different font sizes and different image dimensions, the spacing between the other visual elements remains consistent. This helps to create a sense of order and harmony in an otherwise busy composition.

(Anon., 2022)

## ­Web design Standards.

Web standards are the technologies we use to build web sites. These standards exist as long technical documents called specifications, which detail exactly how the technology should work. These documents are not very useful for learning how to use the technologies they describe (this is why we have sites like MDN Web Docs), but instead are intended to be used by software engineers to implement these technologies (usually in web browsers).

(Anon., 2022)

**Logo in the top left corner:**

This is really one of only two web design standards. Center aligned is the alternative, which can work well, but people need to plan the navigation around it carefully.

**Social media icons in the header:**

The top of every page is definitely the most prominent place to promote social media presence. Social icons in the header are especially common on niche publisher websites, where brand awareness and pageviews are life and death. If the visitor clicks one of those icons, they’ll land on a site that does everything possible to keep that visitor. They’ll be distracted.

**Search tool in the header**

Site search is a very common feature, but it’s not necessarily helpful to visitors. If your site has a lot of pages or an active content marketing program, a site search tool may be helpful to visitors

**Contact button in the top right**

Most websites put “contact” in the top right. It’s sometimes a link with the same treatment as the other navigation. Sometimes it’s treated like a button, with a contrasting color, increasing its visual prominence.

**Main Navigation in the header**

This is another true standard. The vast majority of websites have horizontal navbars in the header, which collapse into the three-lined “hamburger icon” for the mobile visitor looking at the responsive design. Horizontal navigation saves pixel width for content, compared to the left-side navigation menus in earlier eras of web design. It’s expected and space efficient. For the secondary navigation menu, it’s common for designers to put these above the main menu across the very top. This is sometimes called the “eyebrow.”

**Dropdown menus**

Most marketing websites have dropdown menus. The idea is to let the visitor go anywhere from anywhere. Dropdowns “save a click.” The alternative is to make them visit the top level page before seeing sub-navigation, thereby deliberately guiding the visitor through a series of pages.

**Value proposition above the fold**

Those hard working words at the top of the homepage…

The homepage H1 header is the single most prominent bit of text on a website. The web copywriter has four options:

State the value proposition, as in “We do X for Y” (simple, direct, specific)

Repeat the business name (unnecessary)

Use the tag line (often clever but vague and unhelpful)

Push an ad, announcement or content piece (current promotion)

The majority of homepages use the first option. The header is the value proposition, the business category or the services provided.

(Anon., 2022)

**Responsivity**

To provide a truly great user experience, your site has to be compatible with the many different devices that your visitors are using. In the tech world, this is known as responsive design.

Responsive design means investing in a highly flexible website structure. On a responsive site, content is automatically resized and reshuffled to fit the dimensions of whichever device a visitor happens to be using. This can be accomplished with mobile-friendly HTML templates, or by creating a special mobile site

Ultimately, it's more important to provide a great experience across different devices than look identical across those devices.

(Anon., 2022)

## ­Web design guideline

* **Simplicity**

While the appearance of your website is certainly important, most people aren't coming to your site to evaluate how slick the design is. They want to complete some action, or to find some specific piece of information.

Therefore, unnecessary design elements (i.e., those which serve no functional purpose) will only overwhelm and make it more difficult for visitors to accomplish what they're trying to accomplish.

From a usability and UX perspective, simplicity is your best friend. If you have all the necessary page elements, it’s hard to get too simple. You can employ this principle in a variety of different forms, such as:

**Colors:** Basically, don't use a lot. The Handbook of Computer-Human Interaction recommends using a maximum of five (plus or minus two) different colors in your design.

**Typefaces:** The typefaces you choose should be highly legible, so nothing too artsy and very minimal script fonts, if any. For text color, again, keep it minimal and always make sure it contrasts with the background color. A common recommendation is to use a maximum of three different typefaces in a maximum of three different sizes.

**Graphics:** Only use graphics if they help a user complete a task or perform a specific function (don't just add graphics willy-nilly).

* **Visual Hierarchy**

Closely tied to the principle of simplicity, visual hierarchy means arranging and organizing website elements so that visitors naturally gravitate toward the most important elements first.

Remember, whn it comes to optimizing for usability and UX, the goal is to lead visitors to complete a desired action, but in a way that feels natural and enjoyable. By adjusting the position, color, or size of certain elements, you can structure your site in such a way that viewers will be drawn to those elements first.

In the example below from Spotify, you can see that the main heading “Get 3 months of Premium for free” sits atop the visual hierarchy with its size and page position. It draws your eye to their mission before anything else. This is followed by the "Get 3 Months Free" CTA, which prompts action. Users can click this CTA, or scan the menu items above for more actions.

* **Navigability**

Planning out intuitive navigation on your site is crucial to help visitors find what they're looking for. Ideally, a visitor should land on your site and not have to think extensively about where to click next. Moving from point A to point B should be as frictionless as possible.

Here are a few tips for optimizing your site's navigation:

Keep the structure of your primary navigation simple (and near the top of your page).

Include navigation in the footer of your site.

Consider using breadcrumbs on every page (except your homepage) so users remember their navigation trail.

Include a search bar near the top of your site so visitors can search by keywords.

Don't offer too many navigation options per page. Again, simplicity!

Include links within your page copy, and make it clear where those links go.

Don't make users dig too deep. Try making a basic wireframe map of all your site pages arranged like a pyramid: Your homepage is at the top, and each linked page from the previous forms the next layer. In most cases, it’s best to keep your map no more than three levels deep. Take HubSpot’s site map, for example.

* **Responsivity**

To provide a truly great user experience, your site has to be compatible with the many different devices that your visitors are using. In the tech world, this is known as responsive design.

Responsive design means investing in a highly flexible website structure. On a responsive site, content is automatically resized and reshuffled to fit the dimensions of whichever device a visitor happens to be using. This can be accomplished with mobile-friendly HTML templates, or by creating a special mobile site.

Ultimately, it's more important to provide a great experience across different devices than look identical across those devices.

Alongside mobile-friendliness, it’s worth your while to test your website’s cross-cross browser compatibility. In all likelihood, you’ve only viewed your site on one web browser, be it Google Chrome, Safari, Firefox, or something else.

Now is the time to open your pages on each of these browsers and evaluate how your elements appear. Ideally, there won’t be much difference in presentation, but you can’t know for sure until you see for yourself.

* **Accessibility**

The goal of web accessibility is to make a website that anyone can use, including people with disabilities or limitations that affect their browsing experience. As a website designer, it’s your job to think of these users in your UX plan.

Like responsiveness, accessibility applies to your entire site: structure, page format, visuals, and both written and visual content. The Web Content Accessibility Guidelines (WCAG), developed by the Web Accessibility Initiative and the World Wide Web Consortium, set the guidelines for web accessibility. In a broad sense, these guidelines state that websites must be:

Perceivable: Visitors are aware of the content on your site.

Operable: The functionality of your website should be possible in different ways.

Understandable: All content and alerts can be easily understood.

Robust: Your website is usable across different assistive technologies, devices, and browsers.

* **Conventionality**

A big challenge in web design is balancing originality with your expectations. Most of us are expert internet users, and there are specific conventions we’ve grown accustomed to over time. Such conventions include:

Placing the main navigation at the top (or left side) of a page.

Placing a logo at the top left (or center) of a page.

Making the logo clickable, so it always brings a visitor back to the homepage.

Having links and buttons that change color/appearance when you hover over them.

Using a shopping cart icon on an ecommerce site. The icon also has a number badge signifying the number of items in the cart.

Ensuring image sliders have buttons users can click to manually rotate slides.

While some might opt to throw these out the window for the sake of uniqueness, this is a mistake. There’s still plenty of room for creativity within the constraints of web conventionality.

Let’s briefly consider another field of design, architecture. Building codes are put in place so that folks can easily and safely inhabit spaces. An architect doesn’t complain about these codes or violate them because, aside from legal repercussions, they assure safety and comfort of guests. It doesn’t matter how dazzling the building looks — if you trip on uneven stairs or you can’t get out in a fire, you might prefer to stay outside.

In the same way, you can craft a memorable experience while meeting user expectations. If you violate what users anticipate, they may feel uncomfortable or even frustrated with your site.

* **Credibility**

Sticking to web conventions lends your site credibility. In other words, it increases the level of trust your site conveys. And if you're striving to build a site that provides the best user experience possible, credibility goes a long way.

One of the best methods to improve your credibility is to be clear and honest about the product or service you're selling. Don't make visitors dig through dozens of pages to find what it is you do. Be up-front on your homepage, and dedicate some real estate to explaining the value behind what you do.

Another credibility tip: Have a pricing page, also linked on the homepage. Rather than force people to contact you to learn more about pricing, list your prices clearly on your site. This makes your business appear more trustworthy and legitimate.

* **User-Centricity**

At the end of the day, usability and user experience hinge on the preferences of the end-users. After all, if you're not designing for them, who are you designing for?

So, while the principles detailed in this list are a great starting point, the final key to improving the design of your site is to conduct user testing, gather feedback, and implement changes based on what you've learned.

And don’t bother testing usability by yourself. You’ve already invested a lot of time into your design, which brings your own biases into the equation. Get testers who have never seen your site before, the same as any first-time visitor.

(Anon., 2022)

# DESIGN PLAN (P5)

## Users’ Requirements

1. **Project Specification**

Shoppingonline.com is an online store that sells clothing and shoes for both men and women of all ages. All products are meticulously designed. It is easy for users to access and find the right products. Now, they are looking forward to improving their website with all the fashion categories listed and displayed on the site. They have a set of categories. A website needs to be designed to display the different types of products available in the store. Address details and feedback must be included. Customers may read information about their new order and can quickly search for items by name on a website that has been built to display the many product kinds that are offered in the shop. The product categories are maintained, the user must be logged in to access and view the cart. The website will be developed for Windows Platform using HTML5, JavaScript, Bootstrap, CSS and PHP. The site will work fine in all leading browsers including chrome, IE, Firefox etc.

1. **User.**

Online store employees include an administrator and a manager.

Customer: Users or Customers who like to search for or purchase clothing, such as students, professionals, or others.

1. **Input data is taken from the Users which data is put into the system**

- Information about the Shopping Online category: category name, Description.

- Information about Shopping Online: name, price, image, status, quantity, and description of the product.

- Information of customer: Username, full name, password, email, phone, address, birthday.

1. **Output data is displayed to the user which data is taken from the system**

- List of product categories.

- List all products and product details.

- Product name search results.

-Customer’s bill.

1. **The processes of the system Processes are involved in the system**

- Processing customer registration.

- Processing customer’s login.

-Adding, updating, and deleting product categories.

-Adding, updating, and deleting products.

-Search and buy product.

1. **Scope of the Work.**

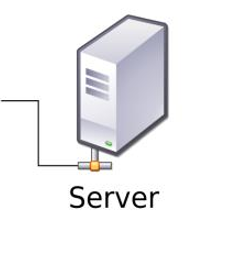
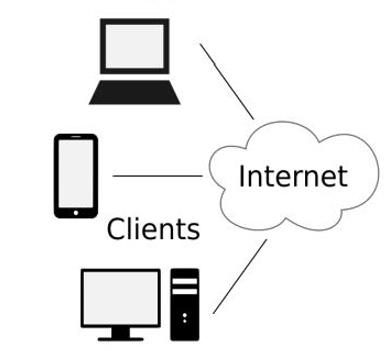
Create a website with many pages just for online shopping. successfully creating a multi-page, branch site website for online commerce. Design an online shopping website with multiple pages like a registration page, login page, home page, product category, checkout, and product page to list products by category name, shopping cart, and product search page. Customers can log in since they have registered member accounts on the website. Product Search: A user can look up products by name. The website was created for customers who would like to find and buy clothes. Specifically, people with economic ability, such as the elderly, working people, and teenagers. Additionally, Shopping Online wants to draw in a lot of clients that are more affluent.

<Shoppingonline.com>

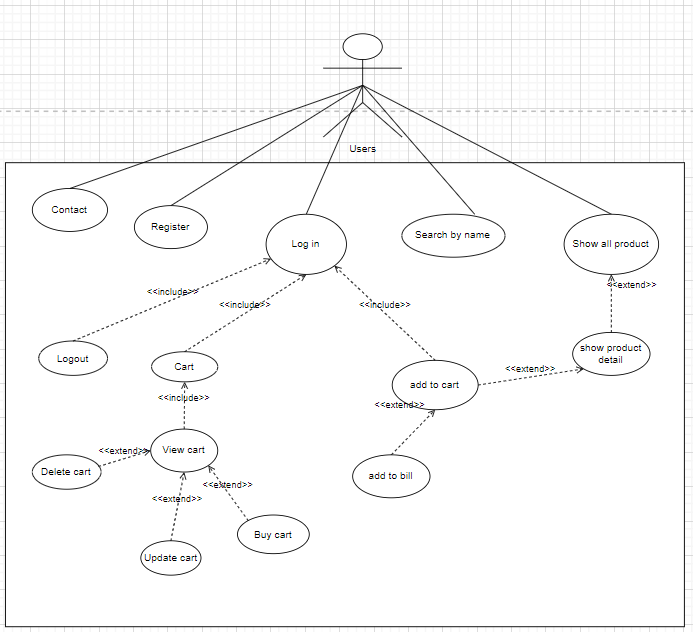
1. **Customer Acceptance Criteria**

|  |  |
| --- | --- |
| **No.** | **Customer’s Acceptance Criteria** |
| 1 | The Home Page should be created by making use of Sections with a suitable header section that can be added which will show images of various products. |
| 2 | The site must contain links to navigate through various types of products. |
| 3 | Product links must be classified.  For example, T-shirts, Shorts, Shoes |
| 4 | Specifications such as price and description of Products should be added along with the images. |
| 5 | Customers can register members of the store and then can log in to the website. |
| 6 | Users can search for products through the search bar. |
| 7 | Customers can see their new order. |
| 8 | Customers must be logged in in order to access the cart. |
| 9 | The site runs in browsers like Google Chrome, Microsoft Edge, Safari, etc. |
| 10 | Customers can add, update, and delete items in the cart. |
| 11 | Need to login before adding products to cart. |

