ASSIGNMENT 2 FRONT SHEET

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Unit number and title	Unit 10: Web Design & Development					
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Student Name	Nguyễn Trung Anh	Student ID	BHAF190162			
Class		Assessor name	Ngô Thị Mai Loan			

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:				
Lecturer Signature:						

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I. Introduction

In this assignment 2, I will apply the theory of assignment 1 to create a website according to the needs of the customer. And here is my progress when creating this website.

II. Content

- 1. Utilize website technologies, tools and techniques with good design principles to create a multipage website
- a. Create a design document for a branded, multipage website supported with medium fidelity wireframes and a full set of client and user requirements (P5)

1.1, Scenario:

Currently I am working in web development department of btec fpt company. And the company gets a sales web design contract for a trader who wants to switch over to an online business. as a comprehensive web leader for the company's leading innovative web and marketing solutions my team was assigned to this contract, since the new client's shop should request by Website customers are quite simple. I will report on web client requests for this assignment.

1.2, User case paradigm:

For the ease of understanding the project and its required functions, I have designed a diagram to demonstrate the functions and the requirements to access them:

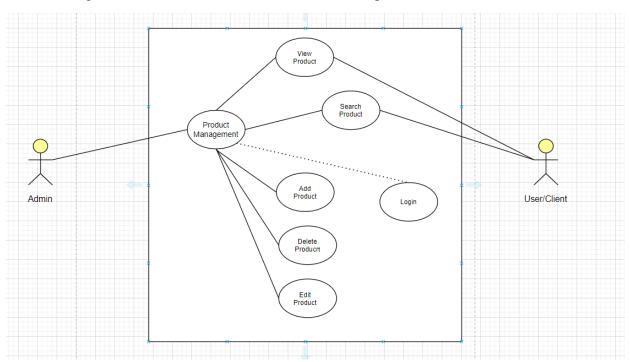


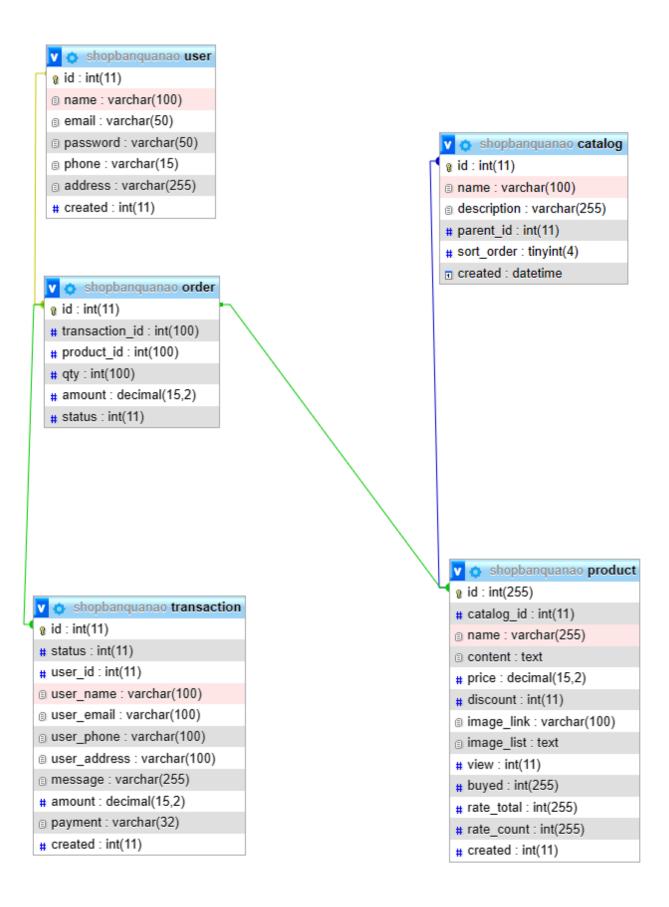
Figure 1. User Case paradigm

As demonstrated in Figure 1, the website will have 5 main functions: View Products, Search Products, Add Product, Delete Product and Edit Product. View Products and Search Products functions are available for both Admin and User/Client. But Add Product, Delete Product and Edit Product functions are only available for the Admin. Additionally, Admin will also be required to enter username and password in the Login in order to access the above functions.

1.3, Database Diagram

To demonstrate the data input types and attributes, I have designed a SQL diagram for a clearer demonstration:

The database contains 2 tables, user_ for admin users management and product for product management. Both tables have ID which is set as key attribute which can't be deleted or edited. ID are also set to auto increment, removing the need of adding ID manually. Other attributes are named for their functions, such as Product Desc for the description of the product



1.4, Wireframe for the project:

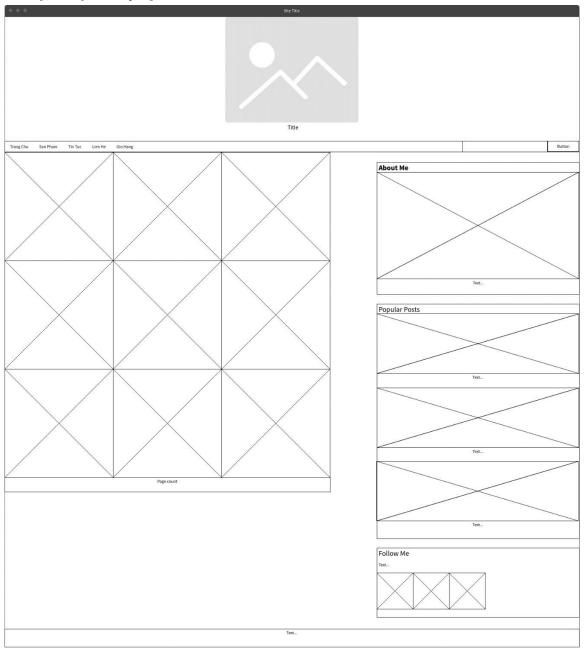


Figure 3. Index page

Each website is broken down into 3 parts: the header, the footer and the index. The header usually contains the logo of the company who owns the website, along with the company's brand. The footer usually contains the legality of the website and technical support for the website, such as hotline or social media. The Index page is the home page of the website. The page usually contains the description to the web or display the products which are on the database of the website.

