

## ASSIGNMENT 2 FRONT SHEET

<b>Qualification</b>	<b>BTEC Level 5 HND Diploma in Computing</b>		
<b>Unit number and title</b>	10: Website Design & Development		
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**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.

	<b>Student's signature</b>	ducanh
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**Grading grid**

P5	P6	P7	M4	M5	D2	D3

✿ Summative Feedback:

✿ Resubmission Feedback:

Grade:	Assessor Signature:	Date:
Signature & Date:		

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## I. Introduction

The article consists of three main parts. Part one introduced my website design, including my website's user requirement, use case diagram, database diagram, site map, and wireframe. The second part discusses the concept and importance of principles in website design, applies them to my website, and explains about the website via screenshot. The last section sets up a test case table and self-assessment of the strengths and weaknesses of my site.

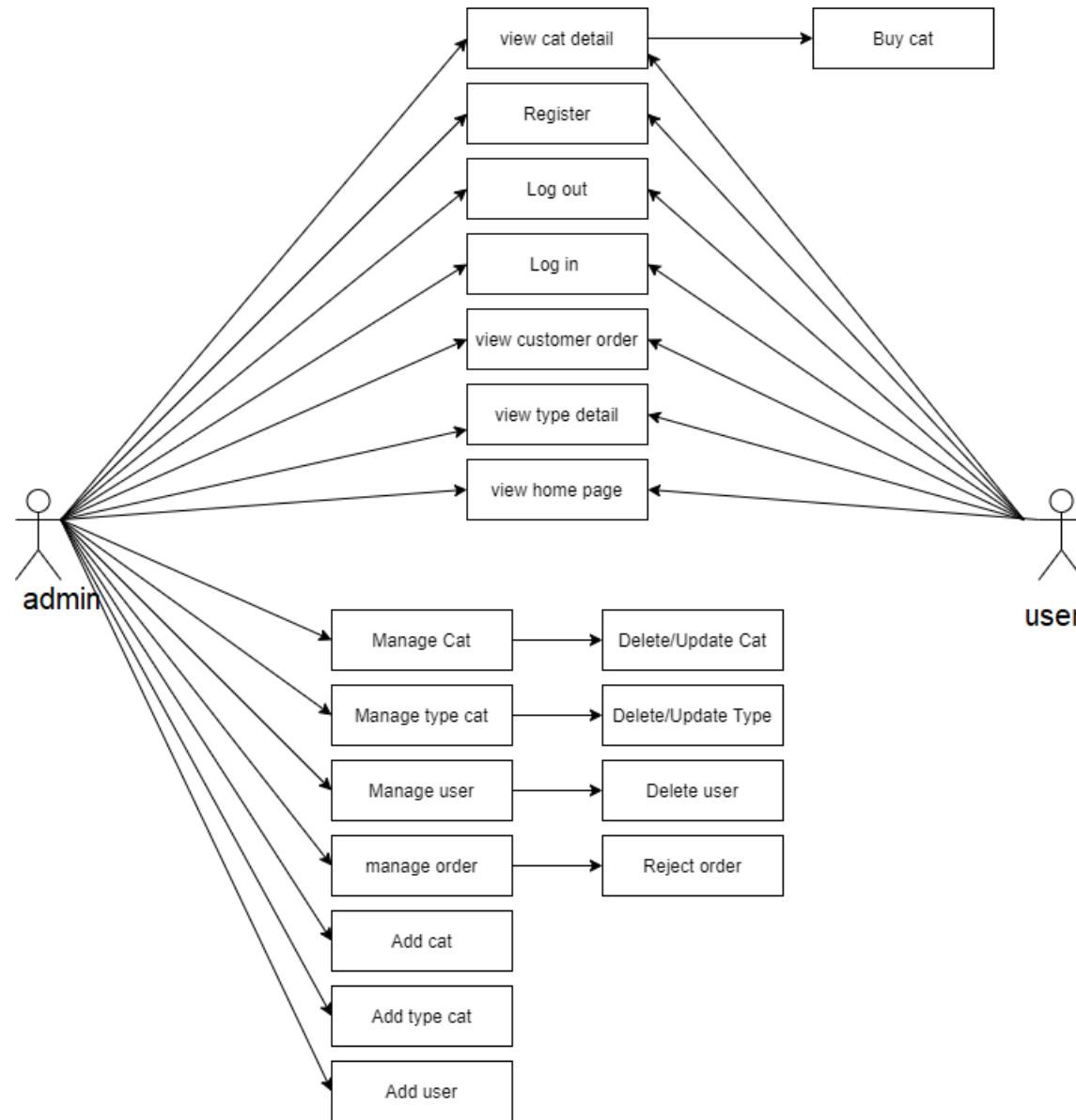
## II. Web Design

### 1) Client and user requirement

Customers have access to the homepage (index page), view categories (cat type), view cat's detail, register an account to buy cats, login the user account to view order information.

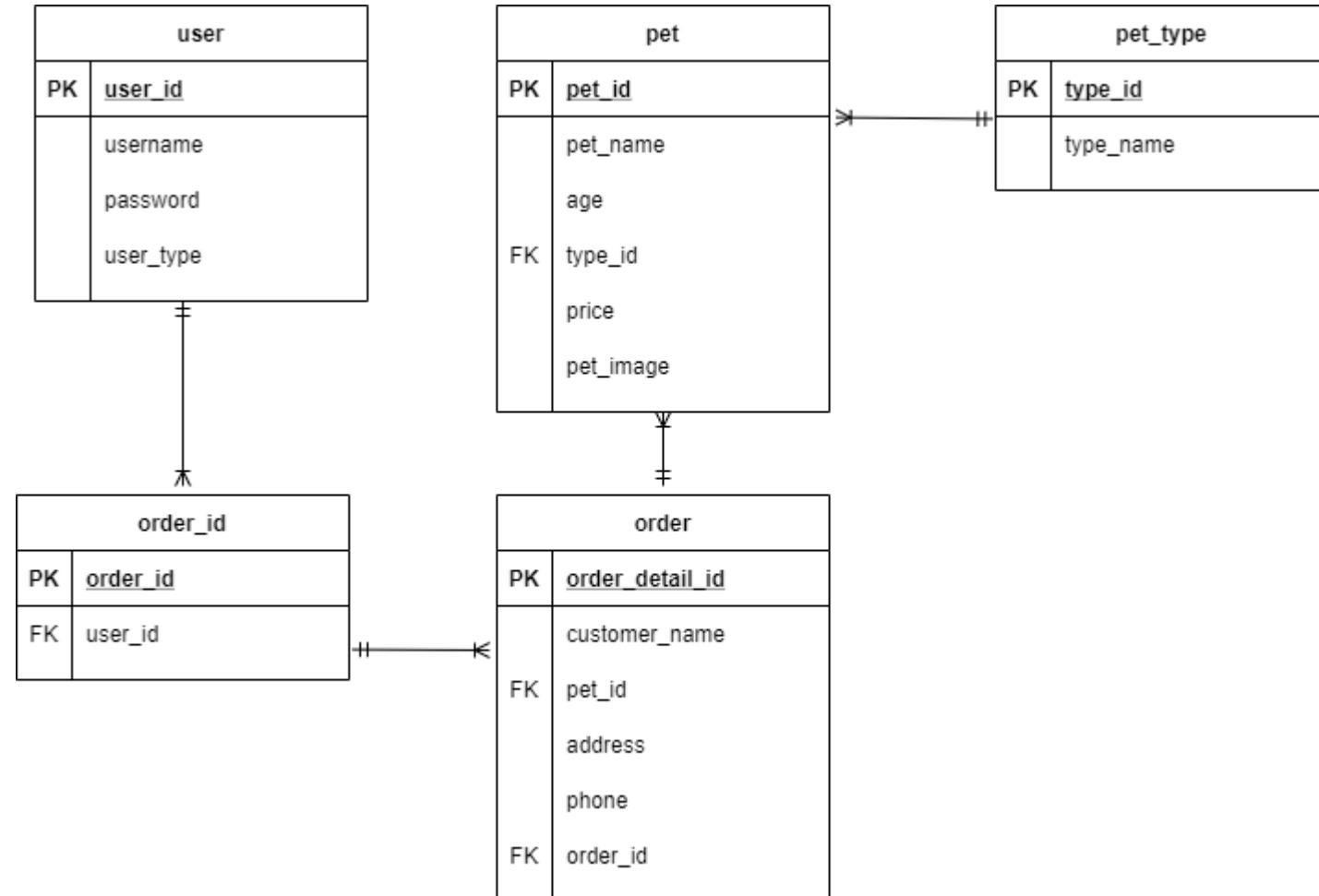
The admin has all the above permissions of the user, in addition, it can login to admin account, view information for all cat/cat types/users/orders, delete cat/cat types/users, reject orders, add cat/cat types/users and update cat/cat types.