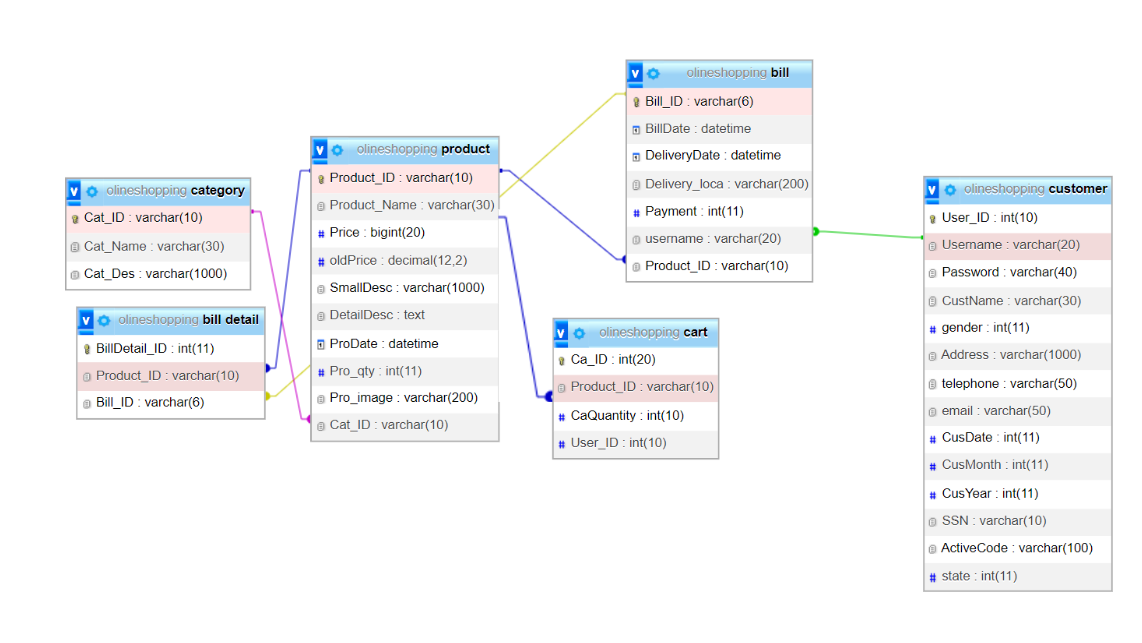
## Architecture of the Application



## Usecase diagram.

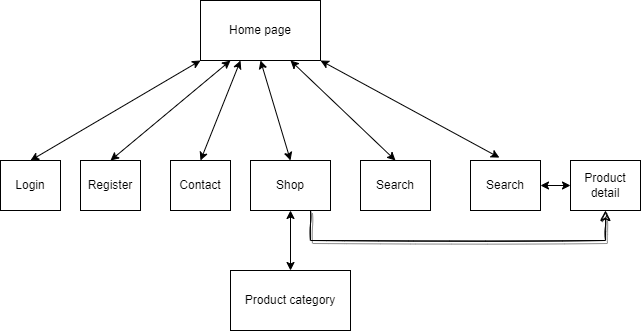


## Database diagram.



## Site map

Before login

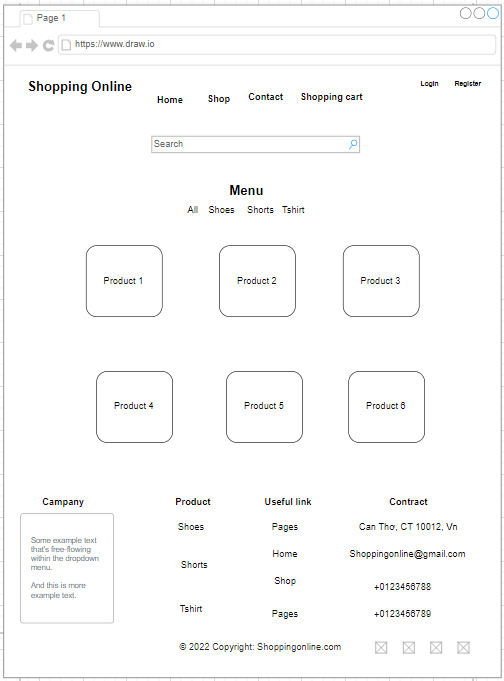


After login

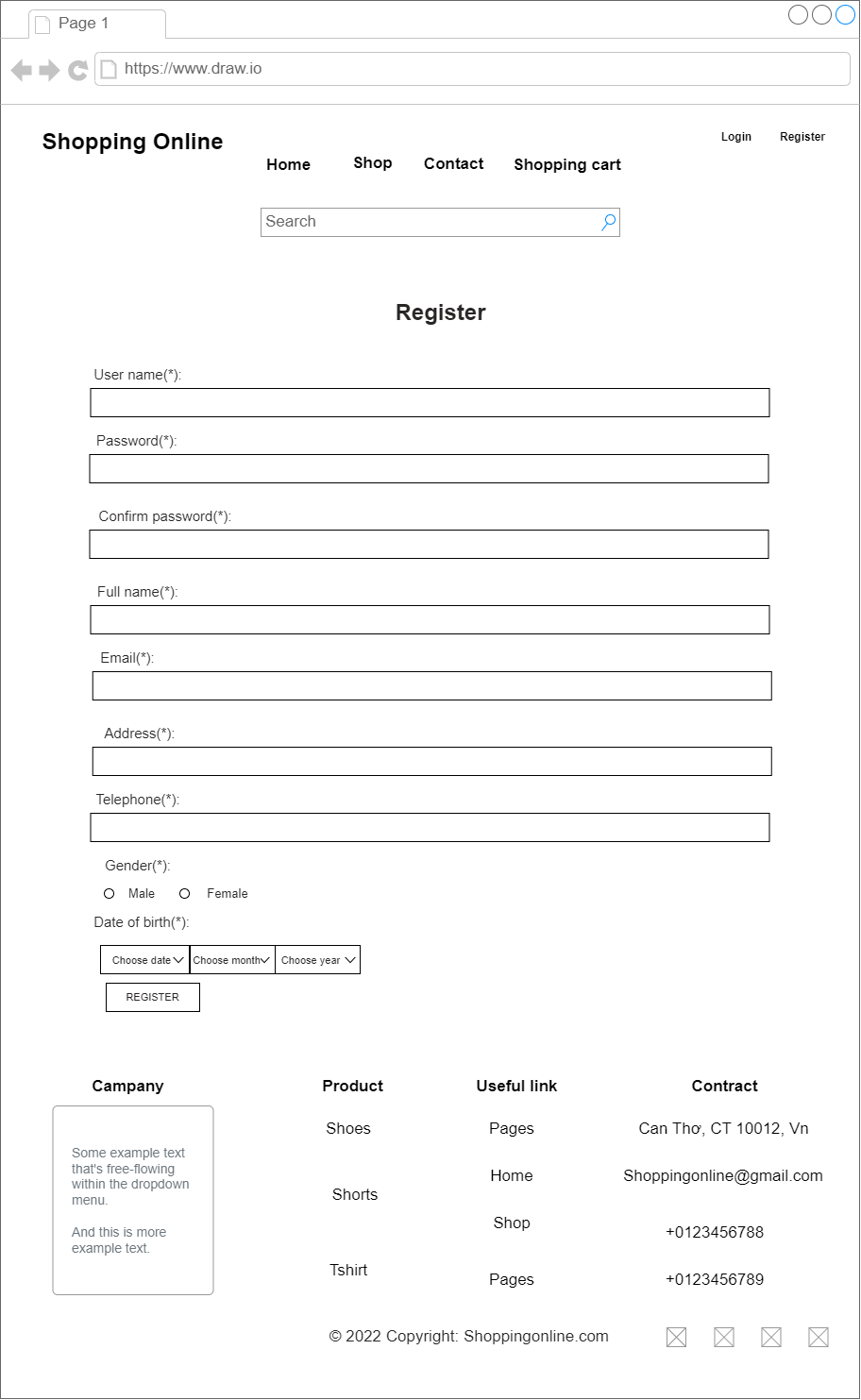


## Wire frames and specific explanation

Homepage

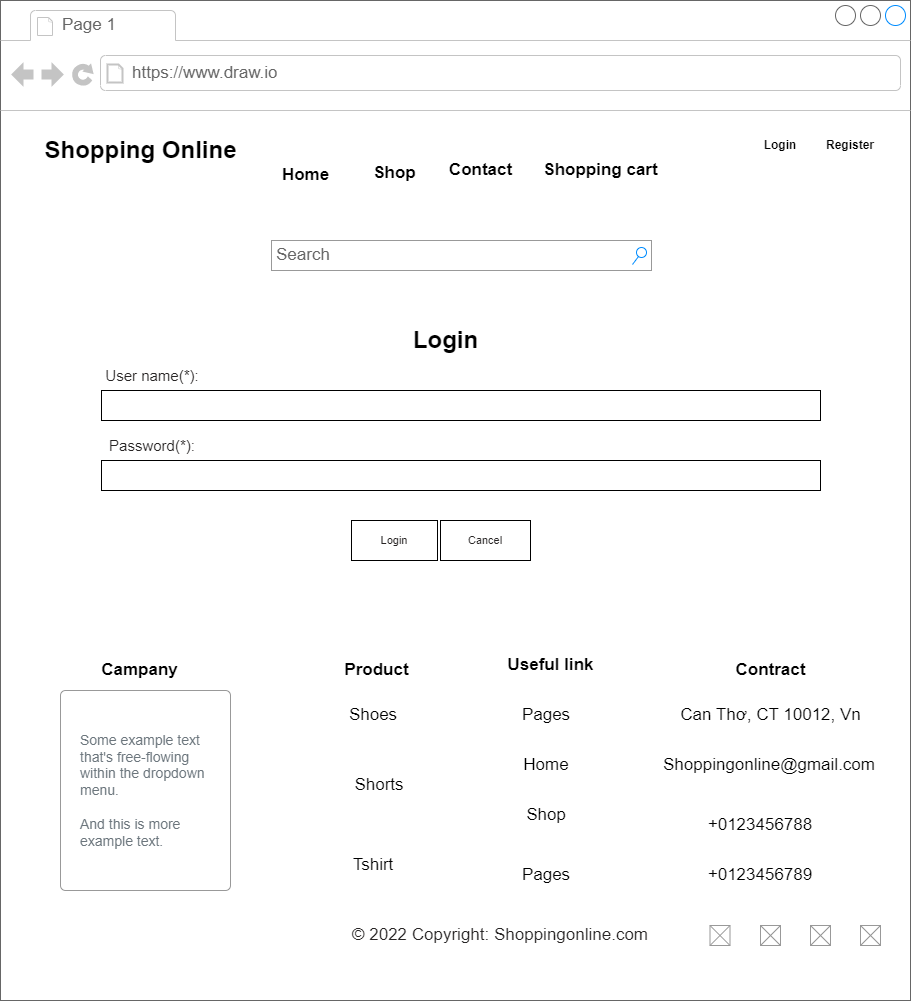


The homepage's wireframe has a logo, a search bar, a product button to categorize items, a login and registration button, and a covert checkout and cart button. The website's content, banner, and fashion items make up the following section. The website address, store address, and contact information are all listed at the bottom of the page.



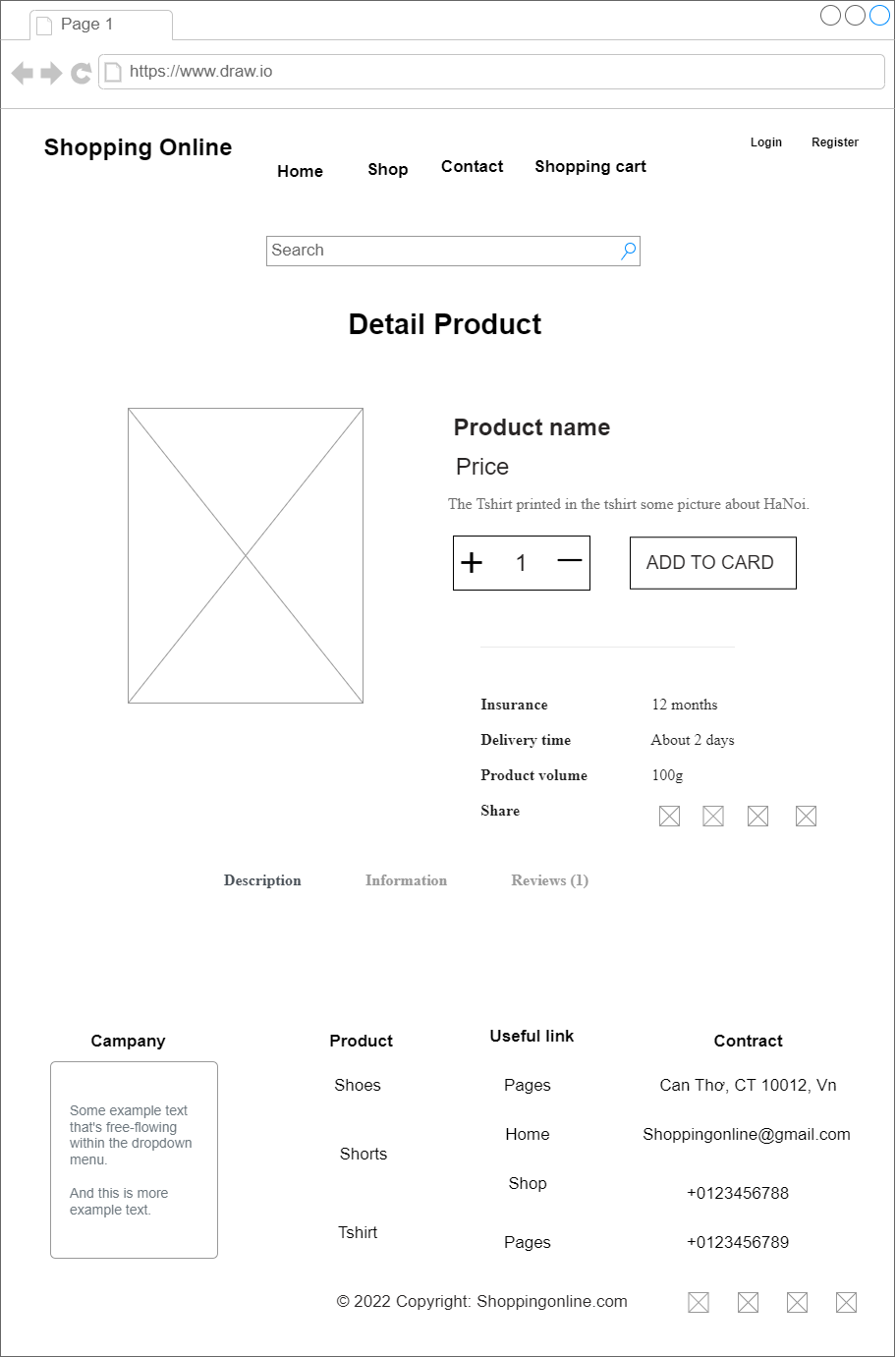
The registration material, including the username, password, confirm password, full name, phone number, email, address, gender and date of birth will be put in the frame in the top left corner of the registration page, according to the wireframe. Below the frame is the registration and login button.