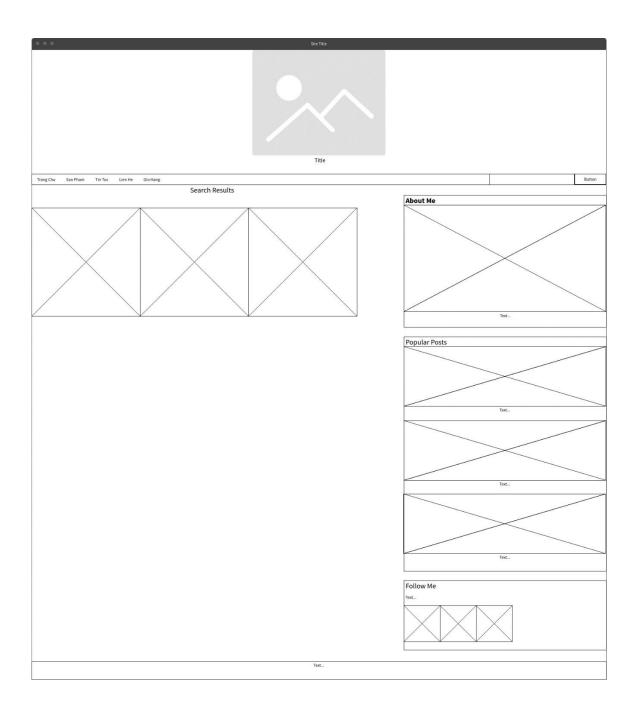


Figure 4. Search Result page

By typing the keyword into the search box on the upper right of the page and clicking on "Search" button, the Search Result page will display the products which its names related to the search keyword. The page will also display the recent keyword entered by the client.

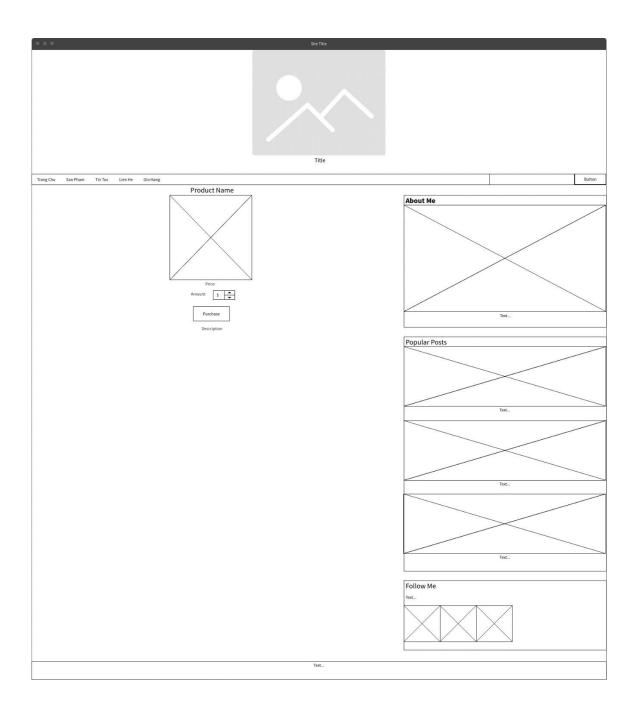


Figure 5. Product Information page

Upon clicking on one of the products, the Product Information page allows the client toview the product personally along with its information that cannot be seen on the Index page such as the product's in-depth descriptions. The page also contains a "Purchase" button, which will add the current product being viewed by the client along with the amount chosen in the "Amount" box to the cart for checkout.

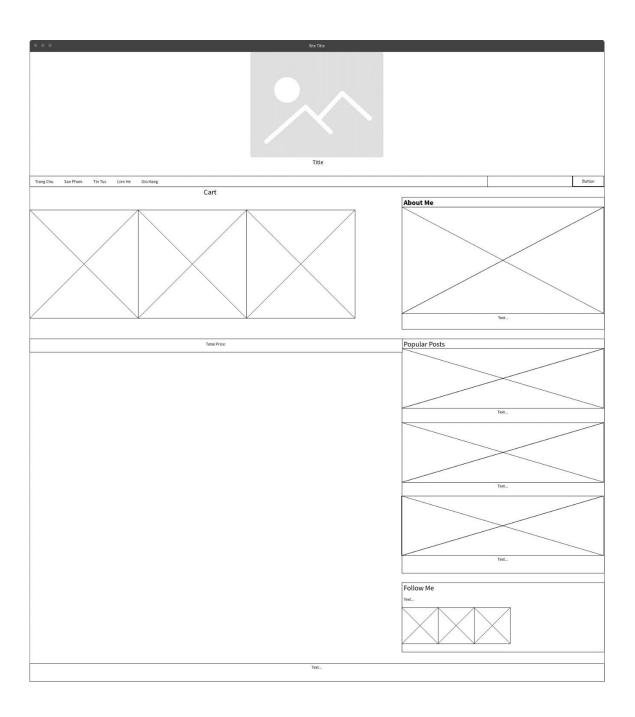


Figure 6. Cart page

The Cart page shows every product that the client has added by clicking the "Purchase" button from the Product Information page. The products on this page are shown with the amount added for the Product Information page. The Total Price is calculated by adding up the products' price currently in the cart.