### 2) Use case diagram



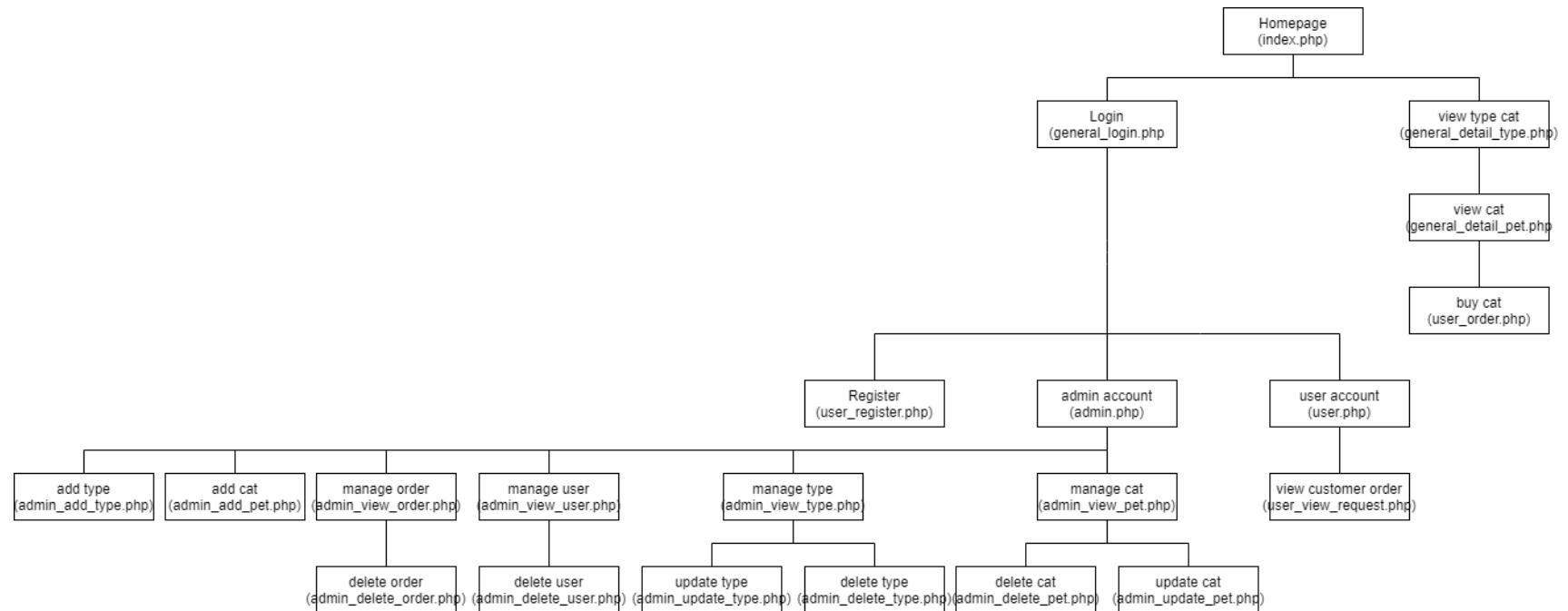
(Figure1: use case diagram)

### 3) Database diagram



(Figure2: database diagram)

### 4) Site map



(Figure3: site map)

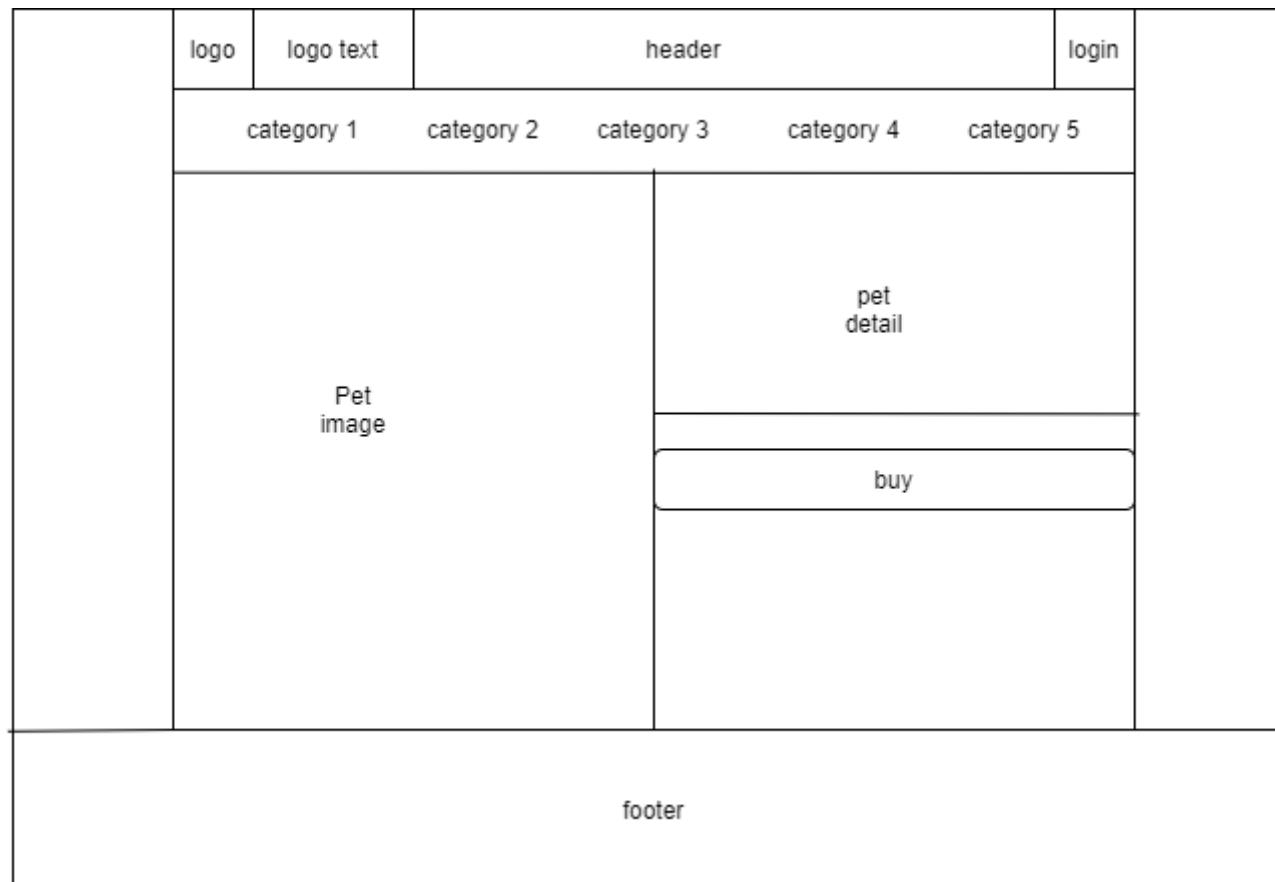
## 5) Wire frames

	logo	logo text	header			login	
			category 1	category 2	category 3	category 4	category 5
Image 1							
Image 2							
footer							

(Figure4: Homepage design)

	logo	logo text	header			login		
	category 1		category 2	category 3	category 4	category 5		
	cat1		cat2	cat 3	cat4			
	cat 5		cat 6					
	footer							

(Figure5: category design)



(Figure6: pet detail design)

	logo	logo text	header			login	
	category 1		category 2	category 3	category 4	category 5	
	background image						
	admin option( view/add/delete/...)						
	footer						

(Figure7: admin design)

	logo	logo text	header					login
	category 1		category 2		category 3		category 4	
	id	pet name	age	gender	type	price	image	update delete

(Figure8: view pet design)

	logo	logo text	header			login	
	category 1	category 2	category 3	category 4	category 5		
	<input type="text" value="id"/> <input type="text" value="name"/> <input type="text" value="age"/> <input type="text" value="gender"/> <input type="button" value="type (category)select"/> <input type="button" value="image upload"/> <input type="text" value="price"/> <input type="button" value="add button"/>						
	footer						

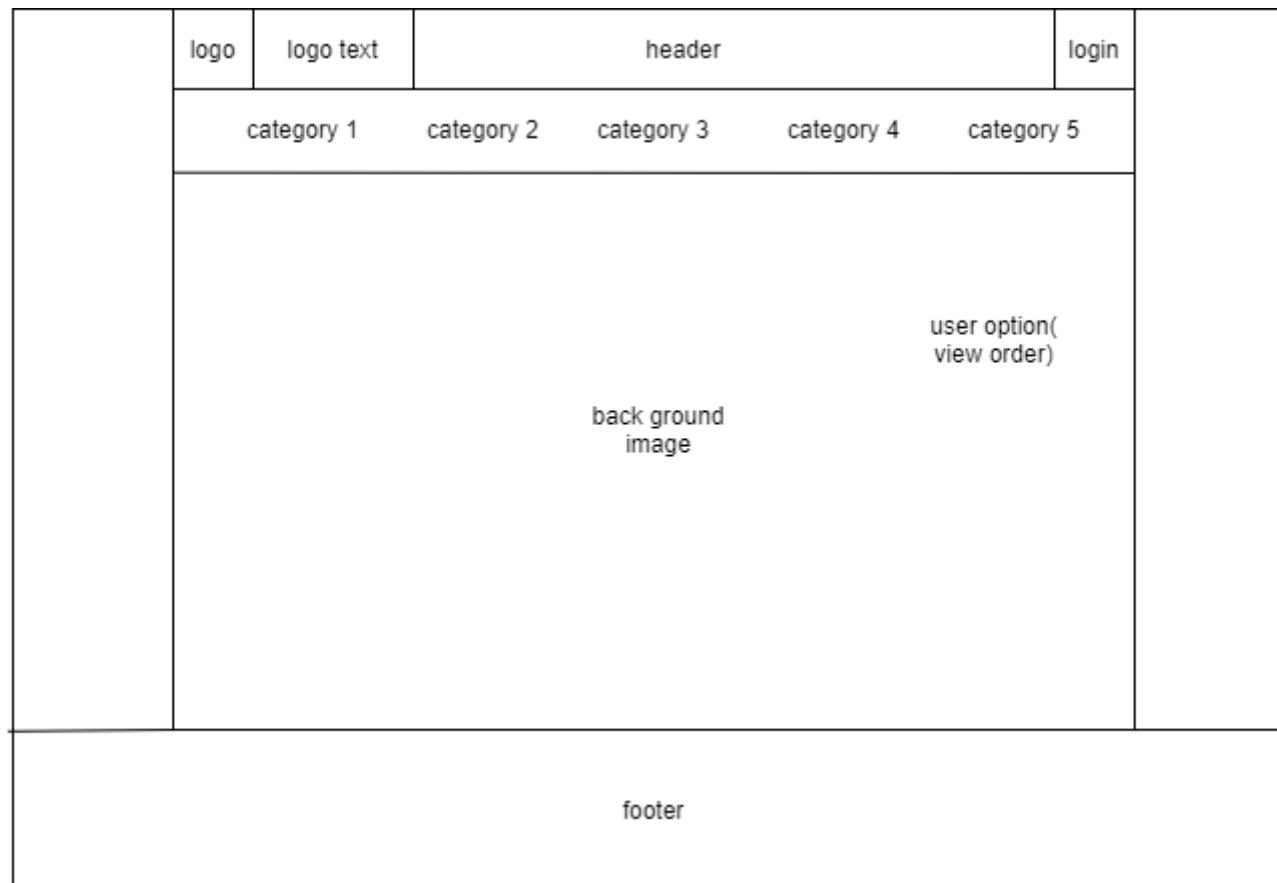
(Figure9: add cat design)