**Login**



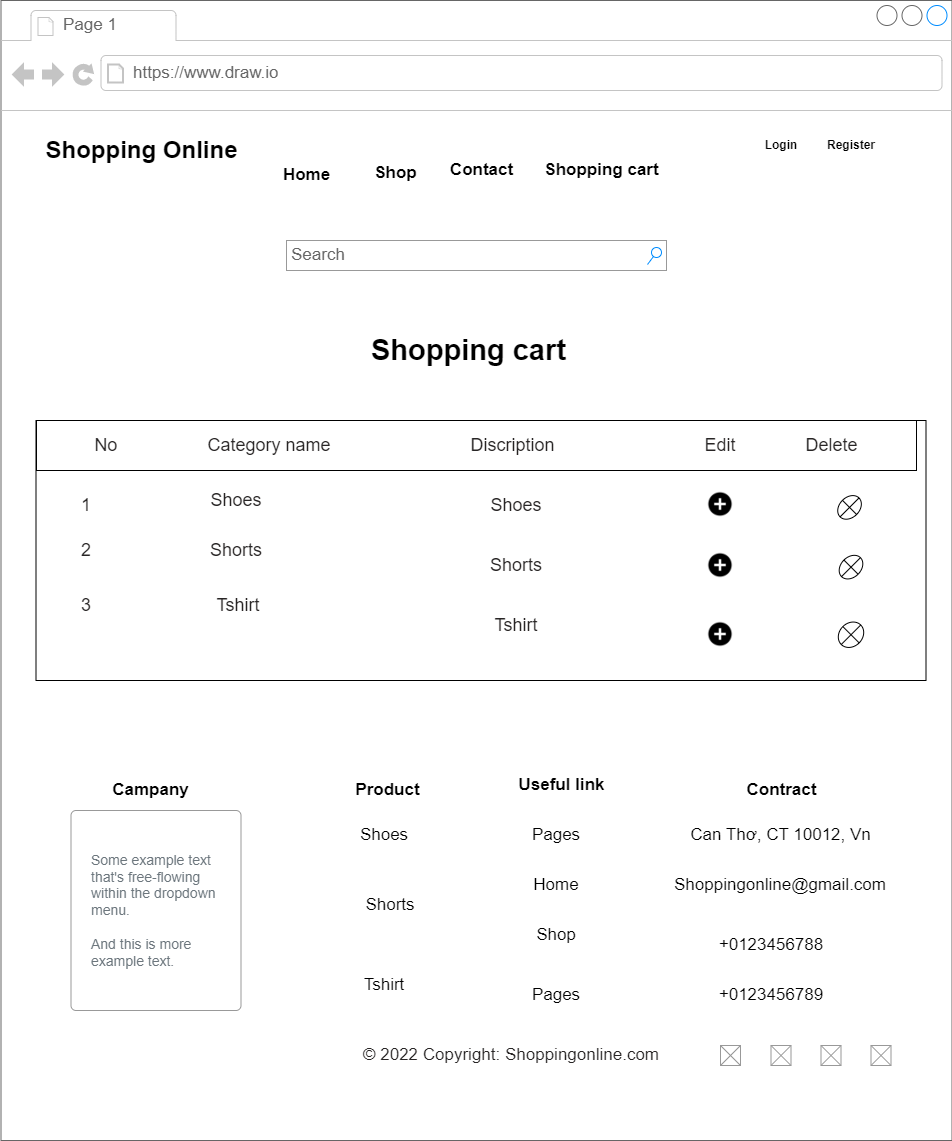
The wireframe shows that the login button and all related user login information, including username and password, in one frame.

**Detailed product page**

****

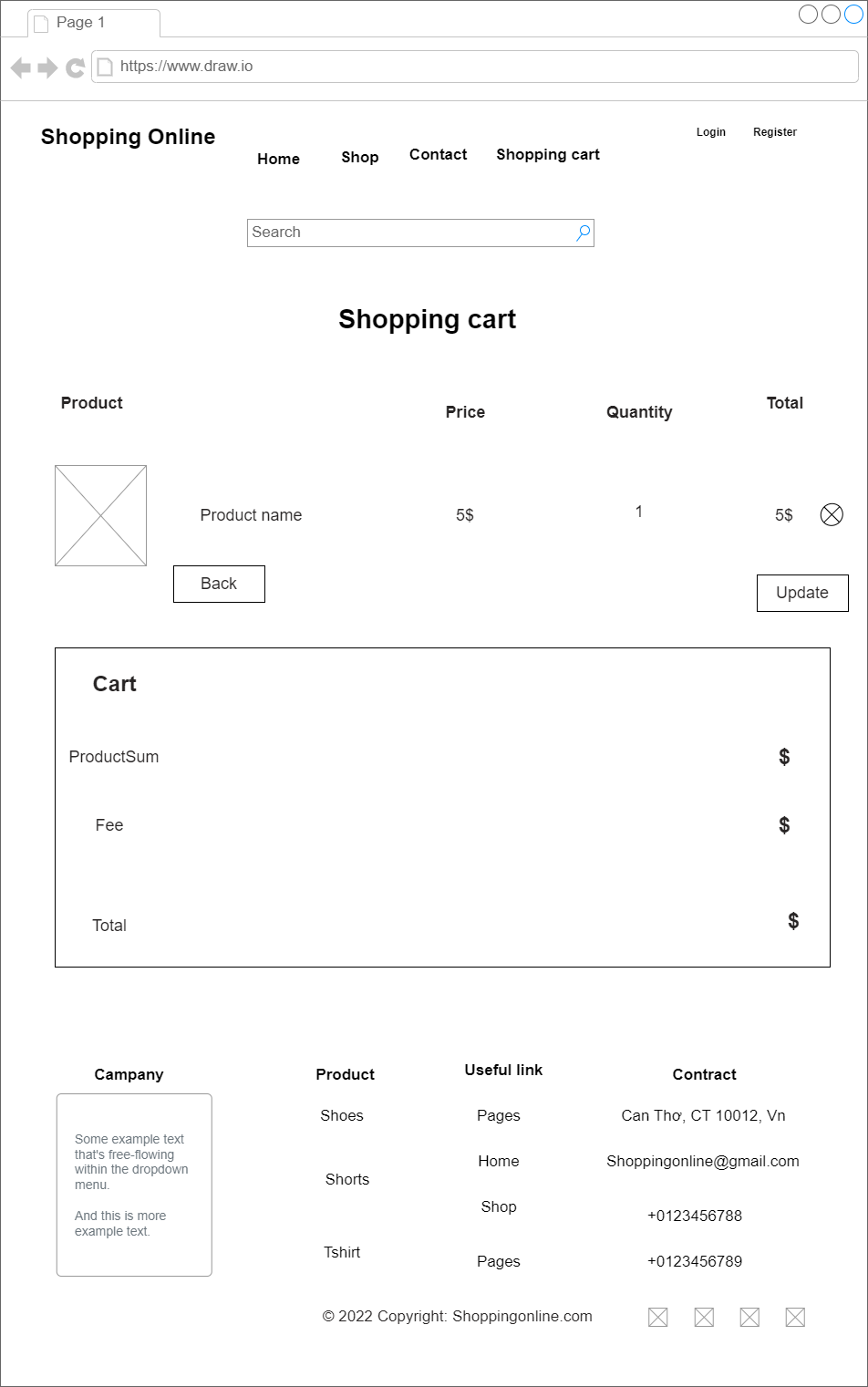
The wireframe shows that the logo, search bar, product button to filter items by category, button to see new orders, cart button, login button placement changed to "hi users," and registration button changed to "logout" at the top of the detail product page. The content area is split into two sections: one on the right has the product image and description, while the other two on the right side include the remaining details, including the product name, price, size, and quantity, as well as an add-to-cart button.

**Category page**

****

The wireframe shows that the logo, search bar, product button to filter items by category, button to see new orders, cart button, login button placement changed to "hi users," and registration button changed to "logout" at the top of the detail product page. Category names are arranged on the center side of the page.

**Cart page**

****

The wireframe shows that the logo, search bar, product button to filter items by category, button to see new orders, cart button, login button placement changed to "hi users," and registration button changed to "logout" at the top of the detail product page. The product name, price, status, quantity, and eventually an X for the user to remove the product from the basket, as well as an update button for changing the amount or size, are all found in the website content area. The buy button and the shop back button come next.

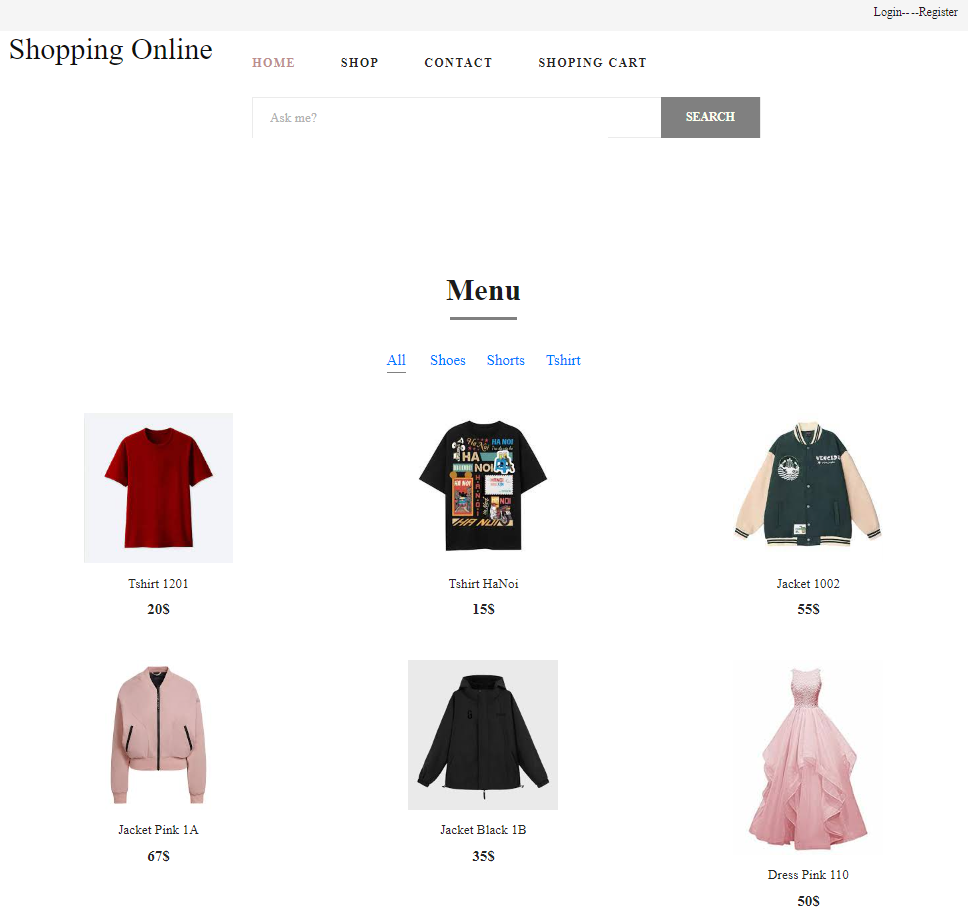
# IMPLEMENTATION OF WEBSITE DESIGN(P6)

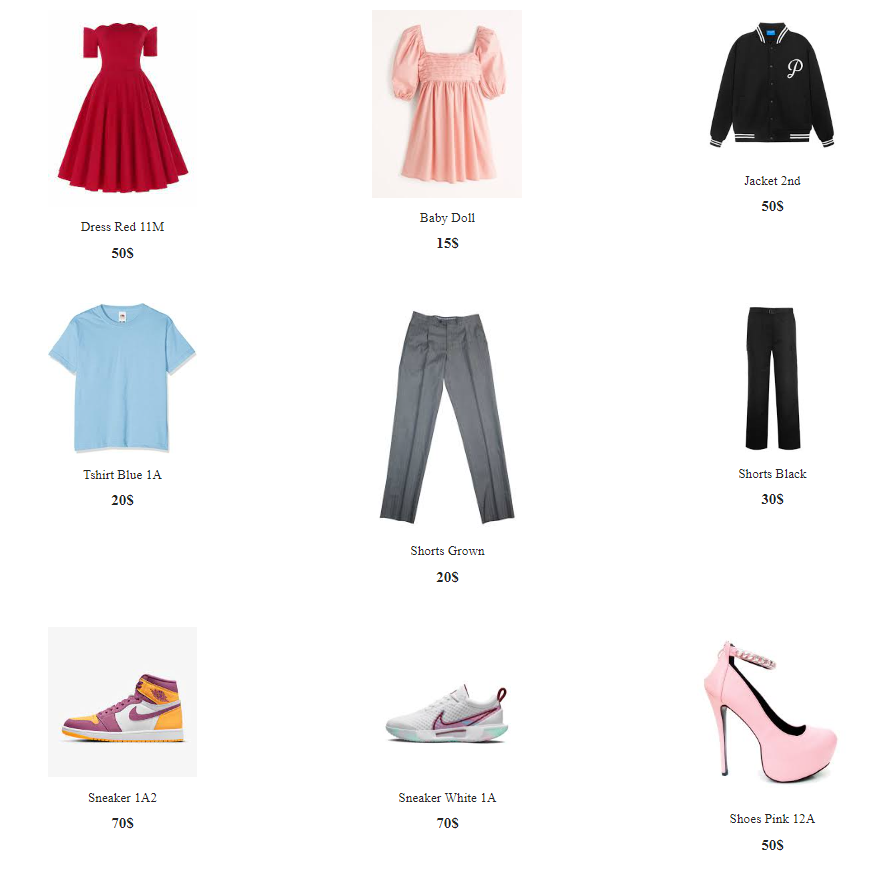
## Website implementation

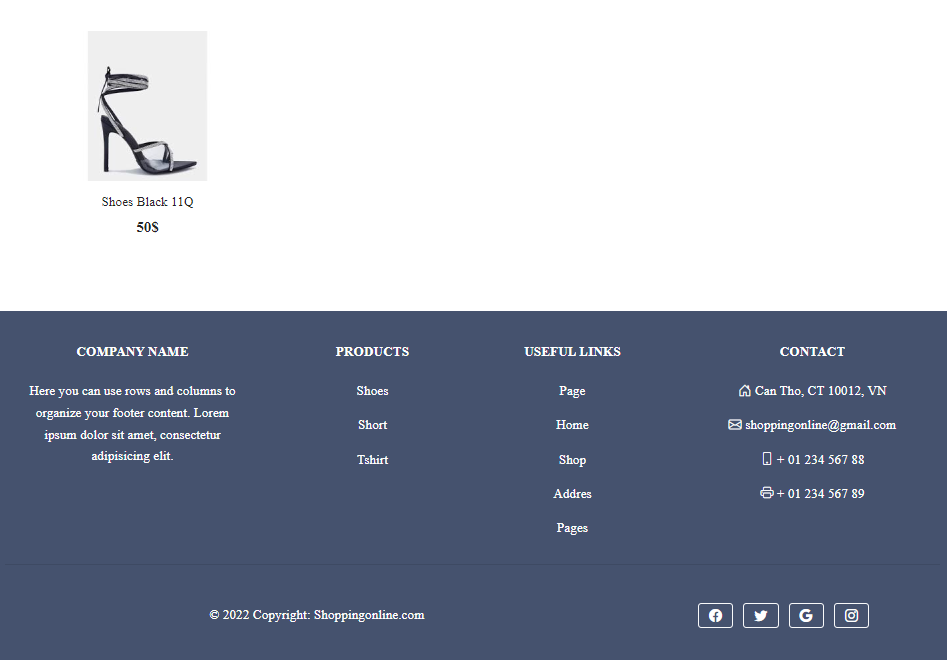
Whether it is a regular user account or not is indicated by a function button on the home page. It won't get you access to its features, such as category and product management management, if you don't log in. Additionally, the homepage has some additional features like registration without being signed in and login. Additionally, the website still offers contact details like a phone number and address, as well as the ability for customers to buy products.