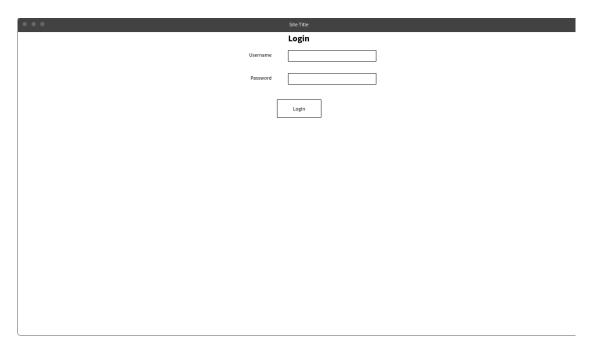


Figure 7. Admin Login page

As mentioned in the previous section, the Admin system cannot be accessed by the average client. Due to the risk of an attack which could lead to server corruption, a login screen is required for the admin side.

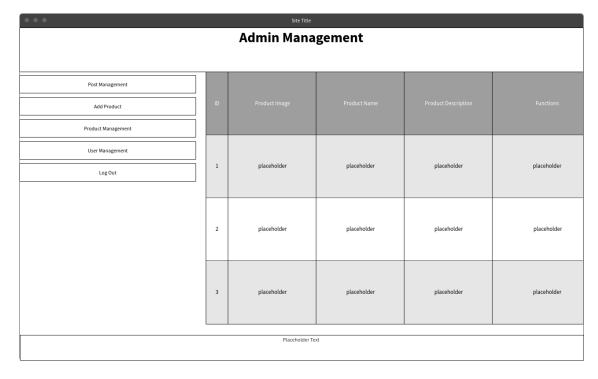


Figure 8. Admin Index page

The Admin Index page is displayed upon logging in. The page includes 3 parts: the header, the footer and the index. The header contains the company's logo along with the company's brand. The footer only contains the legality of the page, unlike the Index page for theclient. The Admin Index page includes 2 sides: the functions and the table. By default, the page will display the product/post table.

Ste Title							
Admin Management							
Post Management		username	password	Functions			
Add Product	ID						
Product Management							
User Management		1 placeholder	placeholder	placeholder			
Log Out	1						
	2	placeholder	placeholder	placeholder			
	3	placeholder	placeholder	placeholder			
Placeholder Text							

Figure 9. Admin User Management

By clicking on the "User Management" button, the page will show the user list, displaying usernames and passwords of each account. The "Function" column allows admins to either edit or delete the account.

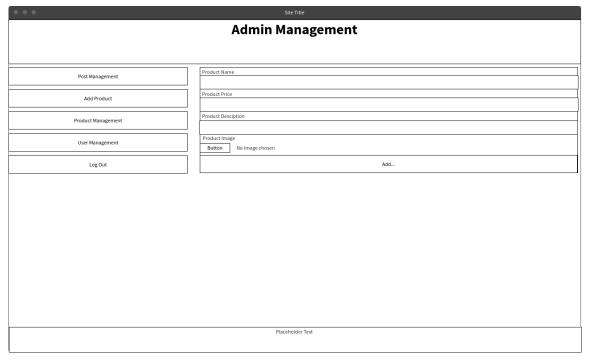


Figure 10. Admin Add Product page

The Admin Add Product page allows the admin to add new products to the database automatically by filling in data into the textboxes in the form and choosing images to upload to the database.

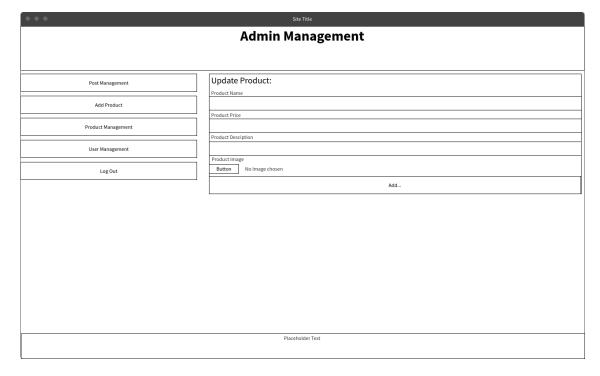


Figure 11. Admin Edit Product page

Similar to the "User Management" function, Product/Post Management allows the admin to edit or delete the existing data on the database. The Admin Edit Product page displays the olddata in the textboxes and admin and replace them with new data.

1.5, Site diagram:

Site diagrams are useful tools when you need to review the functions and outcomes of the website's functions. A site diagram helps with creating, visualizing and changing the flow of a dynamic website. To understand the flow of the website, I have designed a site diagram for the assigned project:

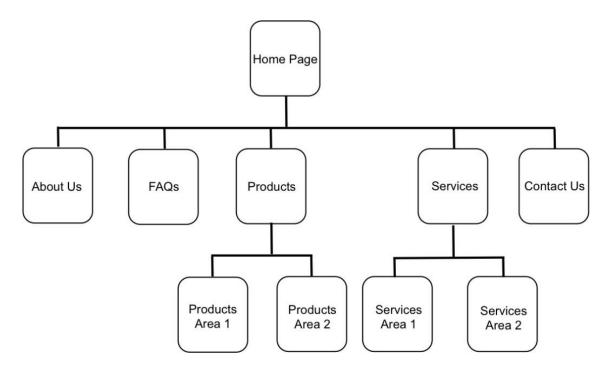


Figure 12. Site Diagram

b. Use your design document with appropriate principles, standards and guidelines to produce a branded, multipage website supported with realistic content (P6):

In order to efficiently design and develop the project assigned, I used Sublime Text 3 for coding and XAMPP Control Panel for emulating the website's environment.I used mainly used 3 types of languages to develop the project: HTML for overall website building, CSS for designing and styling the website and PHP for other website functions.