	logo	logo text	header					login		
			category 1	category 2	category 3	category 4	category 5			
			No account? Register here							
			<input type="text" value="username"/>							
			<input type="text" value="password"/>							
			<input type="button" value="login"/>							
			footer							

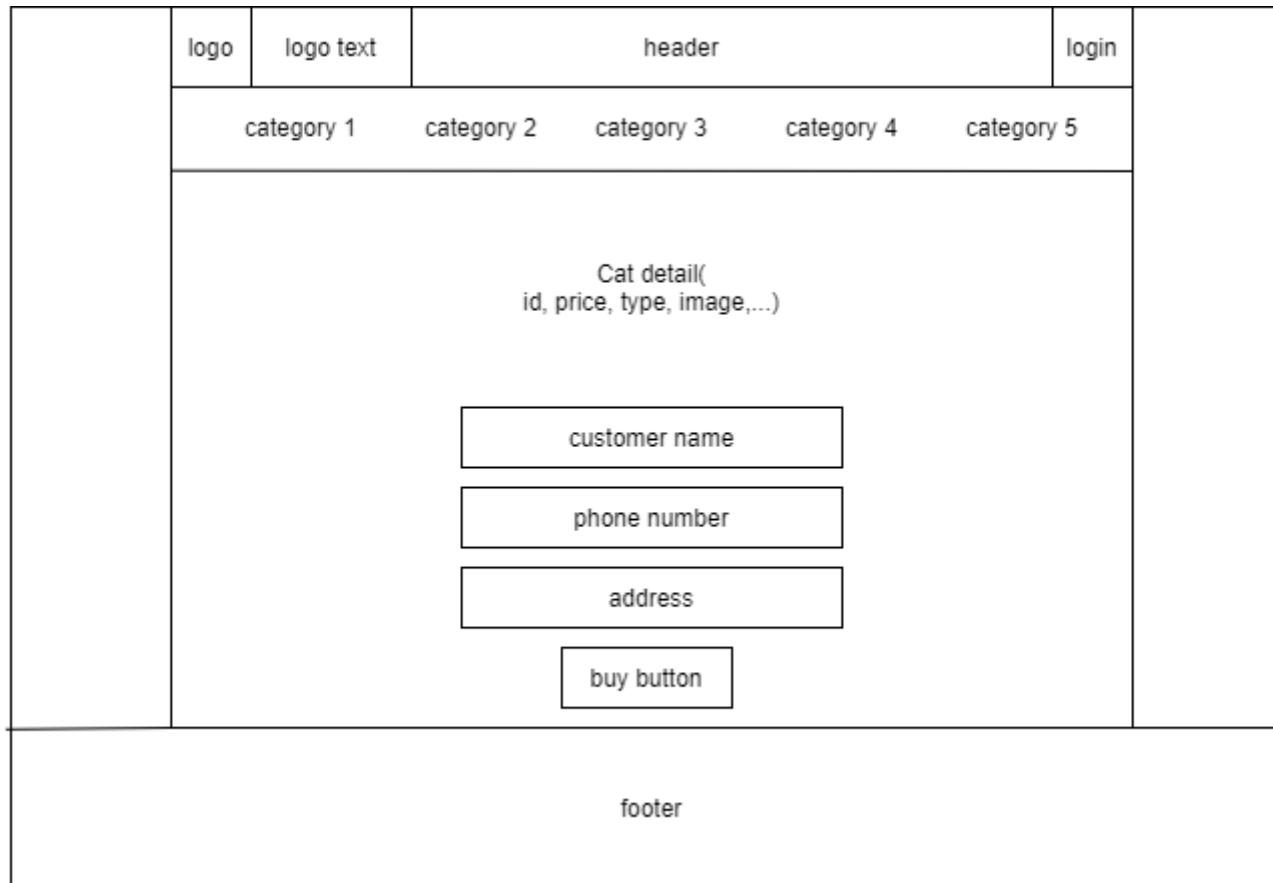
(Figure10: login design)

	logo	logo text	header					login	
			category 1	category 2	category 3	category 4	category 5		
			<input type="text" value="username"/>						
			<input type="text" value="password"/>						
			<input type="text" value="confirm password"/>						
			<input type="button" value="login"/>						
			footer						

(Figure11: register design)



(Figure12: user design)



(Figure13: order cat design)

### III. Website Implementation

#### 1) The principle and standard of web design

Over the years, many principles of website interactive interface design have been developed. The application of these guidelines has resulted in design changes and the formation of commonly used designs, e.g. a 'Back' button on a website or grayed out options, etc. Don Norman and Jacob Nielsen set out many principles in their books. However, due to the degree of abstraction and different timing of publication, these principles are sometimes quite contradictory and confusing. Therefore, David Benyon has gathered these design principles and came up with 12 specific principles regarding access, ease

of use, and accommodation in the book Designing Interactive Systems a Comprehensive Guide to HCI, UX and Interaction Design (Benyon, 2014).

**a) Visibility**

Ensure all functions and processes are visible to users so they can see what has happened to the site as they interact. If something is invisible, make it visible. For example, displays page load progress with a spin icon.

**b) Consistency**

It can be simply understood that every page has the same layout and style. For example, if an index page has white option button and top right corner position, other pages should be the same so that the user is not confused.

**c) Familiarity**

Use familiar language and symbols. This allows the user to recognize the symbol or sign and know what it means instantly. For example, the gear icon represents the setting, the magnifying glass image describes the search function, etc. In case this principle cannot be applied because the concepts are completely new to the user, provide a suitable and relevant metaphorical image and icon to help users associate and form memories when seeing that concept again.

**d) Affordance**

Can be understood that the design must be clear and precise for its purpose. For example, the button is designed to look like a button that can be pressed. This principle is related to the design object's properties.

**e) Navigation**

Provide the user with assistance in accessing the website, navigating through the website's content without difficulty. It can be navigation, links, etc.

**f) Control**

Clarify who is in control and what is controlled. Also, clarify the relationship between what happens in the system and what happens outside the system.

**g) Feedback**

Quickly respond the information from the system to the user so they know what interactions they are performing. Continuous and consistent feedback enhances safety and security. For example, in case of an error message, the user can determine to search and fix any errors that were executed.

**h) Recovery**

Allows quick recovery from user actions. This is also related to feedback, if there is an error or mistake, then there must be a recovery function to bring the setting back to as before. For example, undo, redo, or back / forward buttons.

**i) Constraints**

Take precautions by introducing constraints into the system. This will restrict the user from doing the things they were not authorized to do, thus protecting the user and preventing fatal errors. For example, grey-out some option which shouldn't be used.

**j) Flexibility**

Allows the user to have different options when performing a task. Provides users with the opportunity to change their behavior and habits to suit their experience level. For example, user can use the combine of Ctrl and C button to copy text instead of right clicking on the copy task.

**k) Style**

Designed to suit the user's preferences, in terms of attractiveness and interesting features.

**l) Conviviality**

The design and interaction system must be polite and user-friendly. Do not interrupt user experience with sudden and negative implementations.