**a. Homepage.**

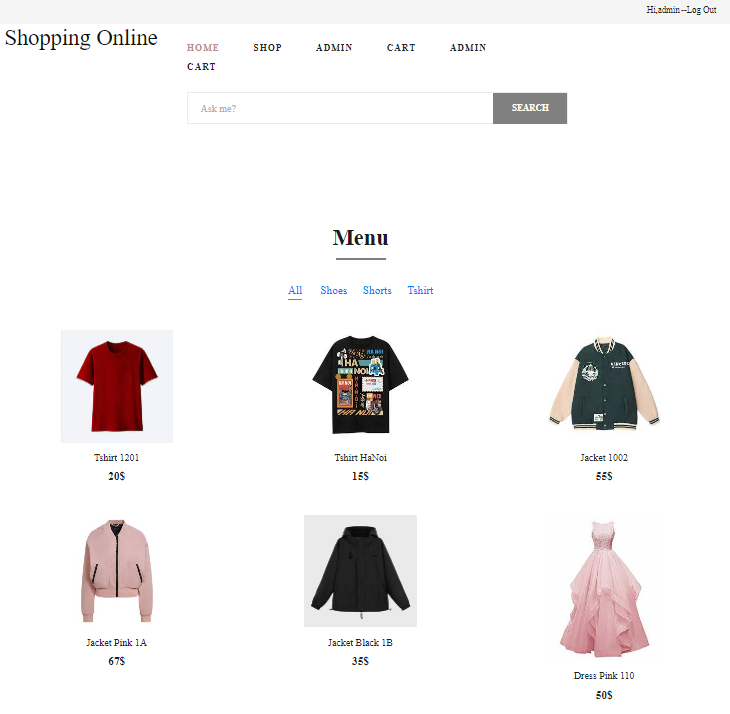
- Homepage before login.

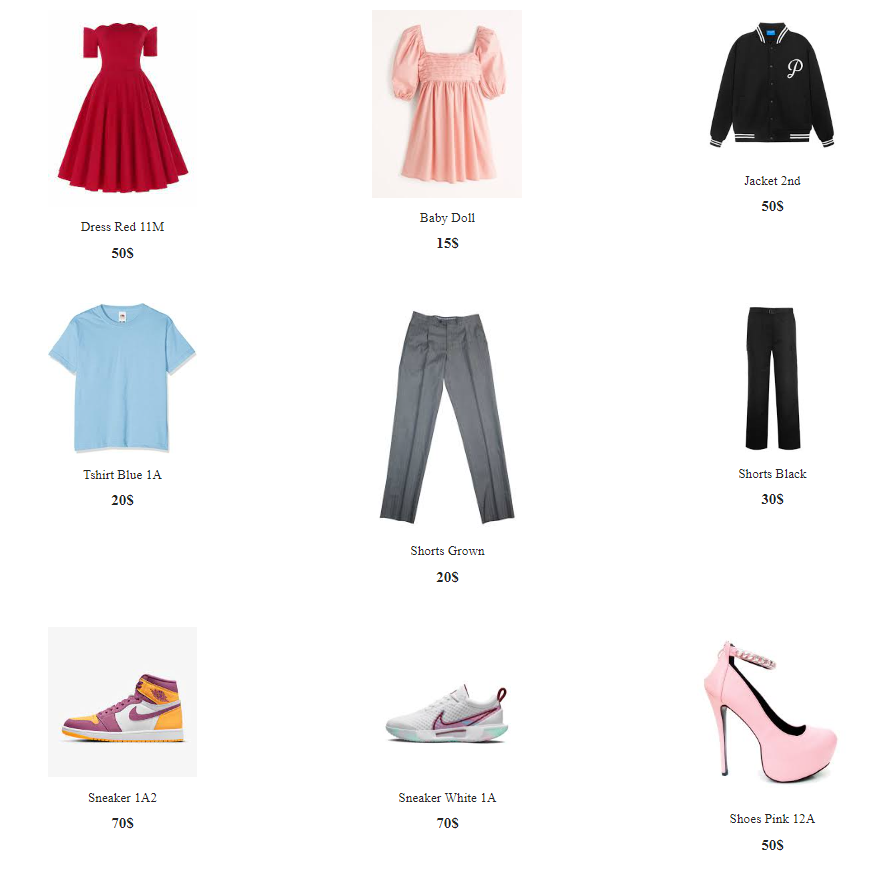


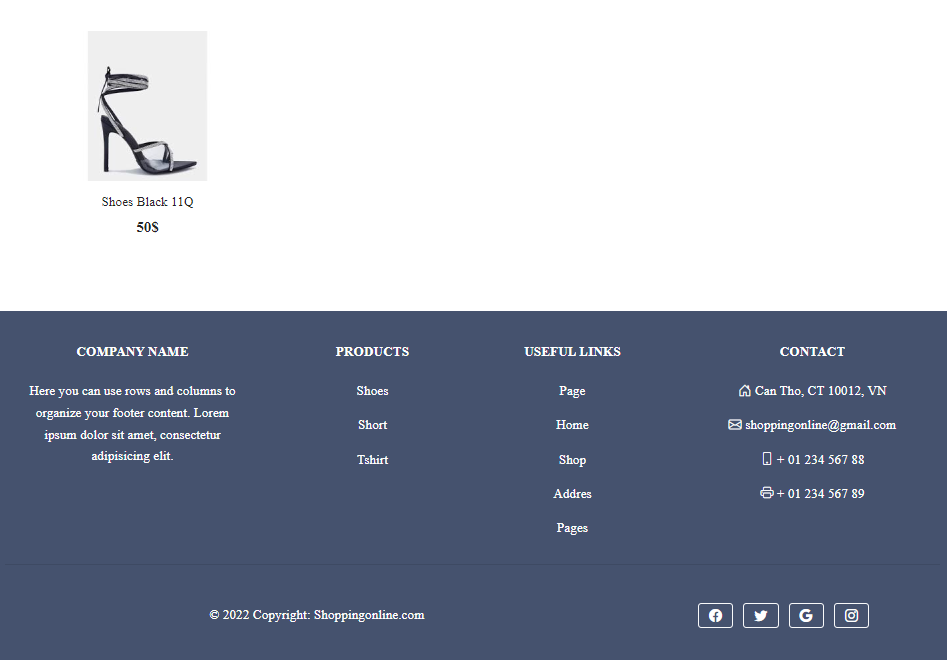




- Homepage after login.

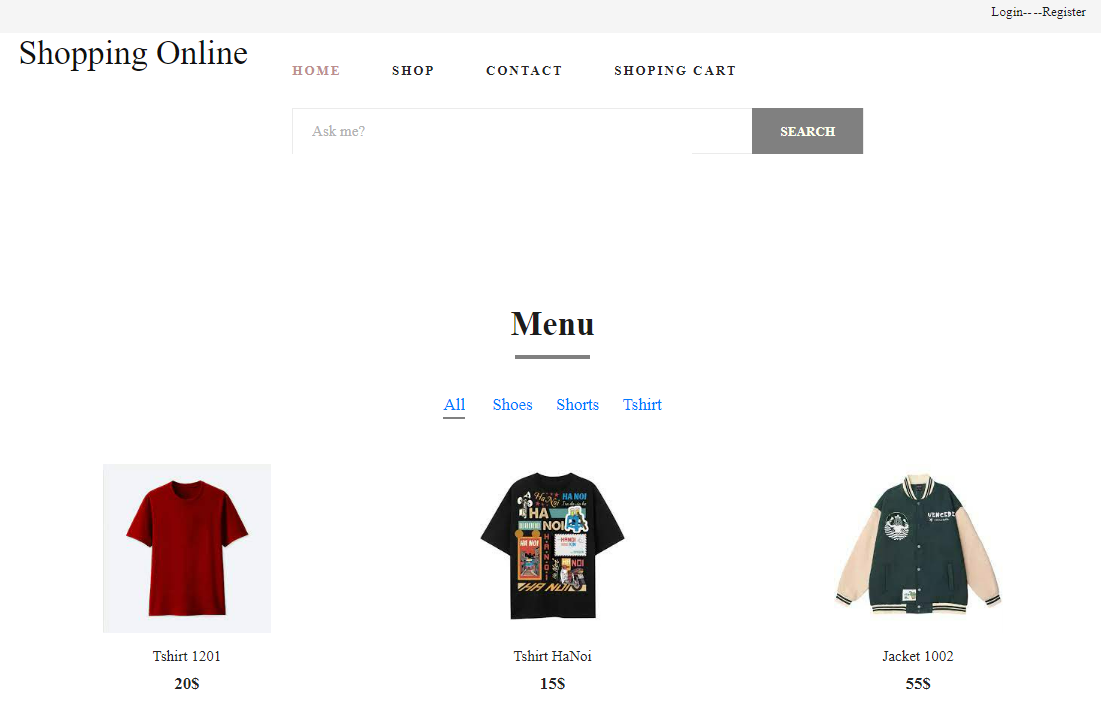




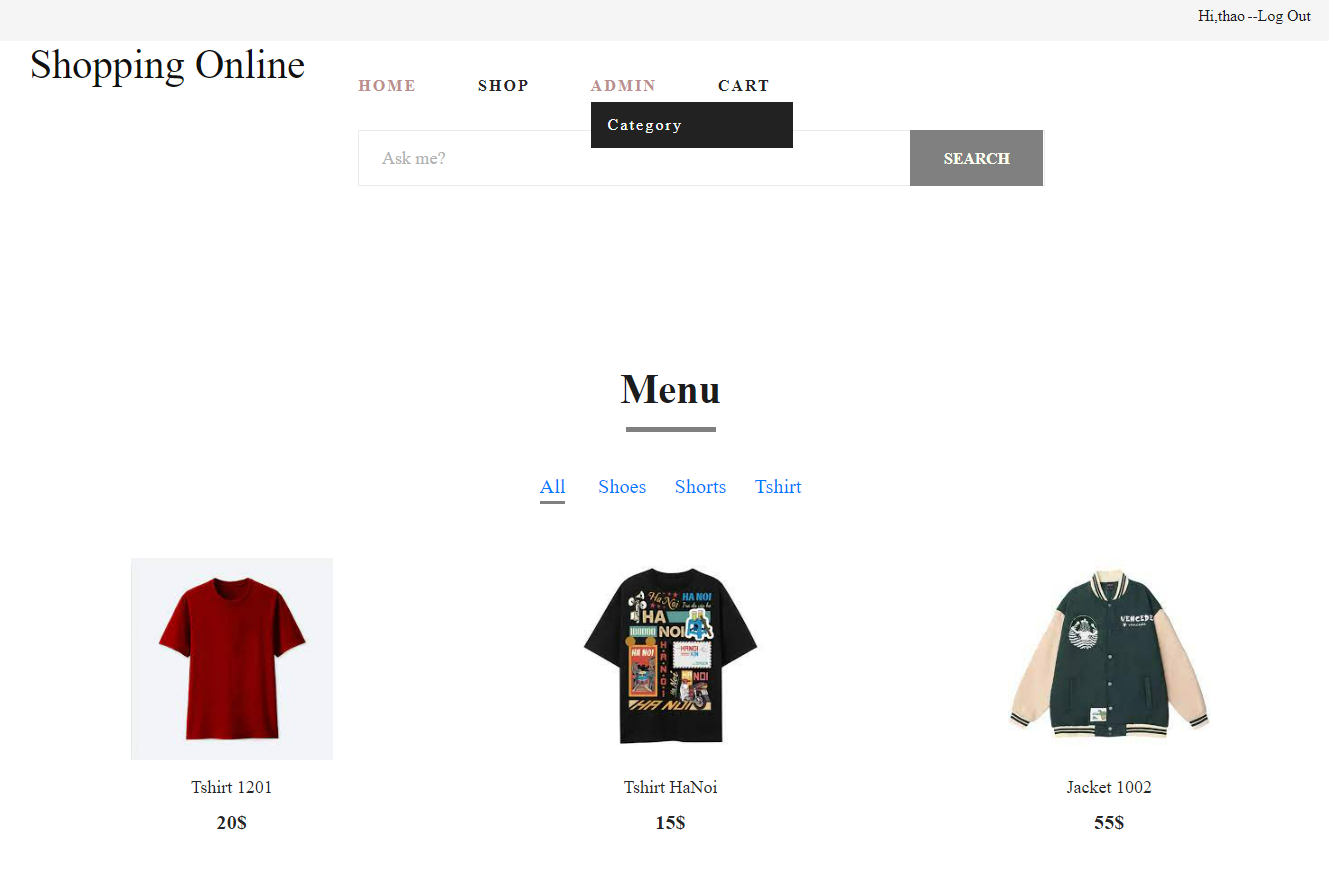


**Explanation of functions in the multipage website**

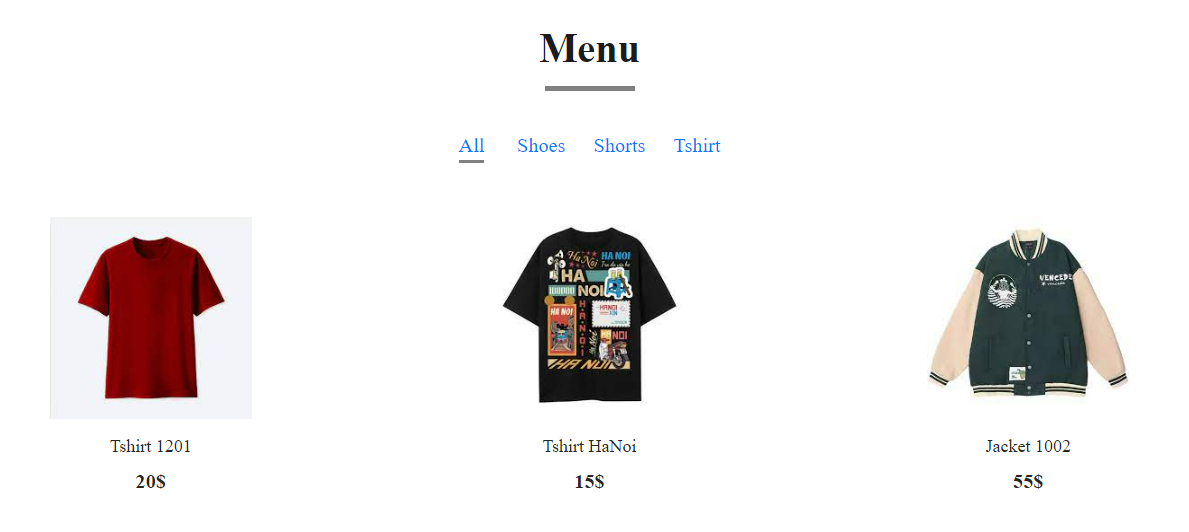
The site is loaded with useful buttons. For instance, the search bar allows users to look up items by name, and clicking the product button takes them to the product page, where products are sorted by catalog. Even if a customer is not signed in, they may still see what is in their purchasing basket. Customer can alse send feedback or idea of customer who hope shop improve.