2.1, Client-side page:

The inc folder includes file that are required on multiple web pages without the need of having to repeat the coding on every web page that requires it.

In order for the website to link with the database, a Connect file is created to establish the connection between the website and the database. After linking with the website, a confirmation step will occur to check for the database.

The header file is used for the above section of the page. It includes the logo and brand of the company and a quick navigation bar with a search function for easier access. Each button of the navigation bar is formatted to redirecting to the different page for its function.

The footer section is for the bottom section of the page. It includes descriptions and information of the company and/or the staffs or the manager of the website.

The Pagination page limits the number of products shown on a page and separate other products to the next page. This also displays the page number on the URL when switching to thenext page. Outside of the inc folder is the main functions of the website. These pages are mostly functions and usually includes the files in the inc folder.

The Index page is the home page of the website, displaying the products and information of the company who owns the website.

The Search file connects to the database and locate similar product names within the database. If no similar product names found, the page will return blank. Else, if similar product names are found, the page will display the product information.

The Single Product file displays the product's full information upon clicking on the product on the Index or the Search Result page. This file also allows clients to add product to the cart.

The Cart file connects and executes commands to the database to receive the products' information. After receiving the information, the file then will display the products' name and price, along with calculating the total price according the products' price and the quantity ordered.

The CSS file is used for designing and styling the web pages. This helps for a clearer and eye-catching presentation for the client. For this website, I mainly used CSS without extensions.

2.2, Admin page:

As the Admin page operates as normal web page, the Admin page also includes an inc folder for codes that is used multiple times

The Login file displays a form for the admin to fill with username and password. Uponclicking the Login button, the file will establish a connection to the database and execute the command for validating the input.

The Index file is the home page of the website. The file displays functions that the admin can use to communicate with the database and shows lists according to the function currently being viewed. The Index file also contains the functionality of the Delete button on the table, which allows instant delete request without the need to re-enter the data to delete.

The Product List file functions as a table, displaying the products sorted out by categories. The table also has 2 functions: Edit Product and Delete Product.

The Edit Product file streams in and displays the current information of the product into the textboxes. Admin is able to change any information of the product by changing the textbox or upload a different picture file.

The Add Product file allows admin to add product by adding information to the blank textboxes and upload new picture files for the product.

II, Create and use a Test Plan to review the performance and design of a multipage website:

1, 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) (P7):

1.1, GUI Testing:

The GUI test checks for 2 main elements: User Interface (UI) and User Experience (UX). The UI test is for the overall layout of the website and comforting for the client's view. The UX test is for testing the website's responsiveness, allowing the website to display on multiple different screen sizes by adjusting the layout but does not affect the original frame.

Testing Elements	Details		
User Interface (UI)			
Color	Harmony between black and gray		
Layout	Easy to locate items and comforting to look		
Font	Easy to read, written clearly		
Images	Easy to recognize the product		
User Experience (UX)			
Website on wide screen platforms	Website is easy to use and displays perfectly		
Website on small screen platforms	Due to the smaller screen size, the layout of the page has to be adjusted but does not affect the original frame (Figure 41, 42, 43)		

Figure 41. GUI Testing



Figure 42. Website on iPhone X



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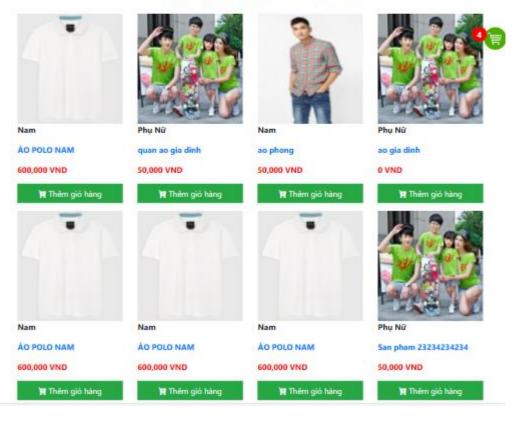


Figure 43. Website on iPad Pro





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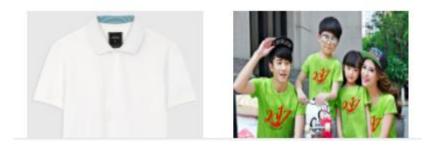


Figure 44. Website on Pixel 2XL

1.2, Function Test:

The Function test only checks for one element: The website operates smoothly and bugs and/or errors are minimal.

No	Scope	Test Description	Input	Expected Results	Results
1	Login (Admin)	Login Testing	Username and Password	Login Validates	Pass (Figure 45 & 46)
2	Add Product (Admin)	Add Product testing	Product Details	Add Success	Pass (Figure 47, 48, 49)
3	Edit Product (Admin)	Edit Product testing	Product Details	Edit Success	Pass (Figure 50, 51, 52)
4	Delete Product (Admin)	Delete Product testing	Product ID	Delete Success	Pass (Figure 53, 54, 55)
5	Search Product (Client)	Search Product testing	Product Name	Product fount	Pass (Figure 56 & 57)