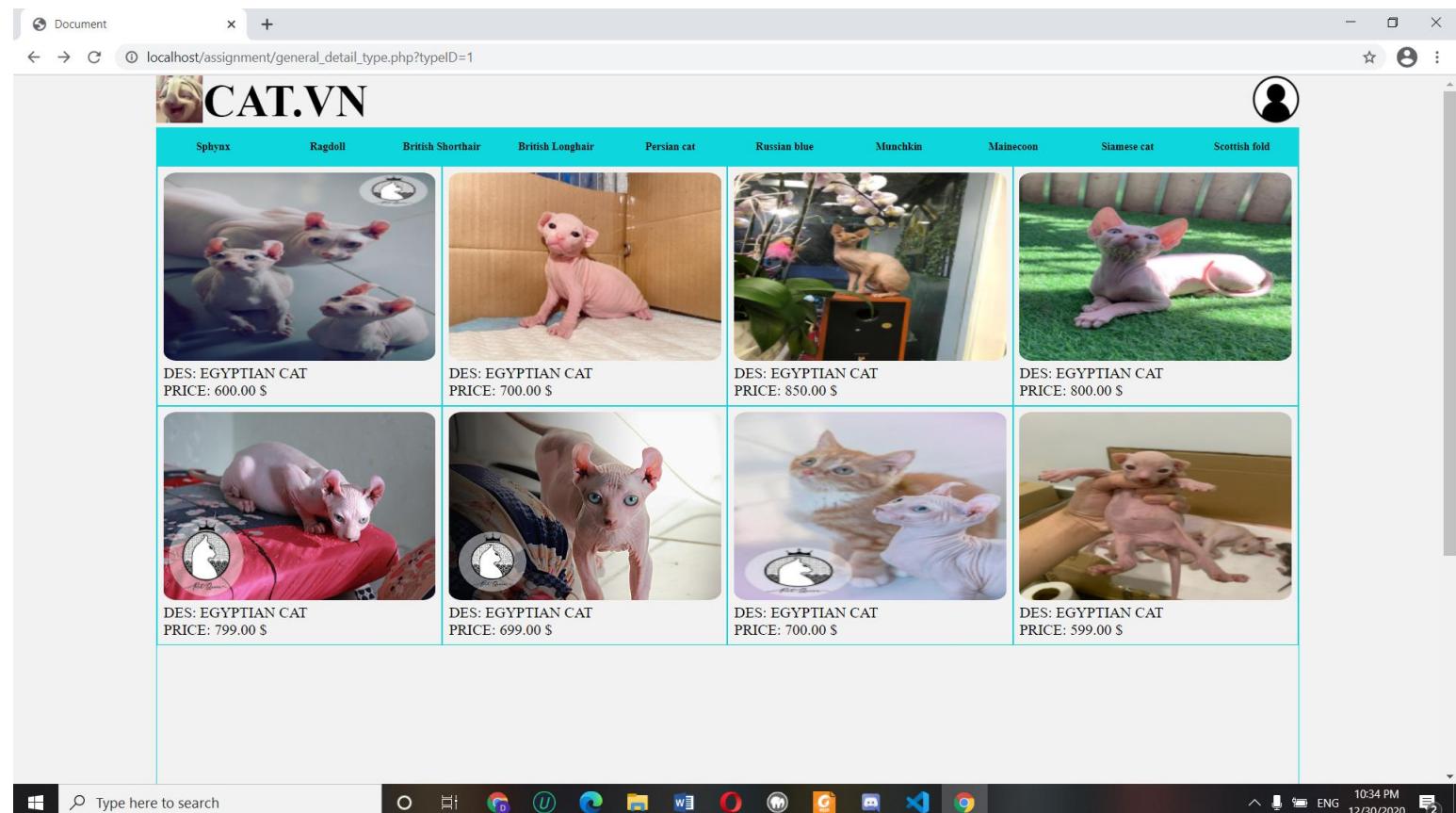
**2) The principle in my website**

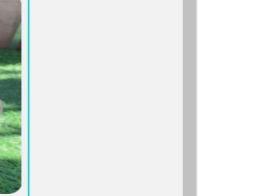
**a) Consistency**

Document x +

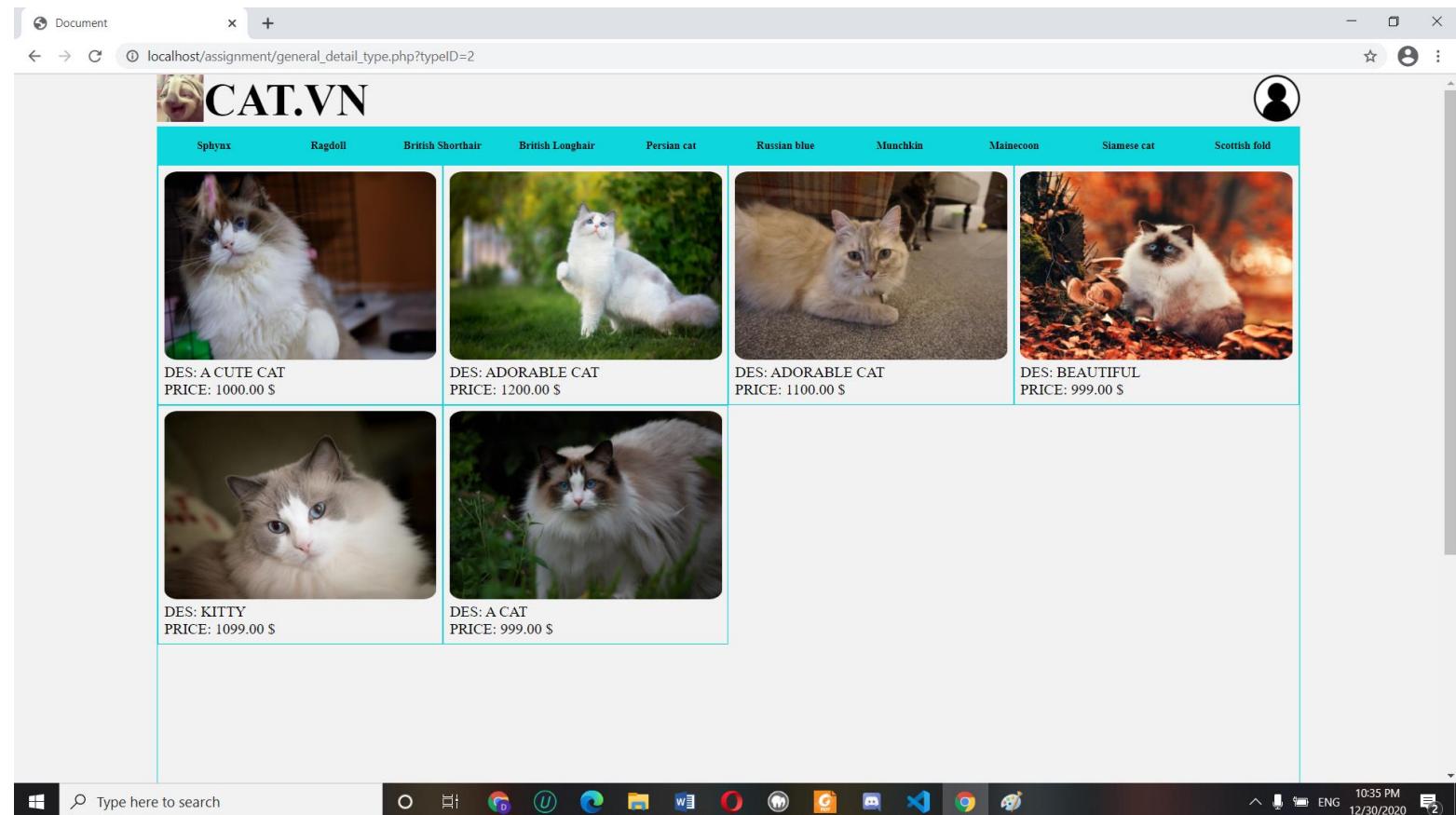
localhost/assignment/general\_detail\_type.php?typeID=1

# CAT.VN



Sphynx	Ragdoll	British Shorthair	British Longhair	Persian cat	Russian blue	Munchkin	Mainecon	Siamese cat	Scottish fold
									
DES: EGYPTIAN CAT PRICE: 600.00 \$	DES: EGYPTIAN CAT PRICE: 700.00 \$	DES: EGYPTIAN CAT PRICE: 850.00 \$	DES: EGYPTIAN CAT PRICE: 800.00 \$	DES: EGYPTIAN CAT PRICE: 799.00 \$	DES: EGYPTIAN CAT PRICE: 699.00 \$	DES: EGYPTIAN CAT PRICE: 700.00 \$	DES: EGYPTIAN CAT PRICE: 599.00 \$		