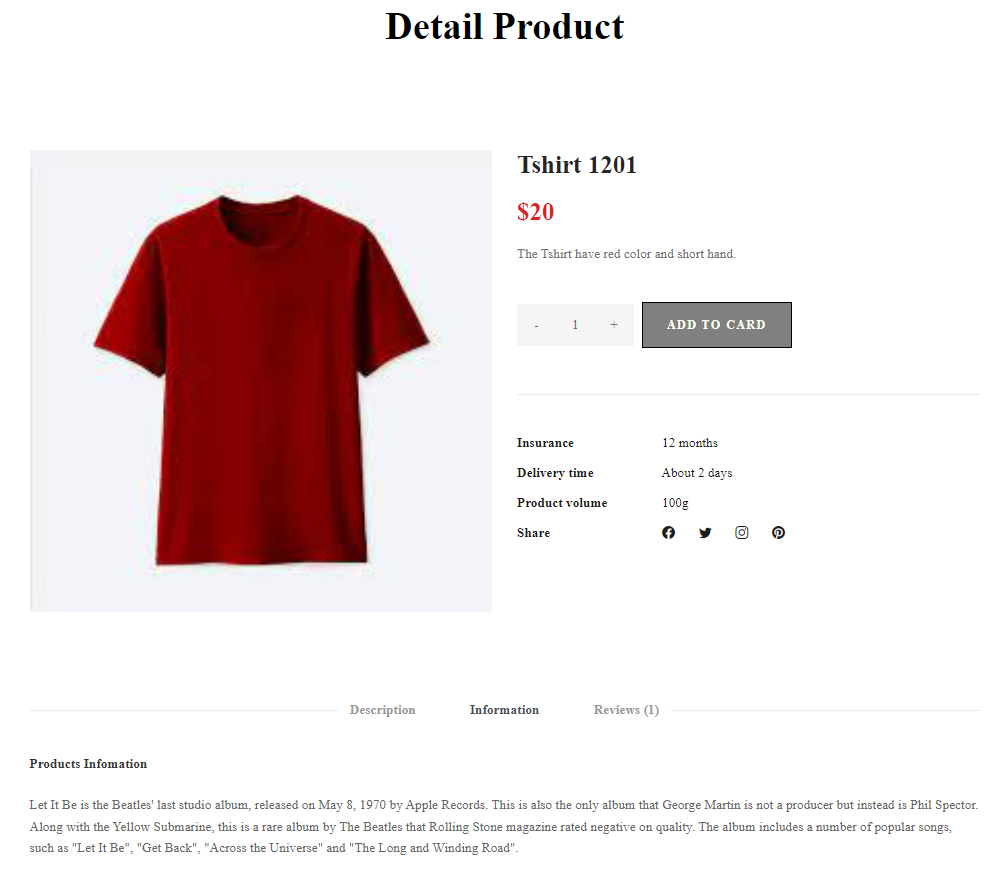


Customers that log in to the website will see features like admin and see product category. Besides, category page put on admin, so customer need transfer a mouse will can see it.

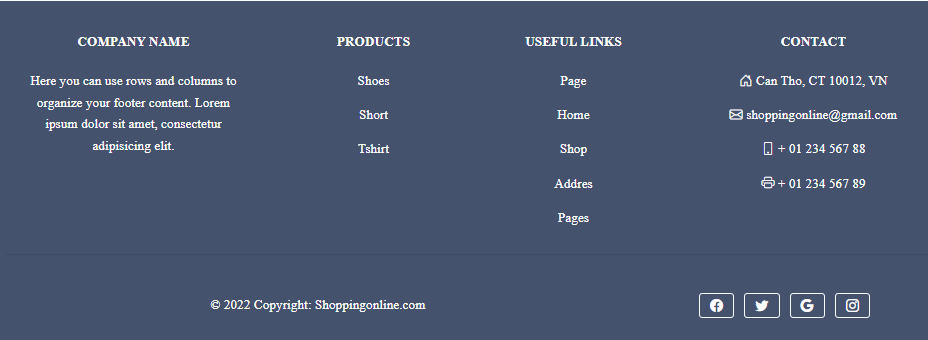


When customers click on a product name on the site, they are sent to the product detail page.



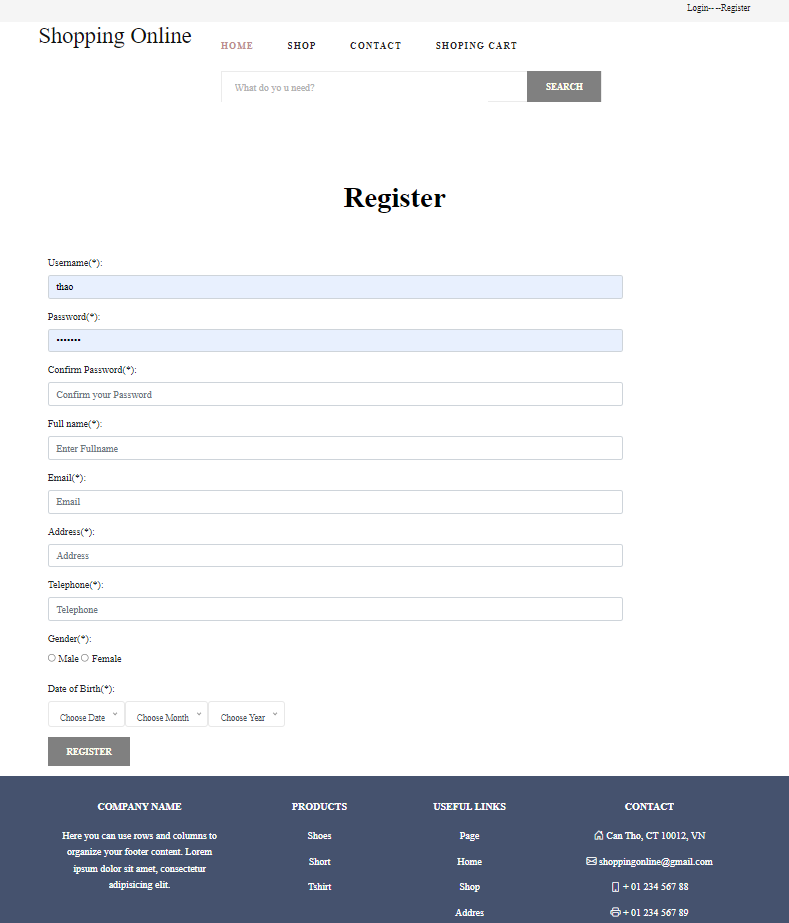


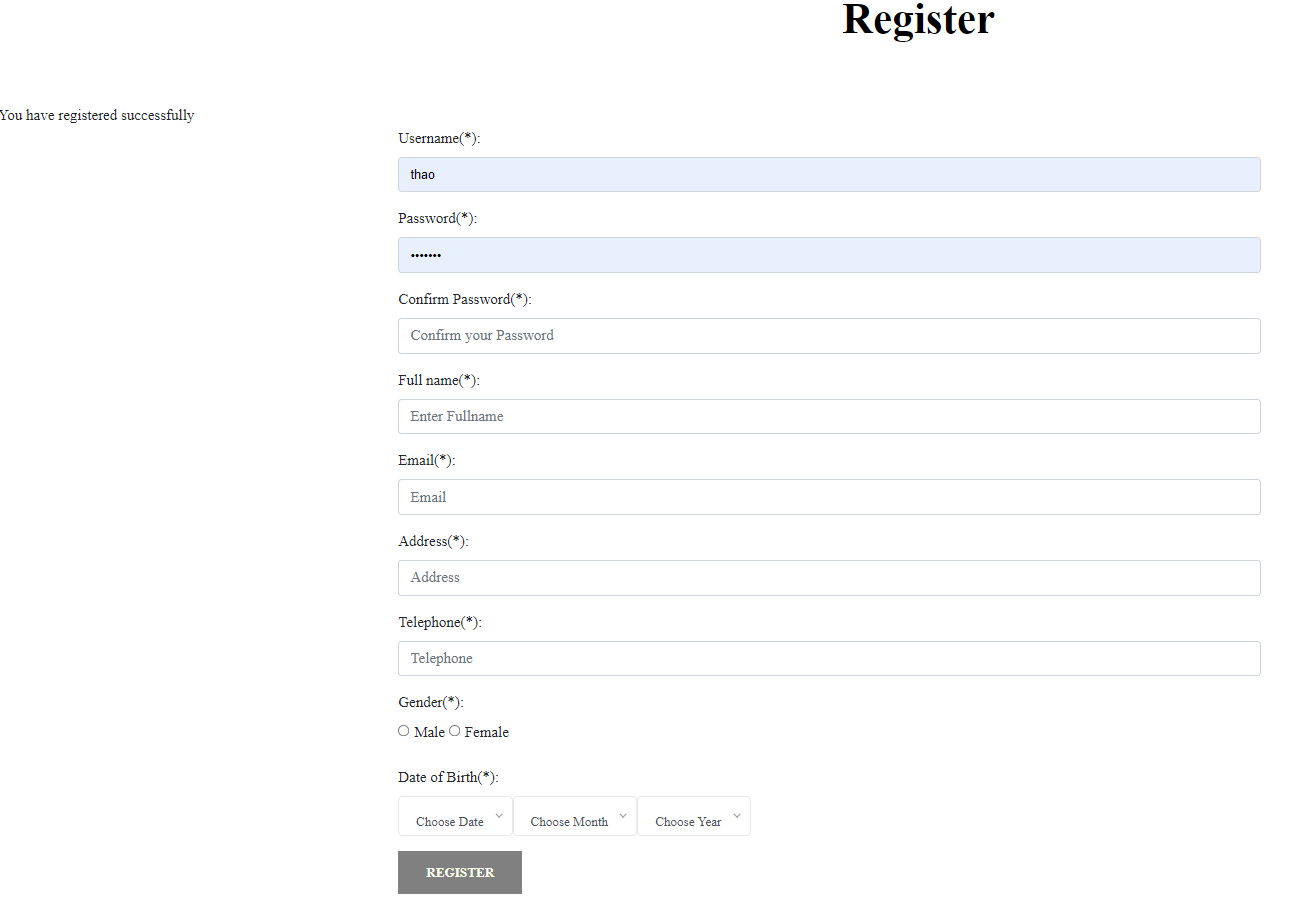
The website's footer will provide contact details including an email address, a phone number, and shop addresses.



**b. The register pages:**

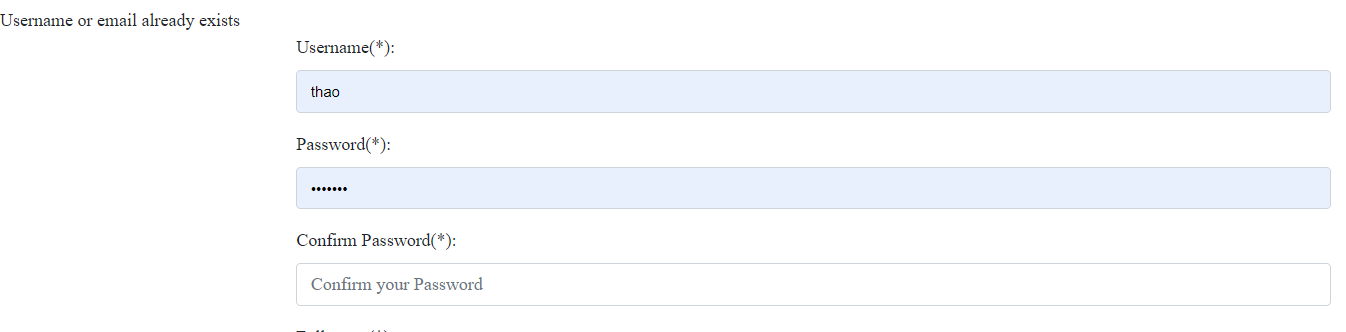
- Functional screen shot of multipage website