Figure 45. Function test

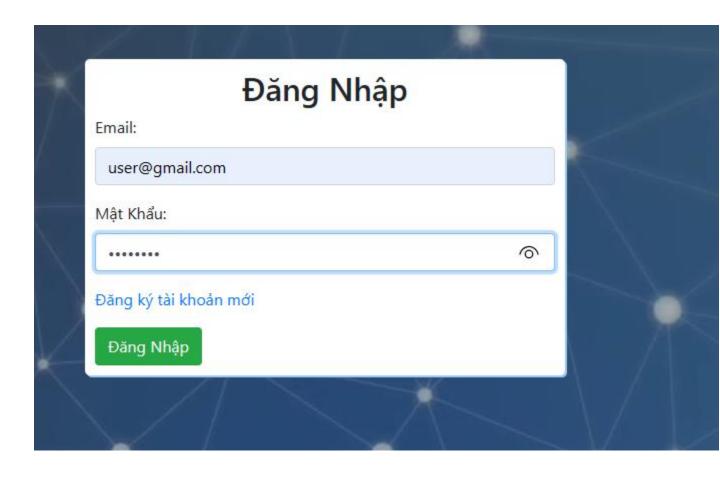


Figure 46. Login Test

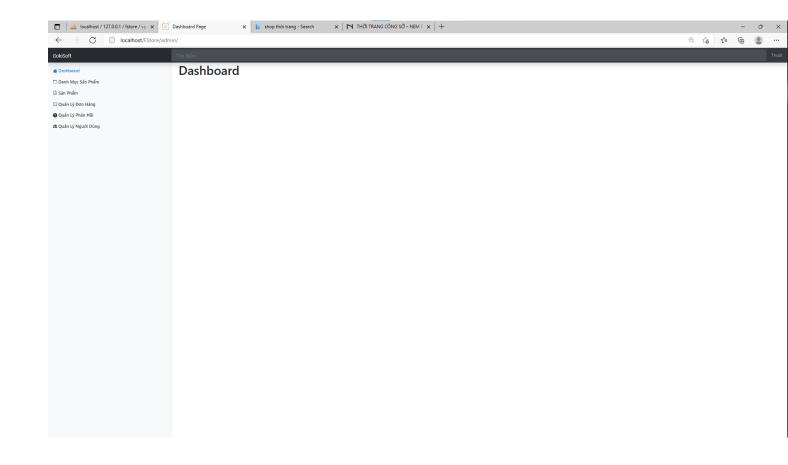


Figure 47. Login Test Success

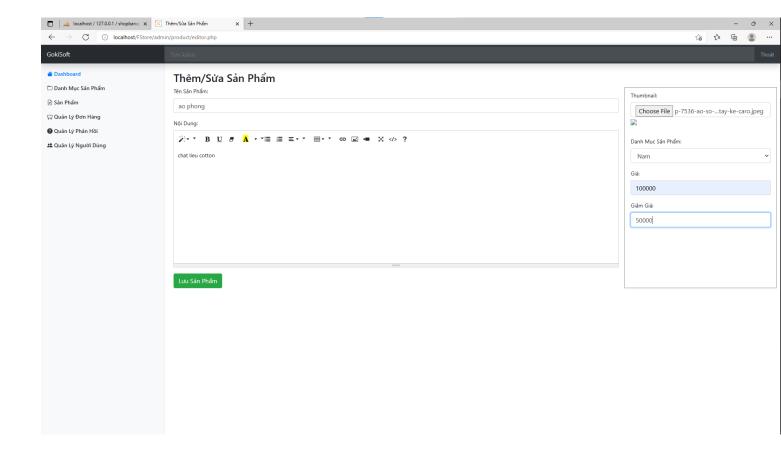


Figure 48. Add Product Test



Figure 49. Add Product Successful

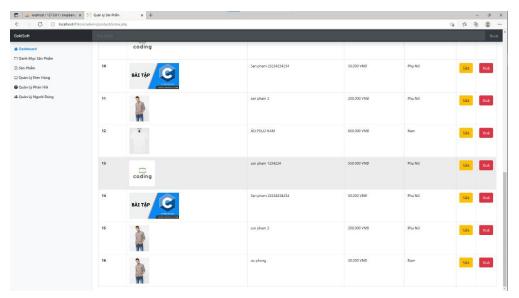


Figure 50. New Product inserted

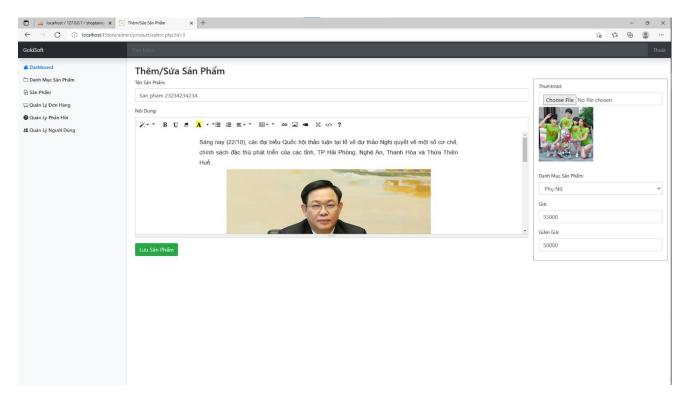


Figure 51. Product Edit Test

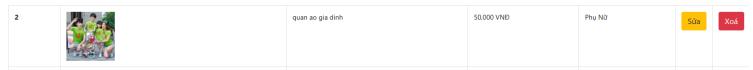


Figure 52. Edit Product Success

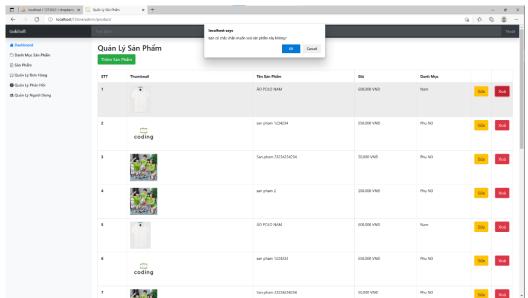


Figure 54. Delete Product Test

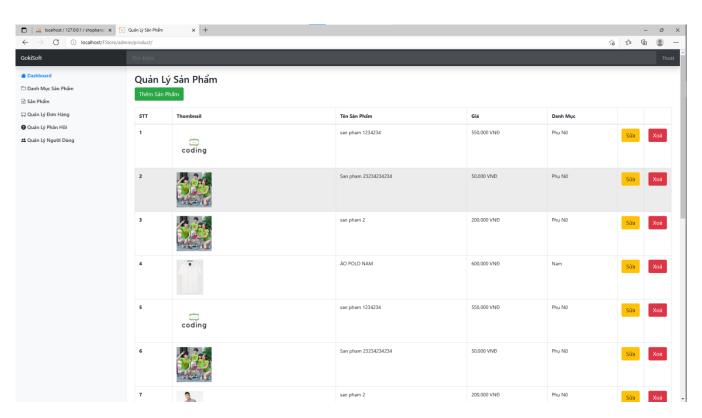


Figure 55. Delete Product Success

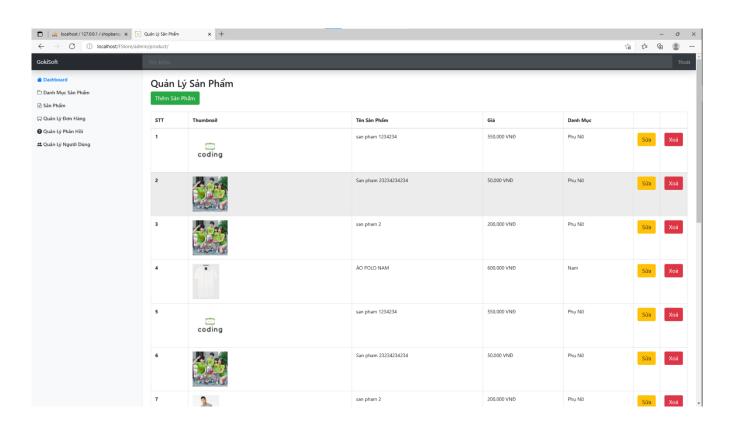


Figure 56. Product Deleted

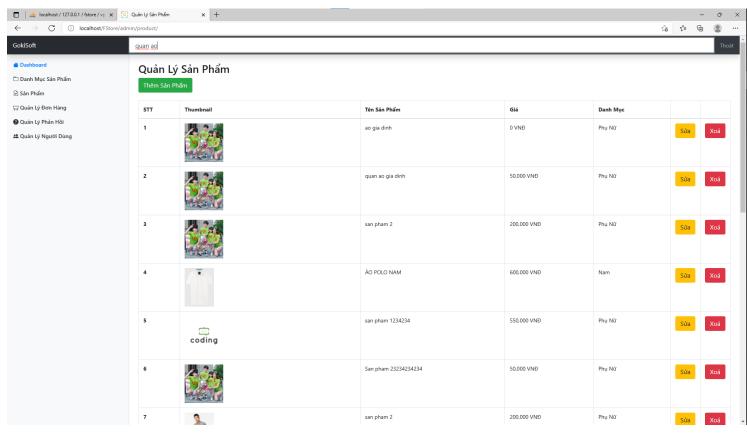


Figure 57. Product Search Test

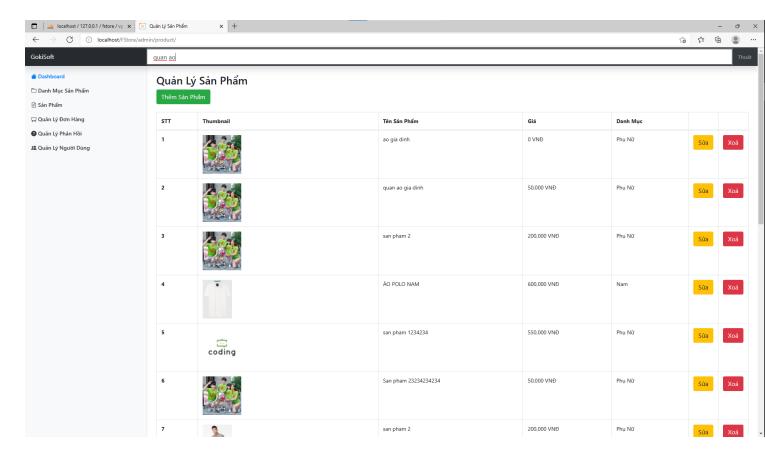


Figure 58. Product Search Fail

III. User manual and solution:

A user manual is a documentation for a product or service provided to the end user. It aims in providing information about the product. The user manual often contains the details about a technical product that is either under development or already in used. User manuals are applied in various industries, for example, in engineering, medicine, IT and so on.

1, Client user manual:

The Client user manual is used to guide the client throughout the website's functions inorder for the client to understand the page clearly.

• Step 1: Once you connect to the website, you will be greeted with the home page. This above section of the page shows logo and the brand of the company. Scrolling down will show products currently for sales, and on the right side will show thedetails of the page, popular posts and social media interaction with the staffs. The bottom section of the page is the company's license along with details of the manager. (Figure 58)

From this page, you can either search for products by scrolling down or type in the product's name in the search bar and click "Search". By searching the product through the search bar, the results will display relevant products according to the search results. From here you can click onto the products to show the product's in depth details. (Figure 59)

• Step 2: Upon clicking on the product, the page will redirect you to the next page where it shows the product's in-depth details, which include the product's name, price and

description. Additionally, there's also a quantity textbox for you to adjust/enterand a "Purchase" button to add the current product(s) with the chosen quantity to the cart. (Figure 60)

• Step 3: After clicking the "Purchase" button, you will be redirected to the cart page, which shows all the products added along with the quantity. The page will also show the total price according to the products' price and the quantity. (Figure 61)