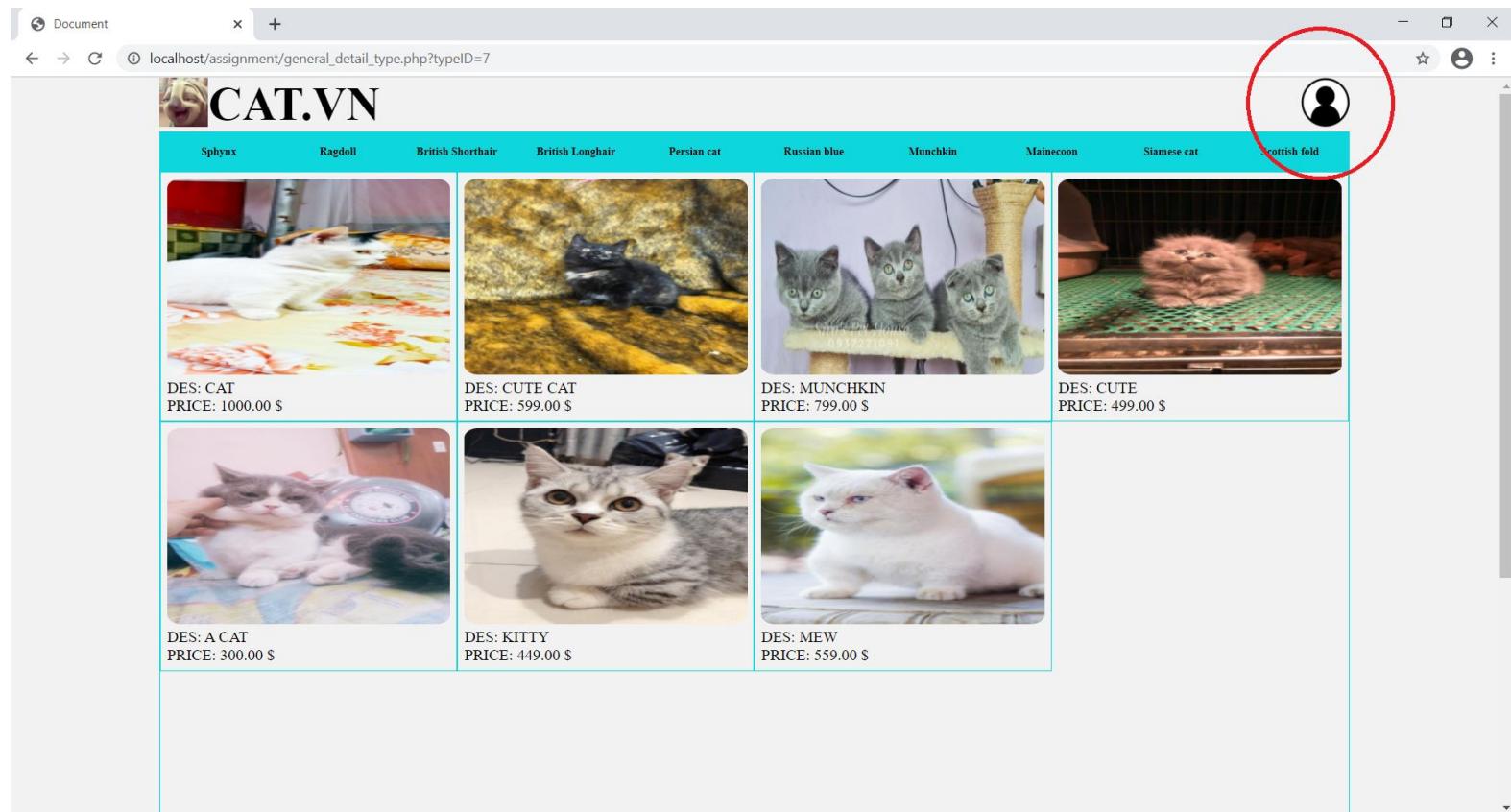
(Image1: layout)



(Image2: layout)

Site pages are designed consistently, with the same color and layout. According to the two images above (image1 and image 2), it is obvious that the header and footer are the same color and position and the navigation bar remains unchanged.

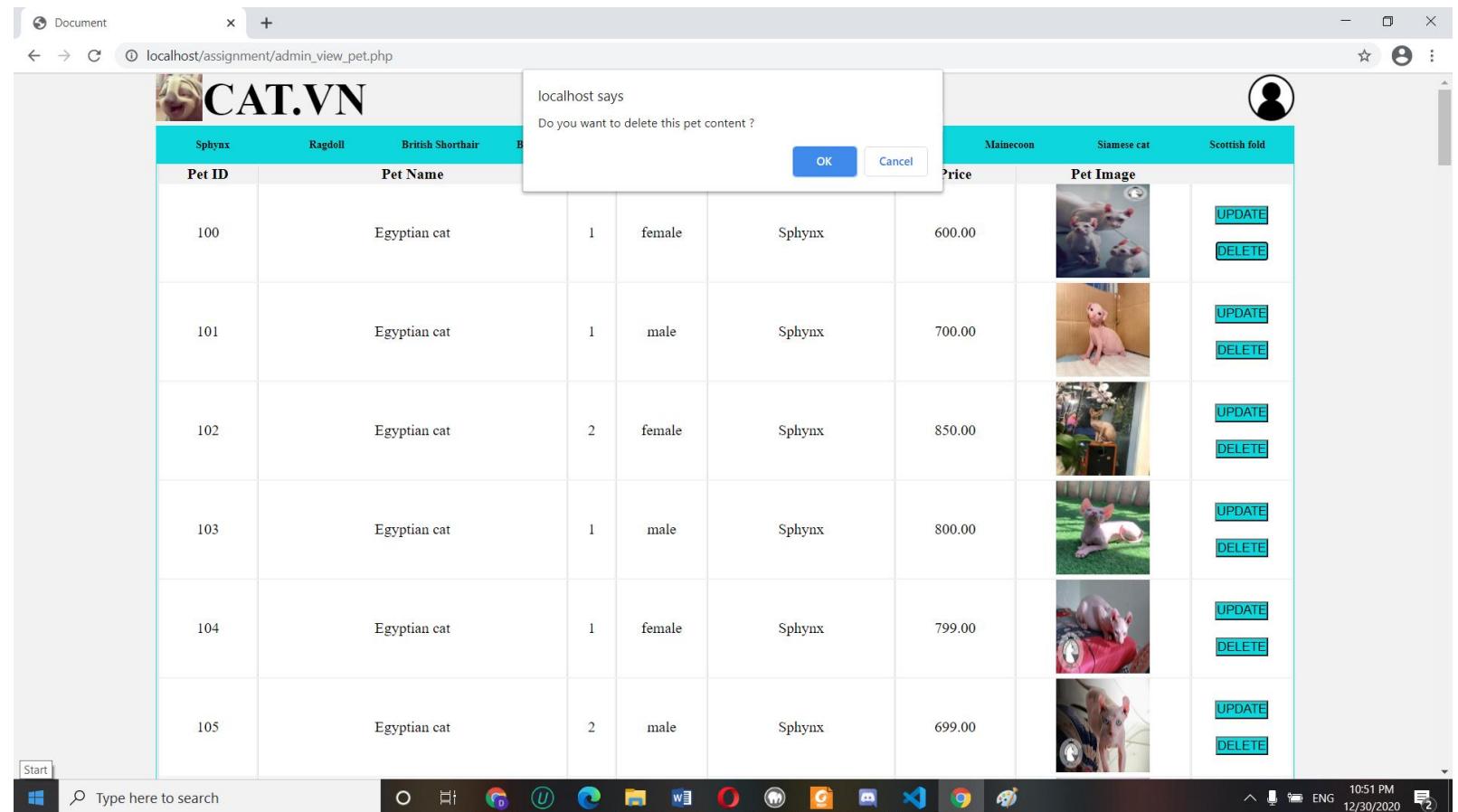
**b) Familiarity**



(Image3: login icon)

A human-shaped icon in the top right corner of the web represents personal information, users can recognize it as a login account

**c) Feedback**



(Image4: message pops up)

A Message will always pop up to remind the administrator of actions such as delete, add successfully, ...

#### d) Navigation

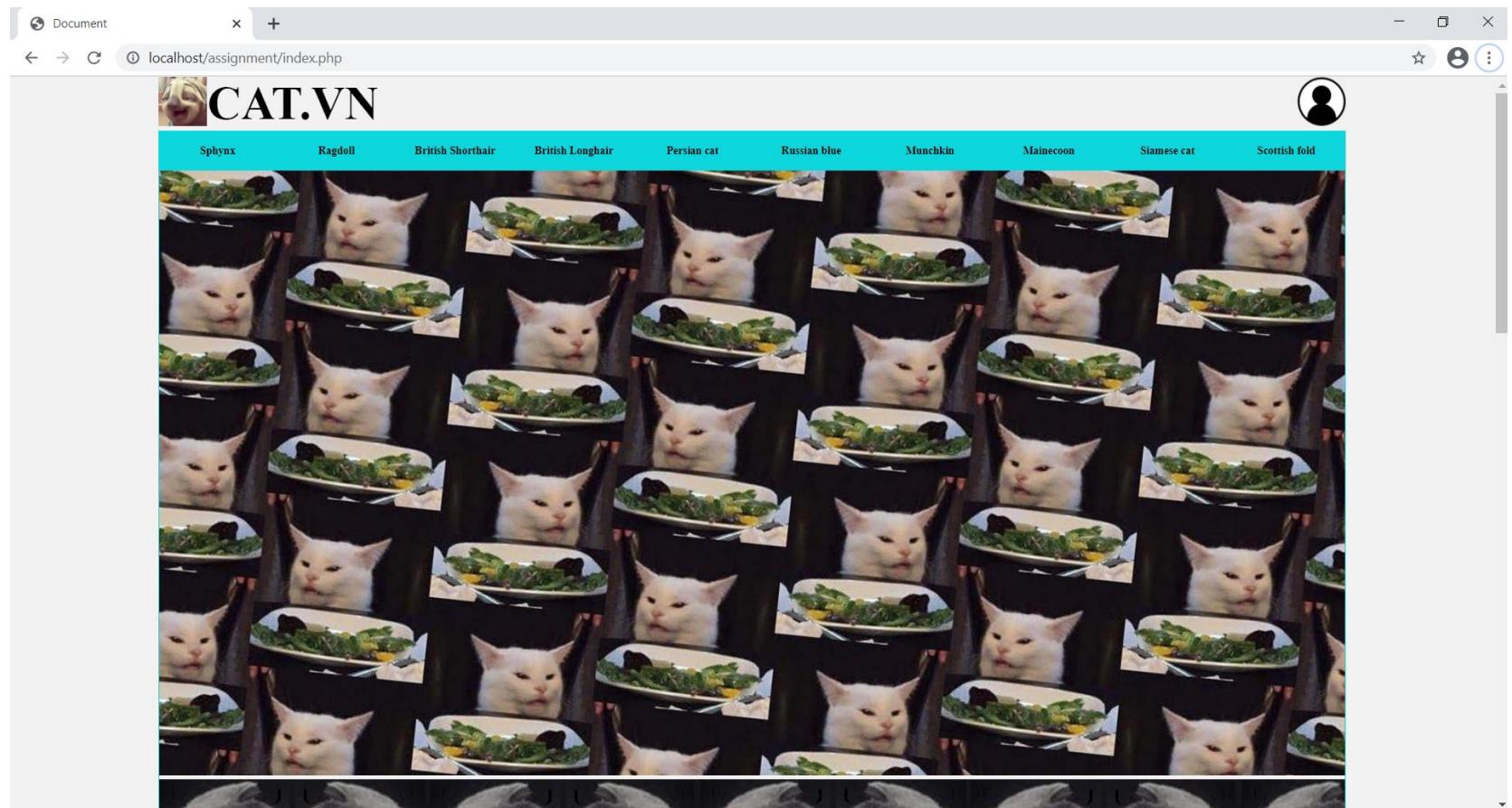


(Image5: navigation)

Users can access all the main content of the page via the navigation bar at the top.