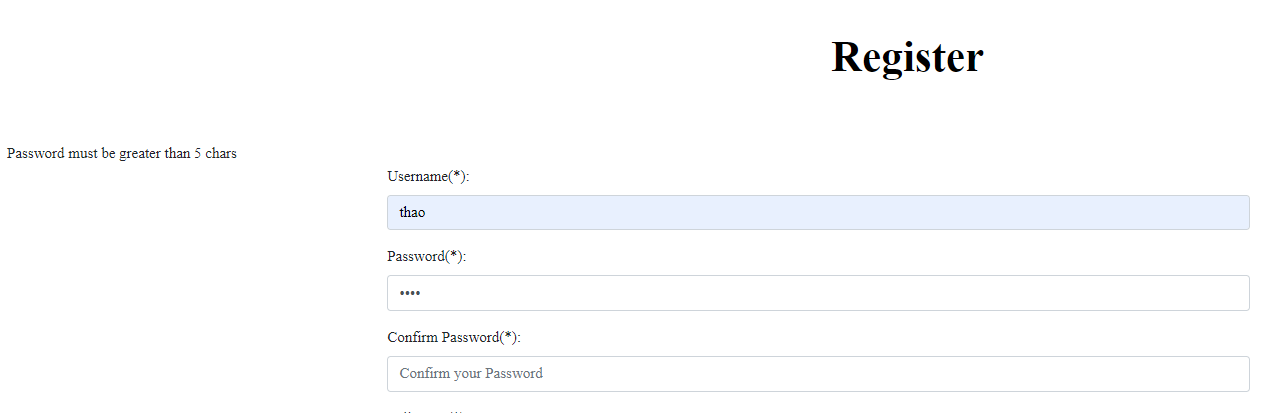


**Functions of the multipage webpage explained:**

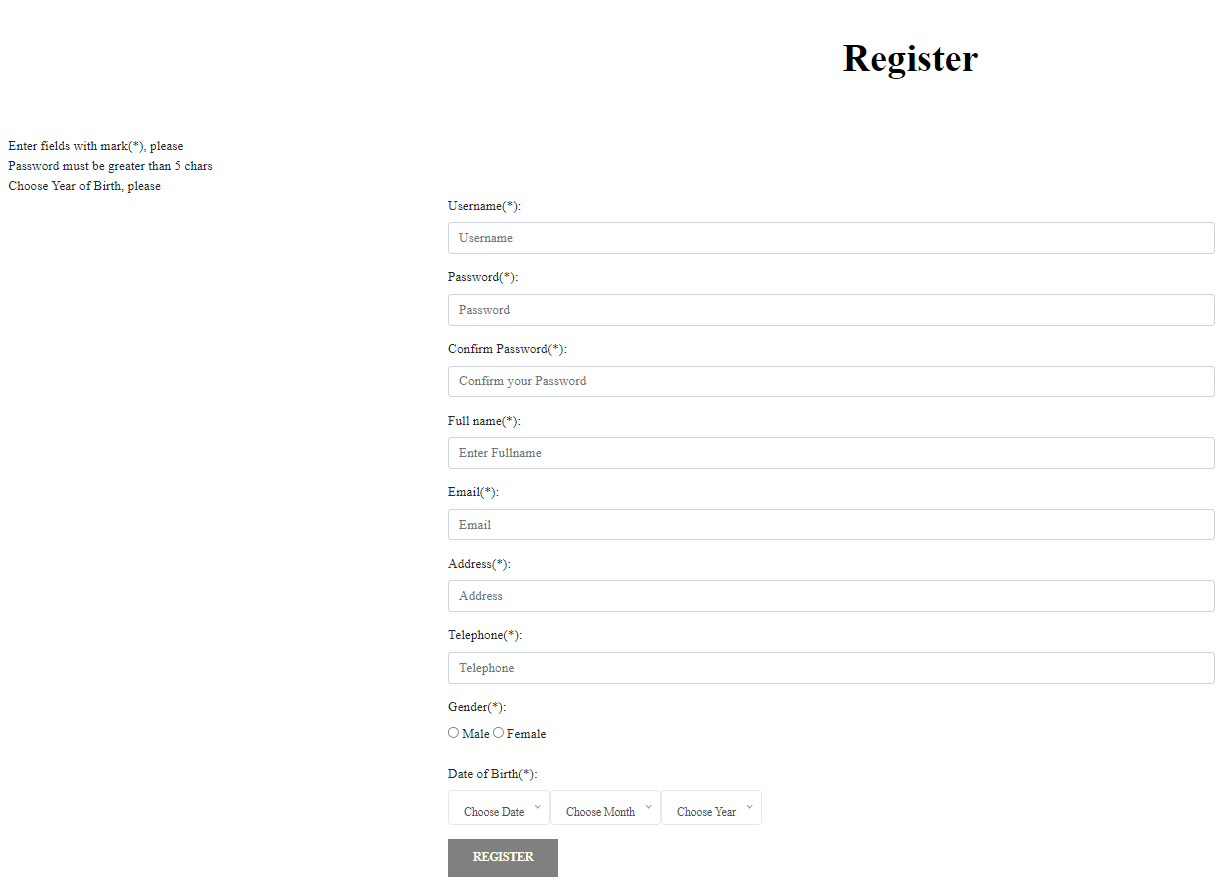
The page used to register members for consumers is known as the registration page. Username, password, second password, gender, date of birth, contact information (phone, email, and address), etc. The consumer must complete all required forms before pressing the register button to establish an account. The website will display the message Successfully, All Information Has Been Saved and You Can Log In. Now after a registration is successful. After the user has completed the form and clicked the "Register" button, a successful registration message is shown “You have registered successfully”. Everyone can access the login page by clicking "Login" upon successful registration.



If the user enters the username that it was registered with before, the message "Username or email already exists" will be displayed.



If the user enters the username, and the password is too short, less than 5 characters, the message "Password must be greater than 5 chars" will be displayed.

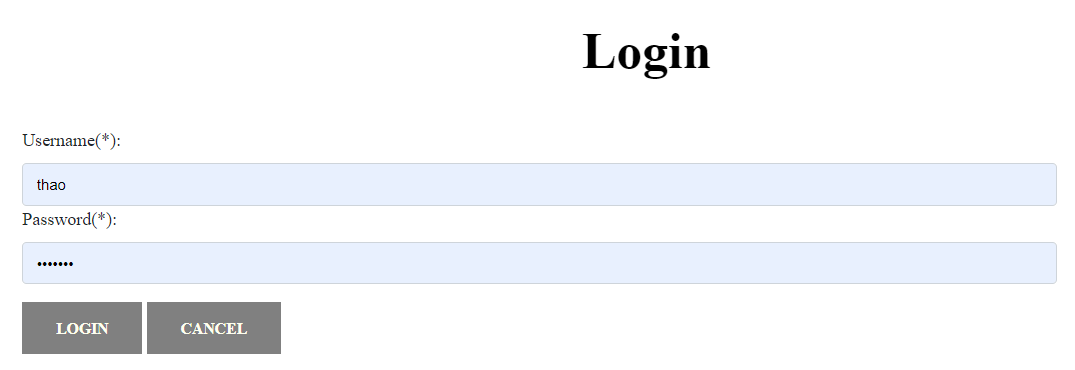


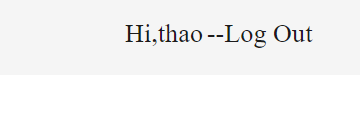
If the user name does not enter anything in the information box, the message "Enter fields with mark (\*), please", "Password must be greater than 5 chars", "Choose Year of Birth, please" will be displayed.

**c. The login pages**

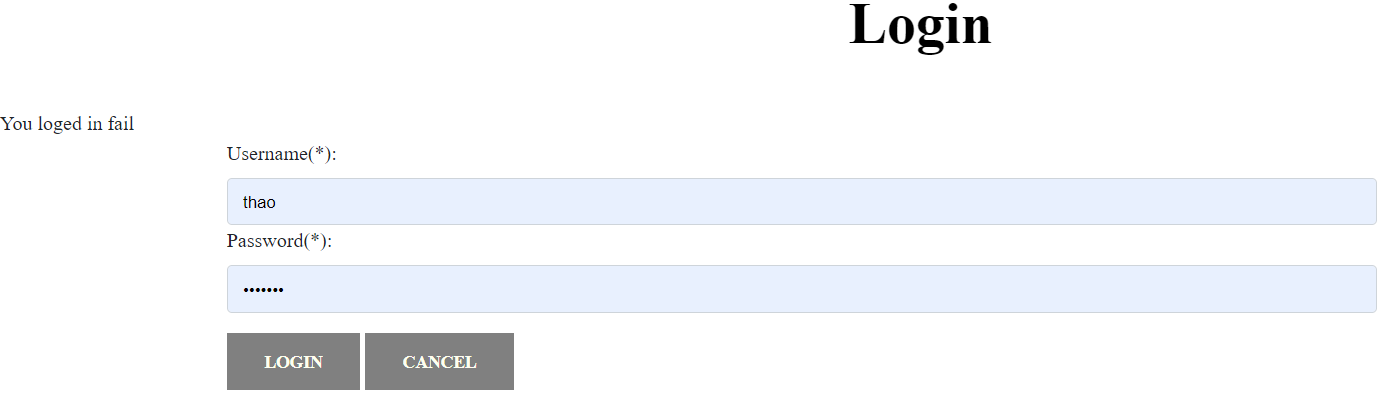
- Functional screen shot of multipage website







After successfully registering for an account, consumers are routed to a login page. When they input the right username and password and click the "Login" button, they are taken to the homepage.



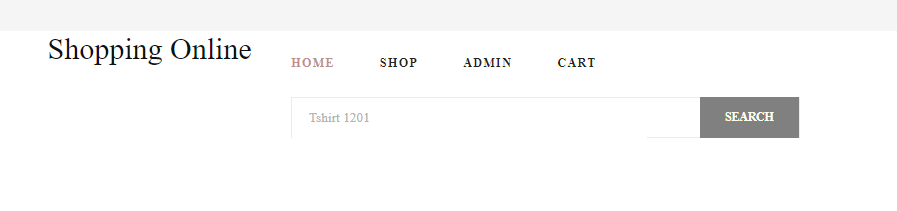
- Some screenshots related to error handling:

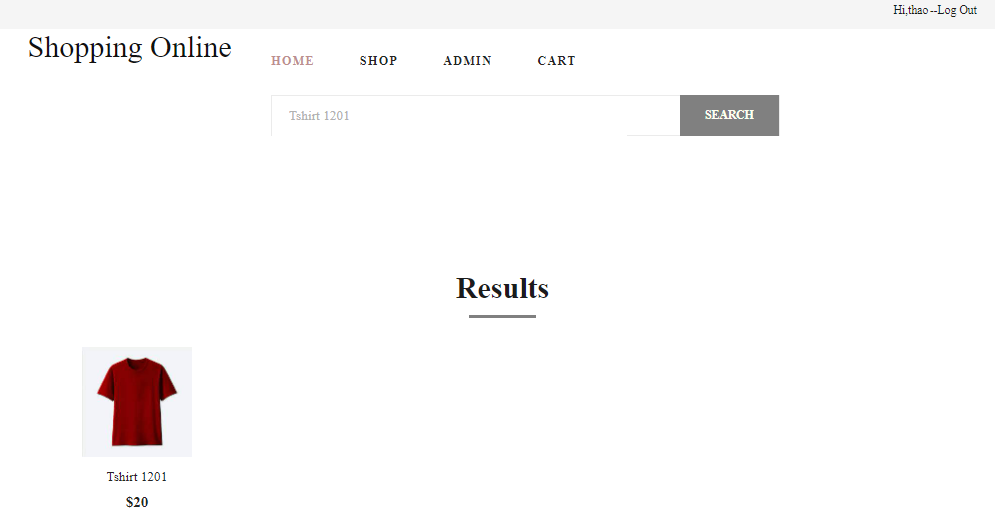
* When the user enters the wrong registration information, the error will be displayed “You loged in fail”.

**d. The search**

**- Explanation of functions in the multipage website**

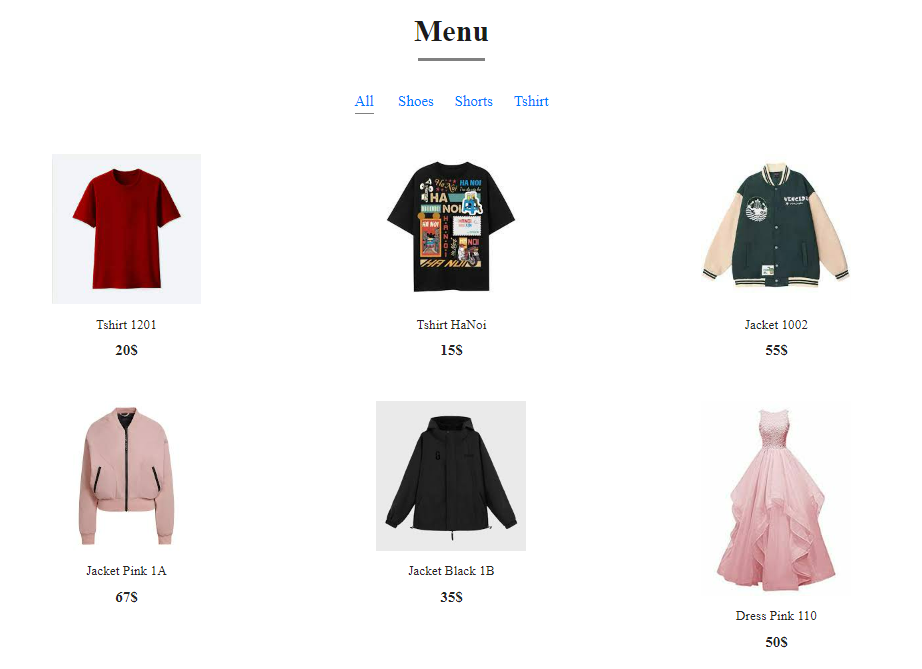
Customers may quickly search for items using the product name in the search field. When a client types in the name of the item to be searched for and pushes the enter key on the keyboard, the item the customer is looking for will appear.

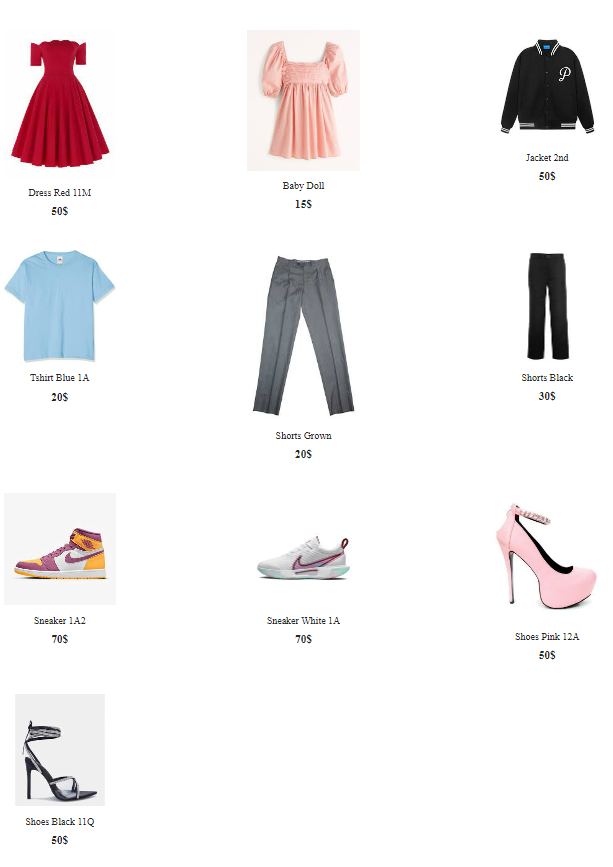




**e. The product pages**

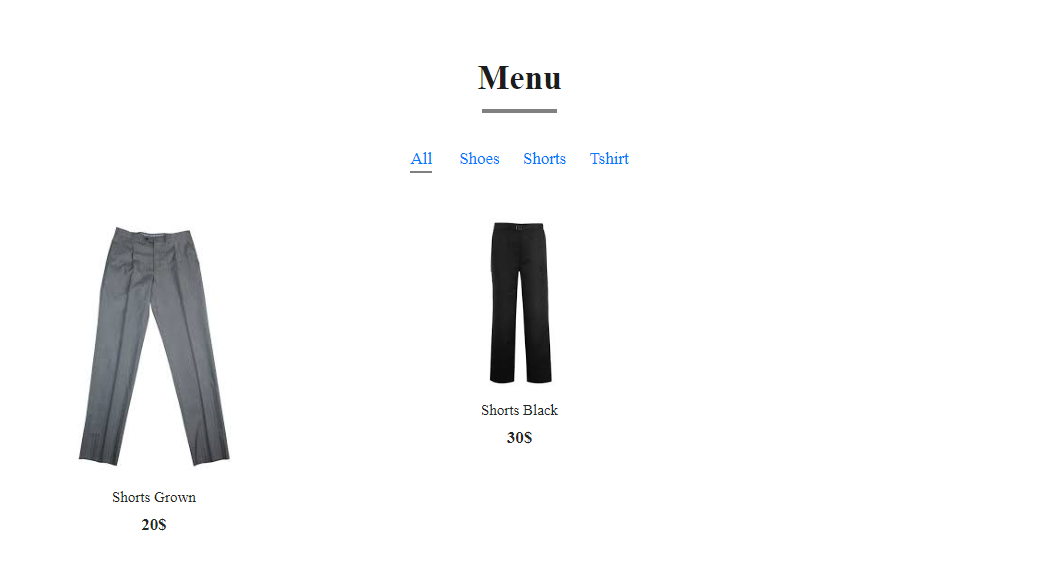
**-Functional screen shot of multipage website**.