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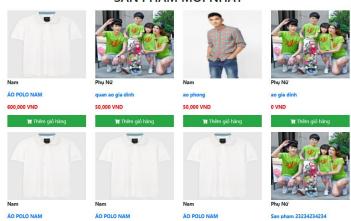
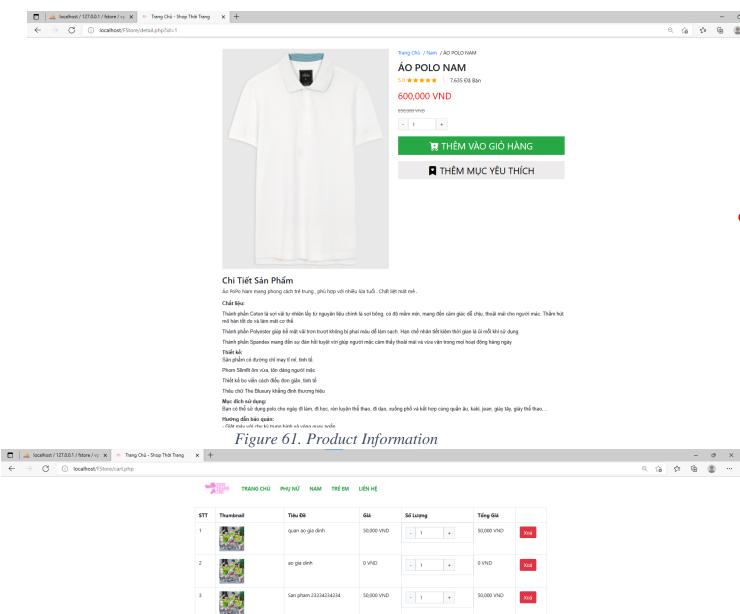
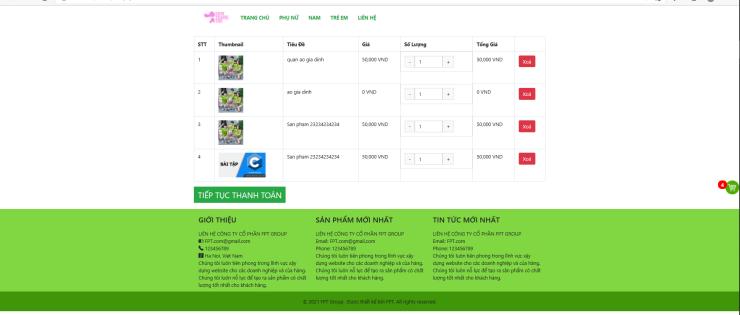


Figure 59. Home Page

localhost/FStore/detail.php?id=3





2, Admin user manual:

The Admin user manual guides the admin through the page's functions for betterunderstanding and development.

When first accessing the website, admins are required to enter their username and password for login. If either the username or password is incorrect, a notification will appear. (Figure 63)

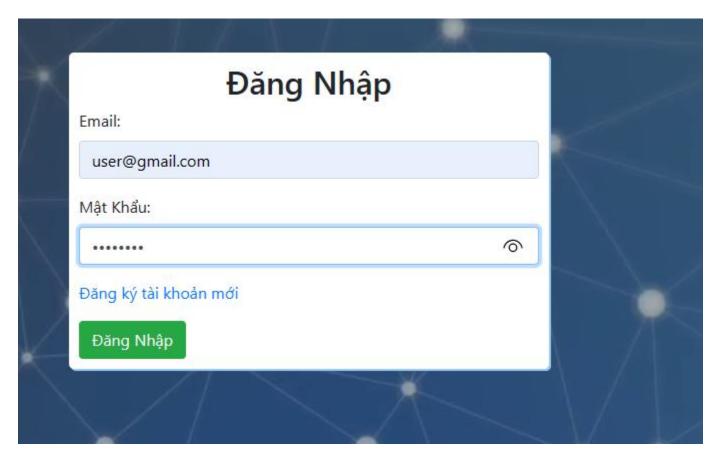


Figure 63. Login page

Upon a successful login, admins are redirected to the index page, which shows the functions of the website along with the table list that shows the details of the products or the users. (Figure 64)

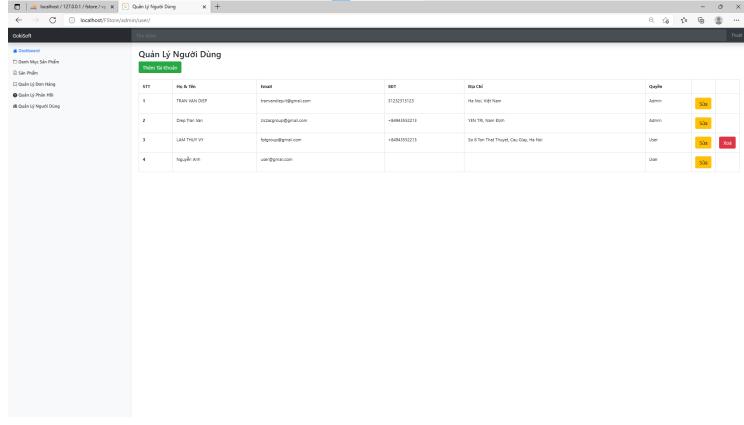


Figure 64. Admin Home page

From here, admins and choose the functions on the page to interact with the database. There are two main management functions on the page: User Management or Product Management. Each management functions have 3 separate functions: Add, Delete and Edit. I will demonstrate Product Management along with the 3 functions:

2.1, Add function:

- Step 1: Click onto the Add Product button to open the add product form.
- Step 2: Insert information into the textboxes, including a picture file which shows the product. Make sure that none of the textboxes are blank or no picture is added. (Figure 65)
- **Step 3**: Click onto the Add button. This will send the information to the database. A notification will display upon adding successful. (Figure 66)