**3) Screen shot and explanation**

**a) Homepage**



(Image6: homepage)

The homepage contains background images of cats. Other pages can be accessed from here.

**b) Category detail**

Document    X    +

localhost/assignment/general\_detail\_type.php?typeID=1



Sphynx    Ragdoll    British Shorthair    British Longhair    Persian cat    Russian blue    Munchkin    Mainecoon    Siamese cat    Scottish fold

				
DES: EGYPTIAN CAT PRICE: 600.00 \$	DES: EGYPTIAN CAT PRICE: 700.00 \$	DES: EGYPTIAN CAT PRICE: 850.00 \$	DES: EGYPTIAN CAT PRICE: 800.00 \$	
				
DES: EGYPTIAN CAT PRICE: 799.00 \$	DES: EGYPTIAN CAT PRICE: 699.00 \$	DES: EGYPTIAN CAT PRICE: 700.00 \$	DES: EGYPTIAN CAT PRICE: 599.00 \$	

localhost/assignment/general\_detail\_pet.php?petID=101

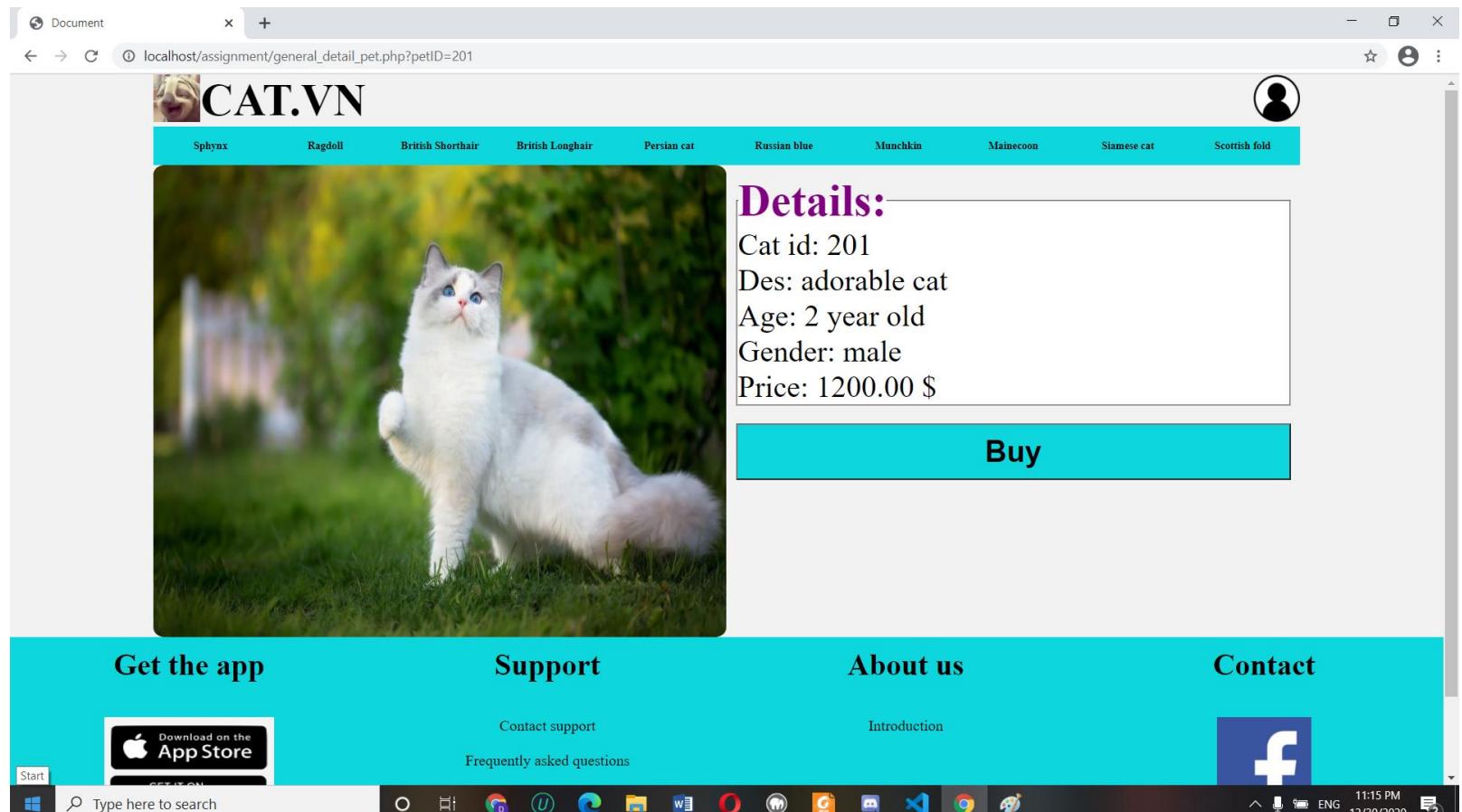
Type here to search

11:10 PM 12/30/2020

(Image7: category detail)

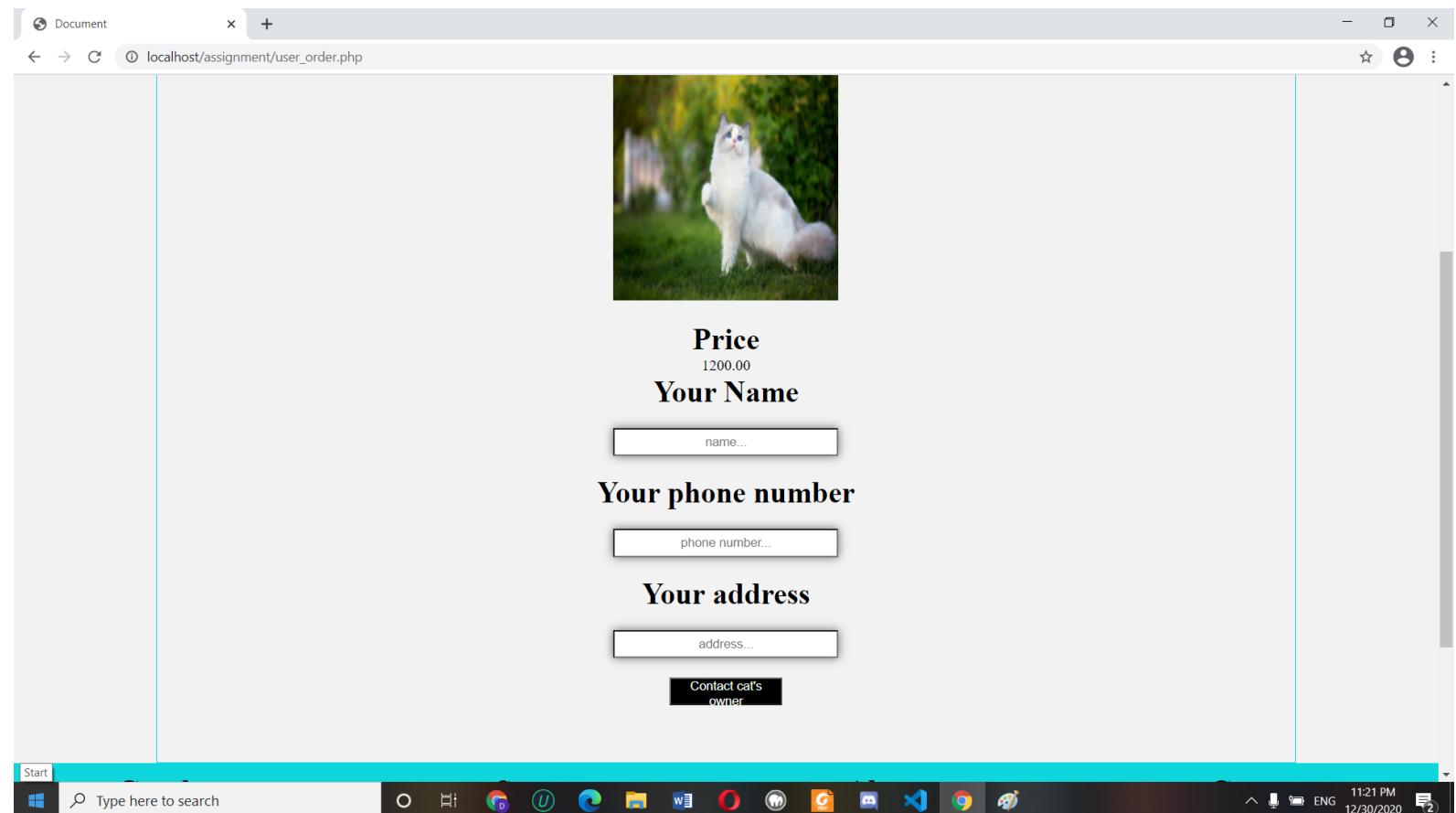
There are ten categories corresponding to the ten types of cats displayed in the navigation bar. By clicking on a category in the navigation bar, the user will be taken to the type information page. It displays information about each cat belonging to that type of cat.