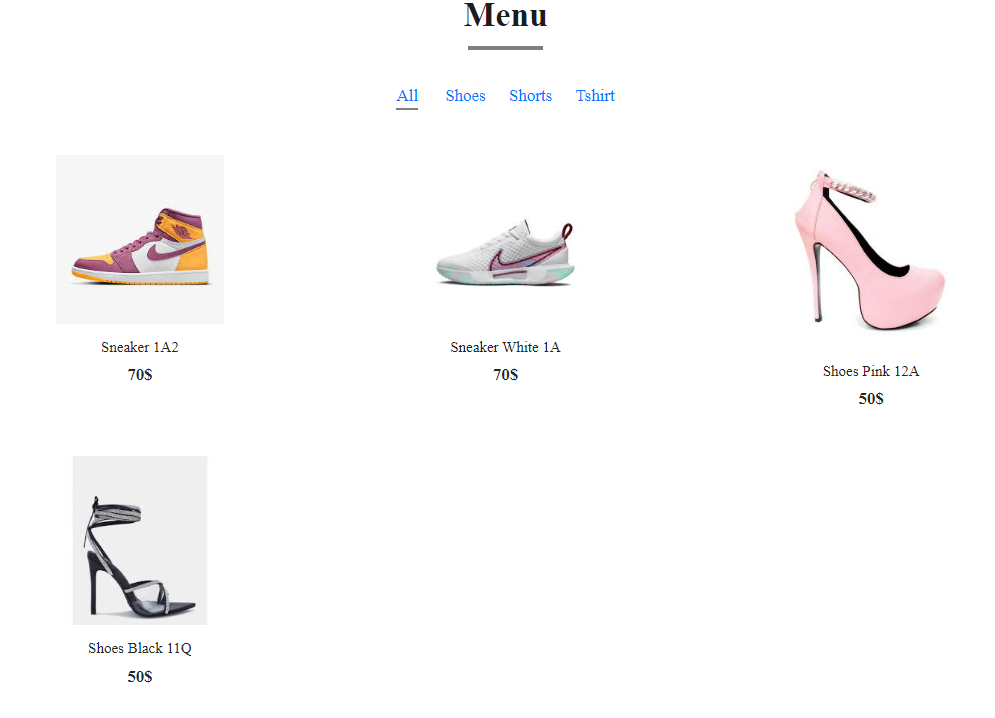


**- Explanation of functions in the multipage website**

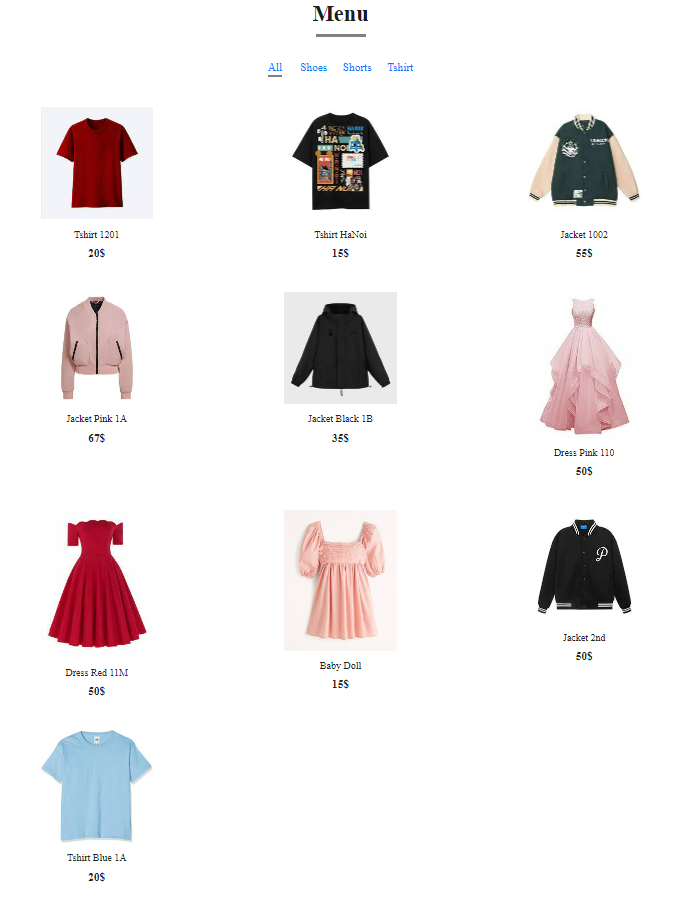
Customers can simply locate things on the store page since they are categorized by category. The image below shows what happens when a consumer hits the "Shorts" button and the items within that category are shown on the screen.



Customers can simply locate things on the store page since they are categorized by category. The image below shows what happens when a consumer hits the "Shoes" button and the items within that category are shown on the screen.

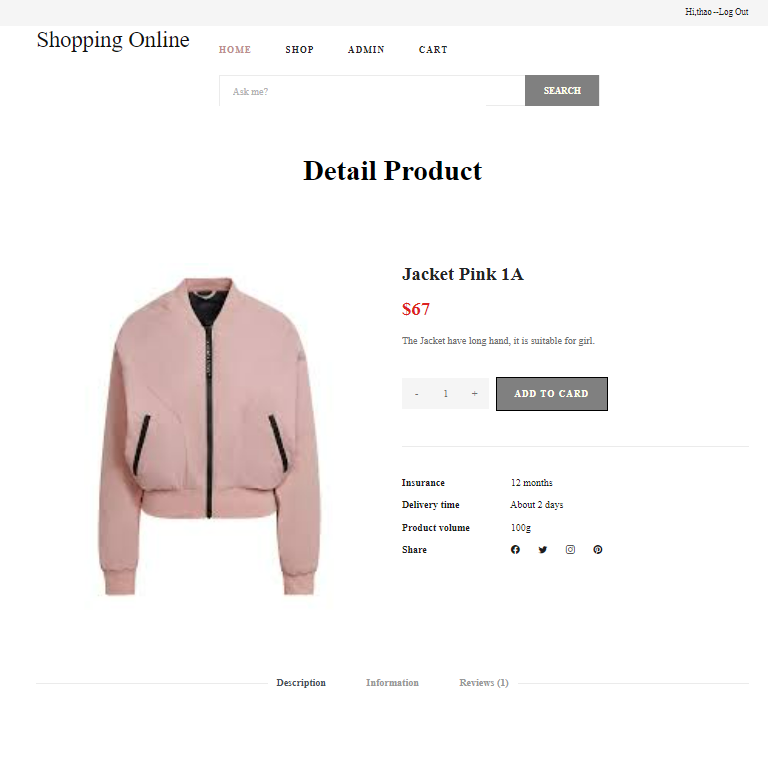


Customers can simply locate things on the store page since they are categorized by category. The image below shows what happens when a consumer hits the "Tshirt" button and the items within that category are shown on the screen.



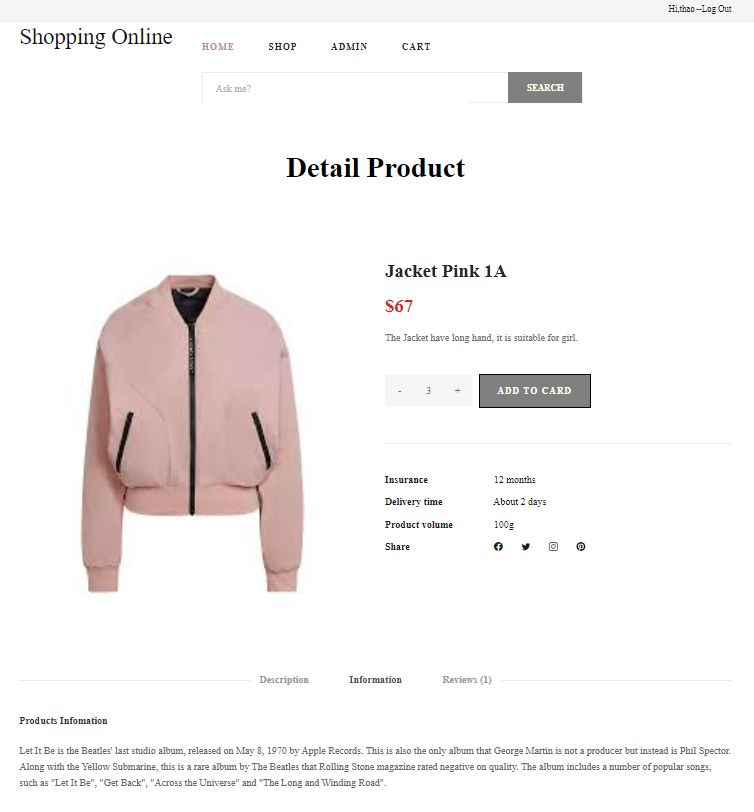
**f. The detailed product**

- **Functional screen shot of multipage website**



When a user clicks on a product name, they are sent to a more in-depth product page. On this page, there are features like a quantity picker and an add to cart button for items that have been selected by the user.

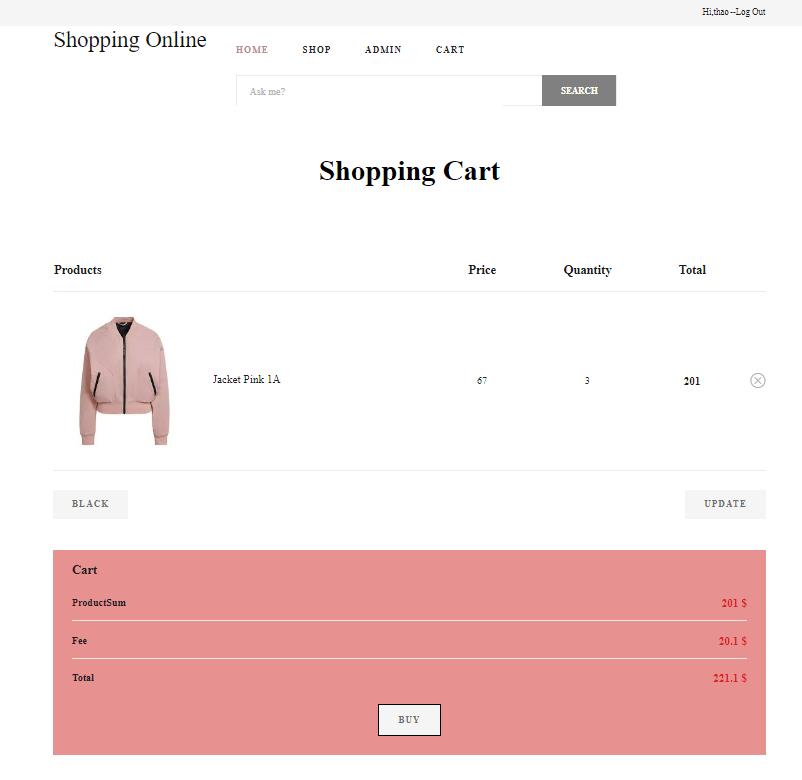
The user will be sent to the shopping cart page after finishing the information selection and clicking the add to cart button.



**g. The shopping carts page**

- **Functional screen shot of multipage website.**

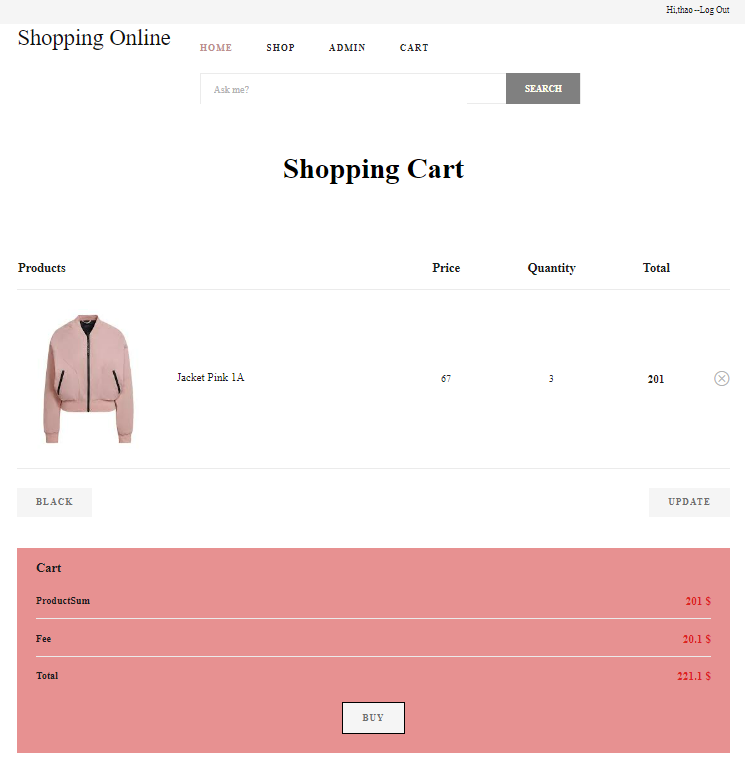
When the user has no order in the cart, the buy button will be hidden



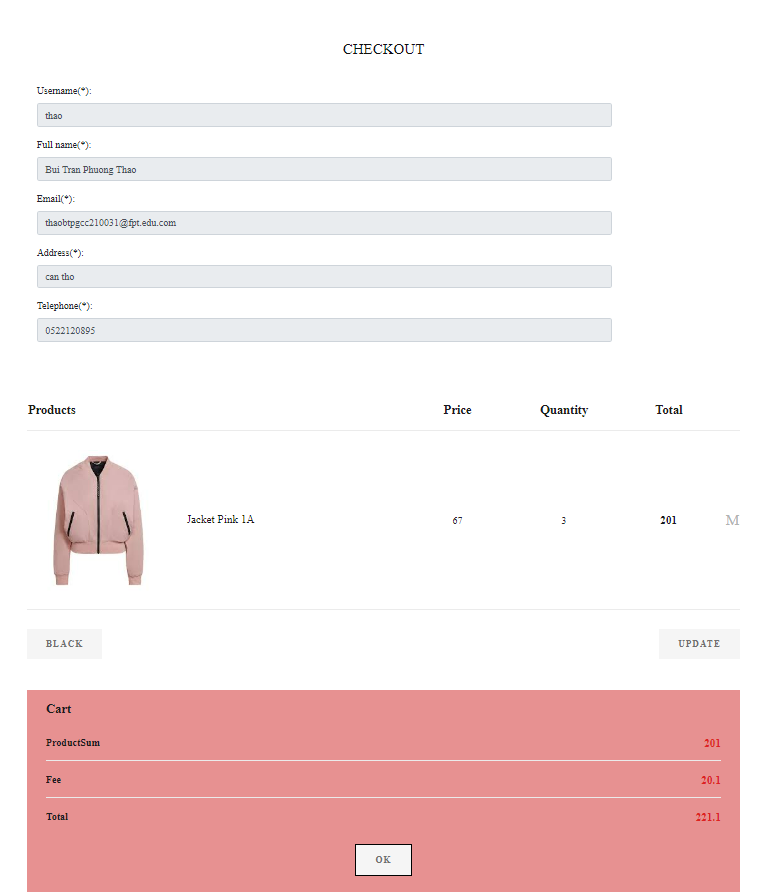
**- Explanations of functions in the multipage website**

**Add to cart:**

When the user clicks the "ADD TO CART" button on the product detail page, their order has been added to the cart.