When return to the home page, the product will show at the bottom of the table withits information. (Figure 67)

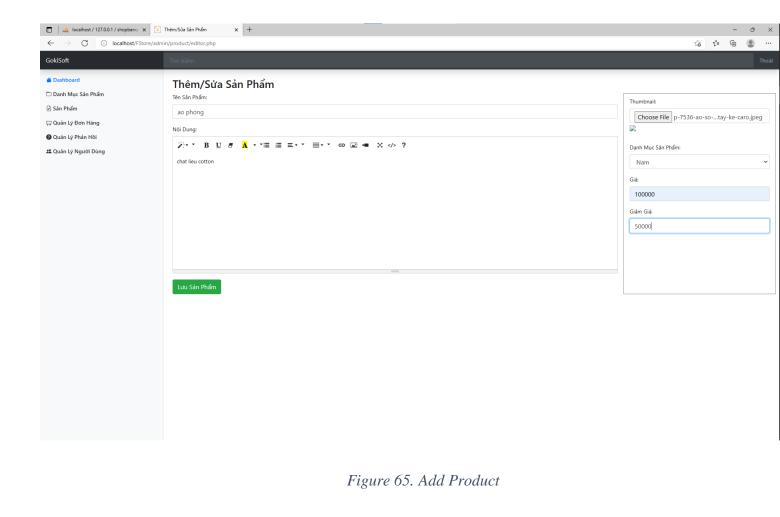


Figure 65. Add Result

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To access the Delete or Edit function, admins are required to open the Product Management table by clicking onto the Product Management button on the home page. The tabledisplays the products from the database with its information sorted. Delete or Edit button can be found in the Function column.

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2.2, Delete Function:

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- Step 1: Locate the product you want to remove from the database. (Figure 68)
- Step 2: Once you have located the product, locate the Delete button and click onto it. The Delete function will start automatically and will displays a notification upon deleting successful. (Figure 69). The product will be removed when you go to the home page. (Figure 70)

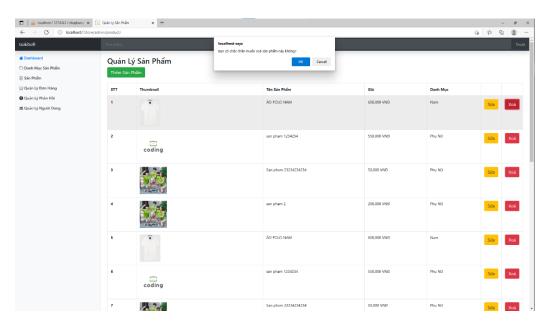


Figure 68. Locate Product

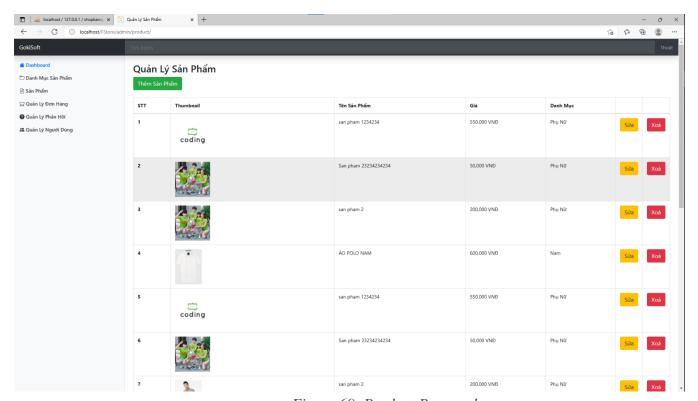


Figure 69. Product Removed

2.3, Edit Function:

- Step 1: Locate the product you want to Edit its information (Figure 71)
- **Step 2:** Once you have located the product, locate the Edit button and click onto it to open the Edit product form. (Figure 72)
- Step 3: The current product's information will fill the textboxes of the form. To edit the product, replace the texts in the textbox with the updated text or change the product's

image by select and upload a different picture.

• **Step 4:** Click onto the Edit button. A notification will display upon update successful. (Figure 73) The product's information change will be applied when you go to the home page. (Figure 74)

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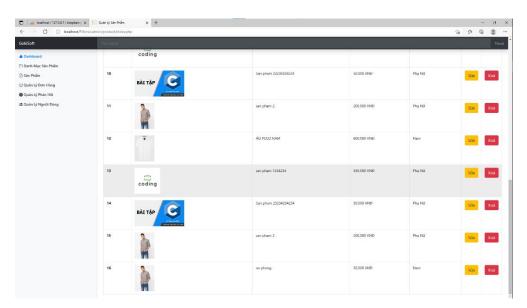


Figure 71. Locate Product

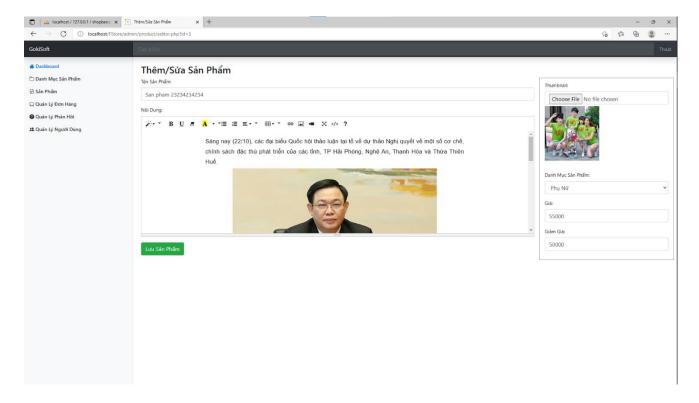


Figure 72. Edit Product



Figure 74. Product Information Updated