### c) Cat detail



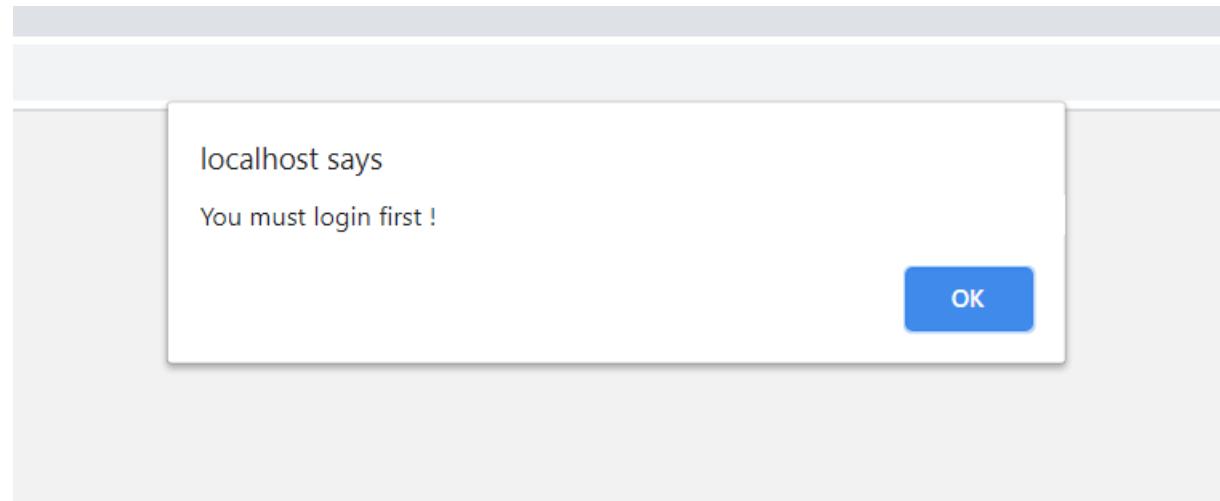
(Image8: cat detail)

By clicking on a cat box, the user will be directed to the detailed information page about that cat. When the user clicks the buy button, there will be two cases, case one: the user is logged in, he will be redirected to the personal information confirmation page to buy that cat.



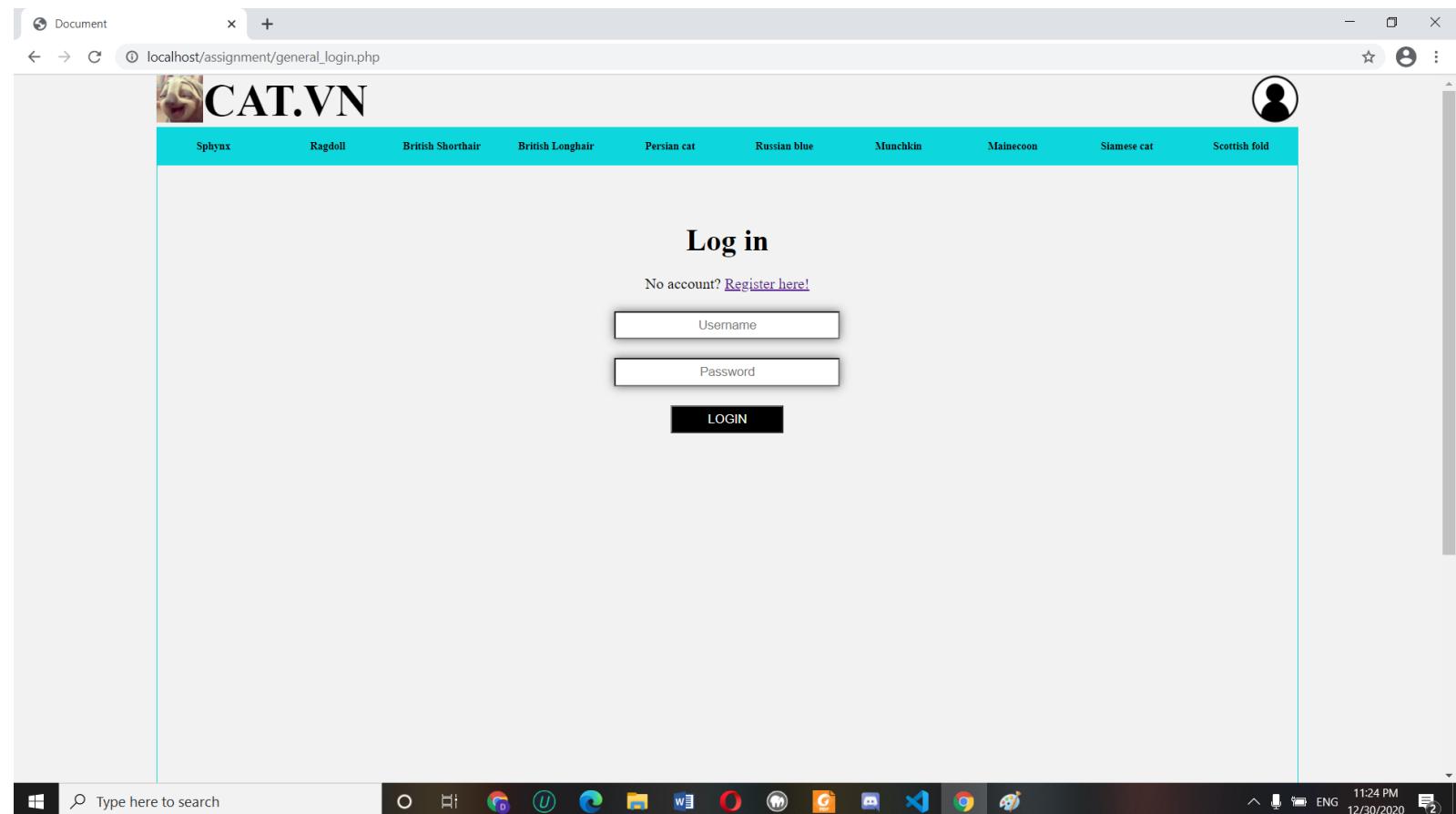
(Image9: buy cat)

In the second case, if the user is not logged in, a message will pop up and they will be redirected to the login page.



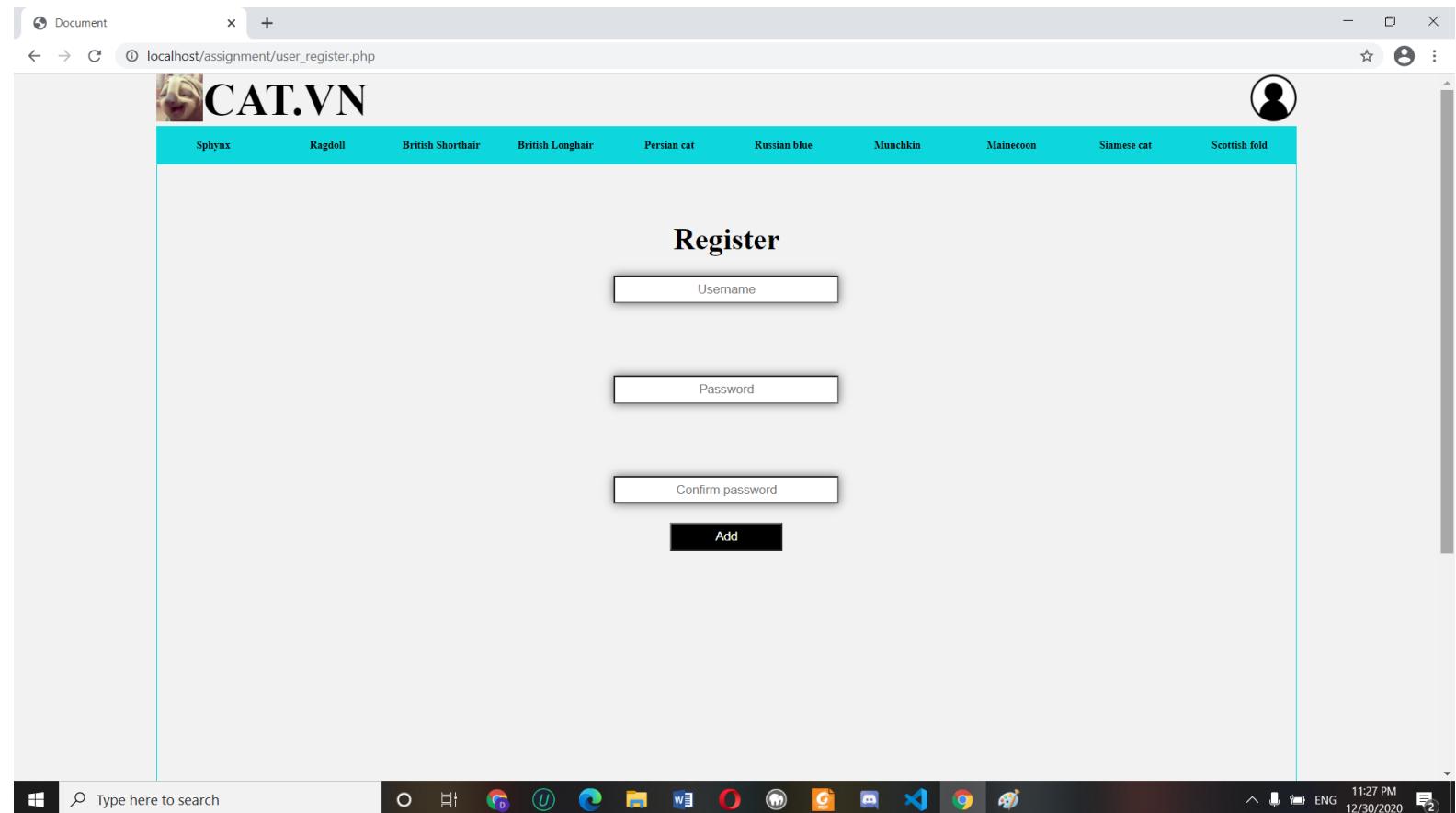
(Image10: login requirement)