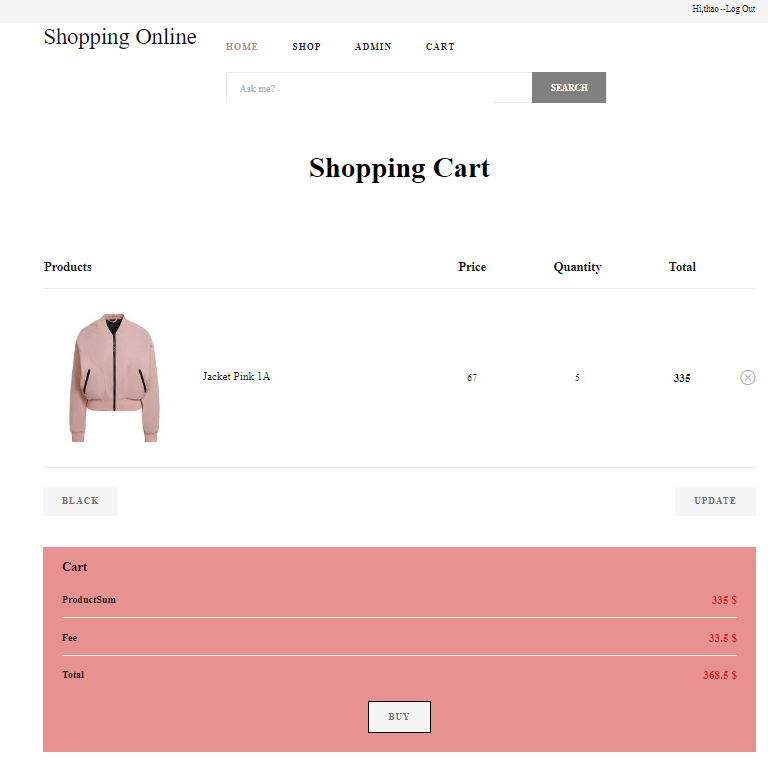


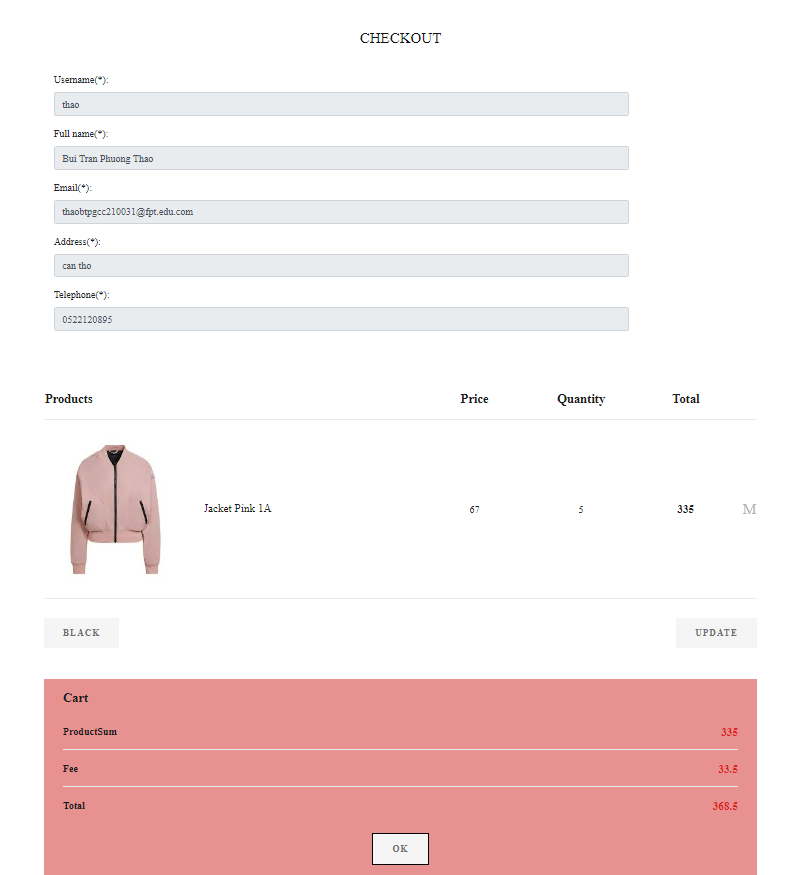
The user will click the "Buy" button after verifying the accuracy of their order information to be sent to the detailed invoice page. Clicking the "back to shop" button will allow them to return to the home page.



UPDATE:

When the user wants to change the quantity of the product in the cart, they just need to re-select the number of the product and then click the update button.





# IV. Test Cases (P7)

Creator: Bui Tran Phuong Thao.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| No. | Test case | Function | Testing data | Exepted output | Actual output | Evaluation |
| 1 | Verify that the user will register successfully after the user enters valid information. | Register | Username (\*): phuongthao123  Password (\*): 1234567  Confirm password: 1234567  Full name (\*): Bui Tran Phuong Thao  Email (\*): [thaobtpgcc1234567@fpt.edu.com](mailto:thaobtpgcc1234567@fpt.edu.com)  Address (\*):Can Tho.  Telephone (\*): 0522120895  Gender (\*): Female  Date of birth : 04/02/2003 | When successfully registered, the website will be displayed a message "You have registered successfully" and store all the data in the database. | When successfully registered, the website will be displayed a message "You have registered successfully" and store all the data in the database. | Pass |
| 2 | Verify that an error sage is displayed when a user enters a username or email already exists. | Register | Username (\*): phuongthao123  Password (\*): 1234567  Confirm password: 1234567  Full name (\*): Bui Tran Phuong Thao  Email (\*): [thaobtpgcc1234567@fpt.edu.com](mailto:thaobtpgcc1234567@fpt.edu.com)  Address (\*):Can Tho.  Telephone (\*): 0522120895  Gender (\*): Female  Date of birth : 04/02/2003 | When registered, the website will be displayed a message "Username or email already exists" and register fail, must be user enter invalid information. | When registered, the website will be displayed a message "Username or email already exists" and register fail, must be user enter invalid information. | Pass |
| 3 | Verify that an error sage is displayed when a user enters a password and confirm password smaller than 5 chars. | Register | Username (\*): phuongthao123  Password (\*): 1234  Confirm password: 1234  Full name (\*): Bui Tran Phuong Thao  Email (\*): [thaobtpgcc1234567@fpt.edu.com](mailto:thaobtpgcc1234567@fpt.edu.com)  Address (\*):Can Tho.  Telephone (\*): 0522120895  Gender (\*): Female  Date of birth : 04/02/2003 | When registered, the website will be displayed a message "Password must be greater than 5 chars" and register fail, must be user enter invalid information. | When registered, the website will be displayed a message "Password must be greater than 5 chars" and register fail, must be user enter invalid information. | Pass |
| 4 | Verify that an error sage is displayed when a user don't enters every files. | Register | There are no information. | When registered, the website will be displayed a message "Enter files with mark(\*), please", "password must be greater than 5 chars", "Choose Year of birth, please" and register fail, must be user enter invalid information. | When registered, the website will be displayed a message "Enter files with mark(\*), please", "password must be greater than 5 chars", "Choose Year of birth, please" and register fail, must be user enter invalid information. | Pass |
| 5 | Verify that the user will login successfully after the user enters valid information. | Login | Username: Thao  Password: 1234567 | When the login is successful, the user will be redirected to the homepage and the Login" button change to “Hi, Thao”, and the register button change "Log out". | When the login is successful, the user will be redirected to the homepage and the Login" button change to “Hi, Thao”, and the register button change "Log out". | Pass |
| 6 | Verify that an error sage is displayed when a user enters a username or password invalid. | Login | Username: Thao  Password: 1111111 | When registered, the website will be displayed a message "You logged in fail" and register fail, must be user enter invalid information. | When registered, the website will be displayed a message "You logged in fail" and register fail, must be user enter invalid information. | Pass |
| 7 | Verify that the user successfully searched for the product by name | Search | The user search for  "[Tshirt 1201](http://localhost/thaobtpgcc210031/index.php?page=shop-details&&id=AB001)" | The result will display that search with name “Tshirt 1201” | The result will display that search with name “Tshirt 1201” | Pass |
| 8 | Verify that the product detail page added to the cart when the user has entered all the information and ressed the "ADD TO CART" button. | Add to cart | The user clicks button “ADD TO  CART” | The website navigates to the shopping cart section and all information is presented there when a user hits the "ADD TO CART" button. | The website navigates to the shopping cart section and all information is presented there when a user hits the "ADD TO CART" button. | Pass |
| 9 | Verify that user successfully edit category with valid information. | Edit category | - Category ID:  C001  - Category  name:  Pata  - Description:  Pata | When the "edit" button was clicked, the website switched to the category management page, where all the information was changed. | When the "edit" button was clicked, the website switched to the category management page, where all the information was changed. | Pass |
| 10 | Verify that “Are you sure?” message is displayed when admin clicks on delete button | Delete Category |  | “Are you sure?” message will be  displayed when admin clicks on delete button. | “Are you sure?” message will be  displayed when admin clicks on delete button. | Pass |
| 11 | Verify that  user  successfully  add with  valid  information | Add  product | Product ID: PF002  Product name: “Shoes girl 1002”  Product category: Shoes  Price:5$  Short description: “The sneaker have white.”  Detail description:””  Quantity: 6  Image: | When clicking on the plus "+" button, the website turned to the product management and all information will be stored into database. | When clicking on the plus "+" button, the website turned to the product management and all information will be stored into database. | Pass |
| 12 | Verify that “Are you sure?" message is displayed when admin clicks on delete button | Delete product |  | "Are you sure?" message will be displayed when admin clicks on delete button | "Are you sure?" message will be displayed when admin clicks on delete button | Pass |
| 13 | Verify that the order information and user information will be displayed on the "Checkout" page after the user clicks the buy button "Buy" on the cart page | Cart page |  | Product:  http://localhost/thaobtpgcc210031/img/download%20(9).jpg  Tshirt 1201  Price: 20  Quantity: 1  Total: 20  Cart  ProductSum 20$  Fee: 2$  Total: 22$ | Product:  http://localhost/thaobtpgcc210031/img/download%20(9).jpg  Tshirt 1201  Price: 20  Quantity: 1  Total: 20  Cart  ProductSum 20$  Fee: 2$  Total: 22$ | Pass |
| 14 | Verify that,  the user will  successfully  log out of  the site | Logout |  | If the user logs out successfully, the  "Hi" place will change to "Login", "Logout" will change to "Register" | If the user logs out successfully, the  "Hi" place will change to "Login", "Logout" will change to "Register" | Pass |
| 15 | Verify that user successfully update with valid information. | Update profile | Username: thao  Password: 1122334455  Password confirm: 1122334455  Full name: Bui Tran Phuong Thao  Email: [thaobtpgcc210031@fpt.edu.com](mailto:thaobtpgcc210031@fpt.edu.com)  Address: Kien Giang  Telephone: 0522120895  Gender: Female  Date of birth: 29/01/2003 | The website returned to its main page after pressing the "UPDATE" button, and all newly added information was updated. | The website returned to its main page after pressing the "UPDATE" button, and all newly added information was updated. | Pass |

# References

Anon., 2022. *Blog.* [Online]   
Available at: https://blog.hubspot.com/blog/tabid/6307/bid/30557/6-guidelines-for-exceptional-website-design-and-usability.aspx  
[Accessed 20 12 2022].

Anon., 2022. *Blog.* [Online]   
Available at: https://blog.hubspot.com/blog/tabid/6307/bid/30557/6-guidelines-for-exceptional-website-design-and-usability.aspx  
[Accessed 20 12 2022].

Anon., 2022. *Developer.* [Online]   
Available at: https://developer.mozilla.org/en-US/docs/Learn/Getting\_started\_with\_the\_web/The\_web\_and\_web\_standards  
[Accessed 8 12 2022].

Anon., 2022. *Elegantthemes.* [Online]   
Available at: https://www.elegantthemes.com/blog/design/making-the-most-of-symmetrical-and-asymmetrical-balance-in-your-web-design  
[Accessed 19 12 2022].

Anon., 2022. *Feelingpeaky.* [Online]   
Available at: https://www.feelingpeaky.com/9-principles-of-good-web-design/  
[Accessed 19 12 2022].

Anon., 2022. *Jedwylie.* [Online]   
Available at: https://www.jedwylie.com/post/web-design-the-80-20-rule  
[Accessed 19 12 2022].

Anon., 2022. *Orbitmedia.* [Online]   
Available at: https://www.orbitmedia.com/blog/web-design-standards/  
[Accessed 20 12 2022].

Anon., 2022. *Smashingmagazine.* [Online]   
Available at: https://www.smashingmagazine.com/2008/01/10-principles-of-effective-web-design/  
[Accessed 19 12 2022].

Anon., 2022. *Techrepublic.* [Online]   
Available at: https://www.techrepublic.com/article/effective-design-principles-for-web-designers-alignment/  
[Accessed 19 12 2022].