**d) Login**



(Image11: login)

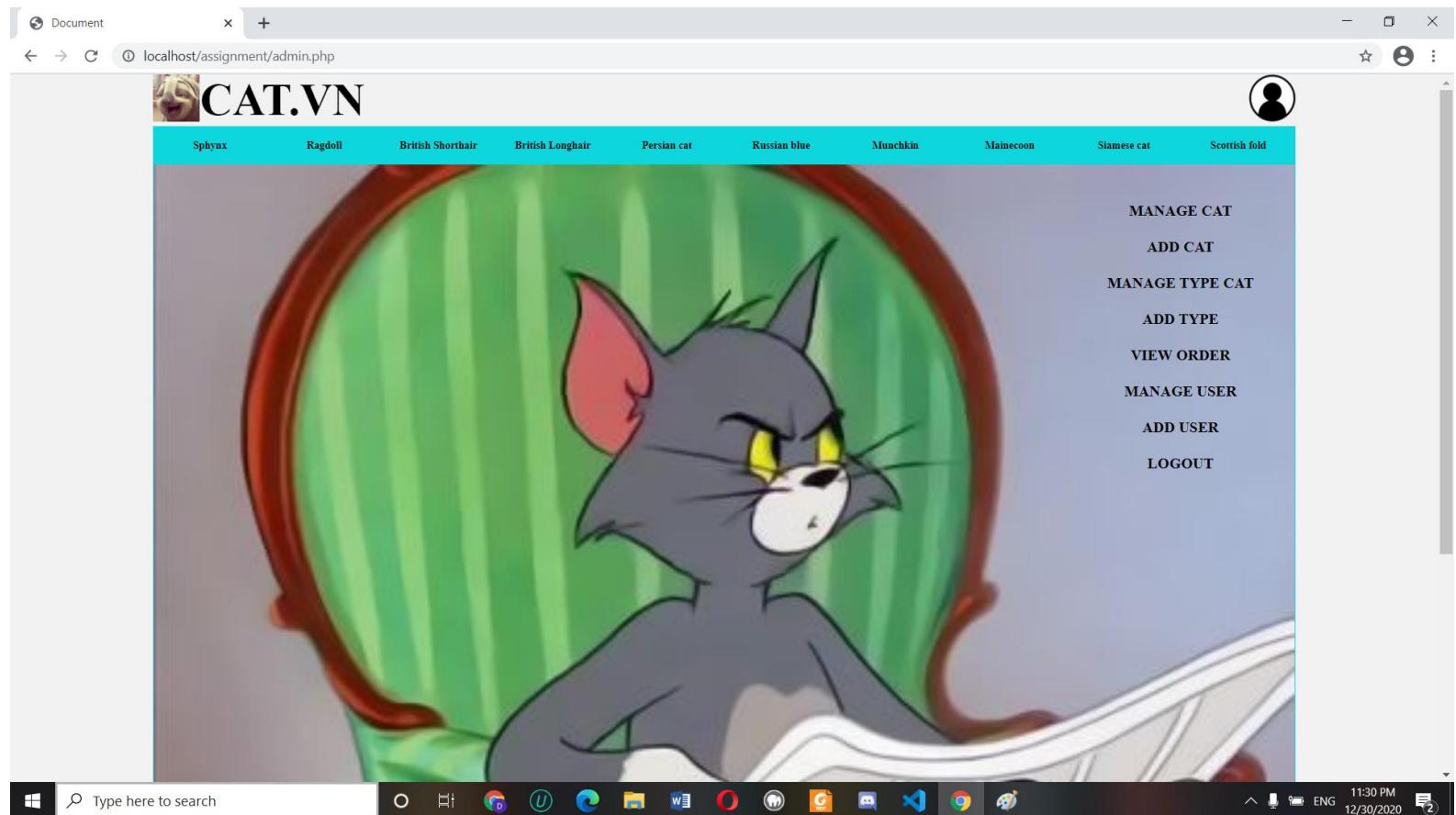
Admin and user accounts are logged in from this page. If the user does not have an account, the user clicks on the link to go to the registration page



(Image12: register)

All accounts registered on this site default to the user's account type. After successful registration, automatically navigate to the login page.

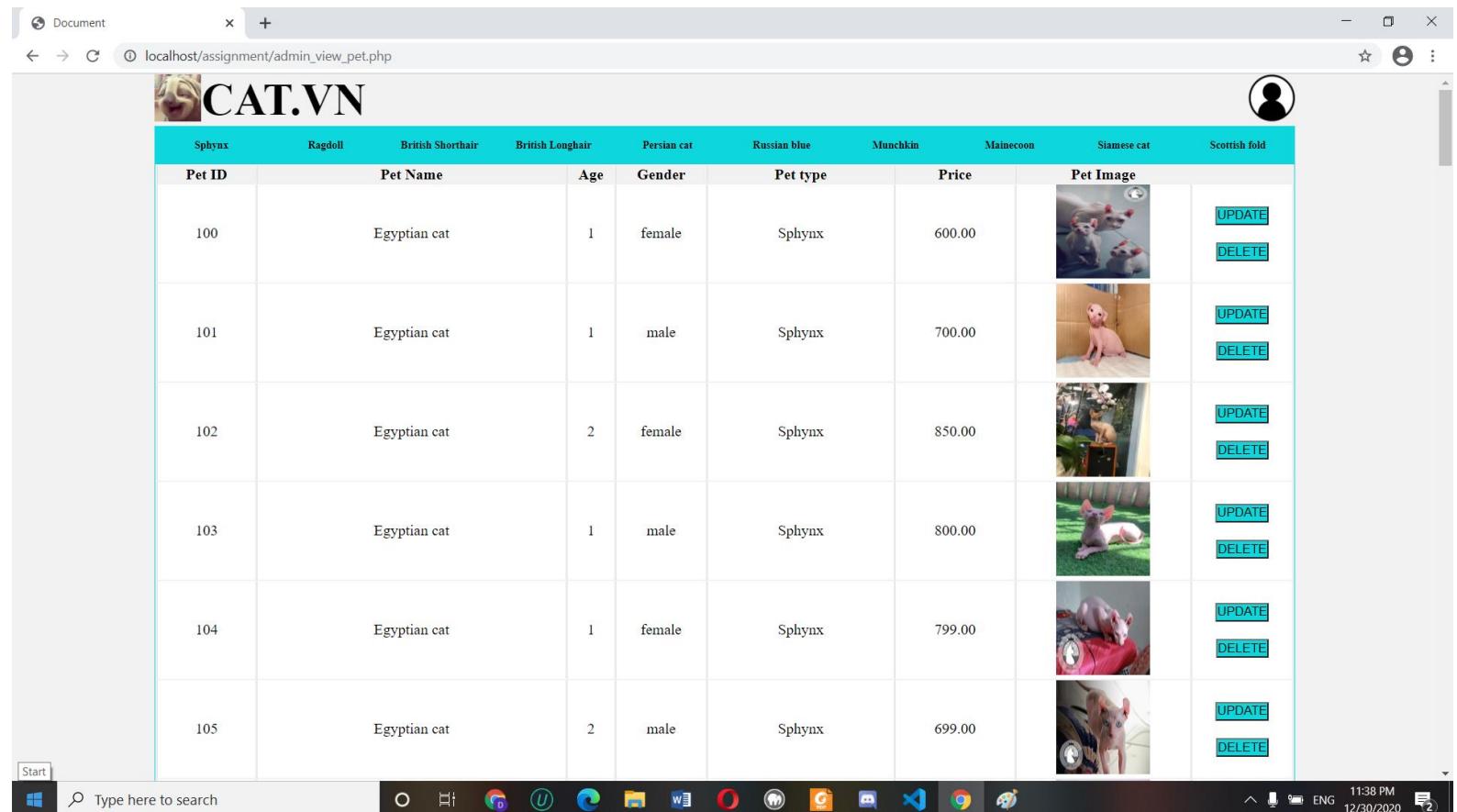
**e) Admin home**

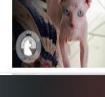


(Image13: admin)

The admin can perform various management tasks from the right navigation bar.

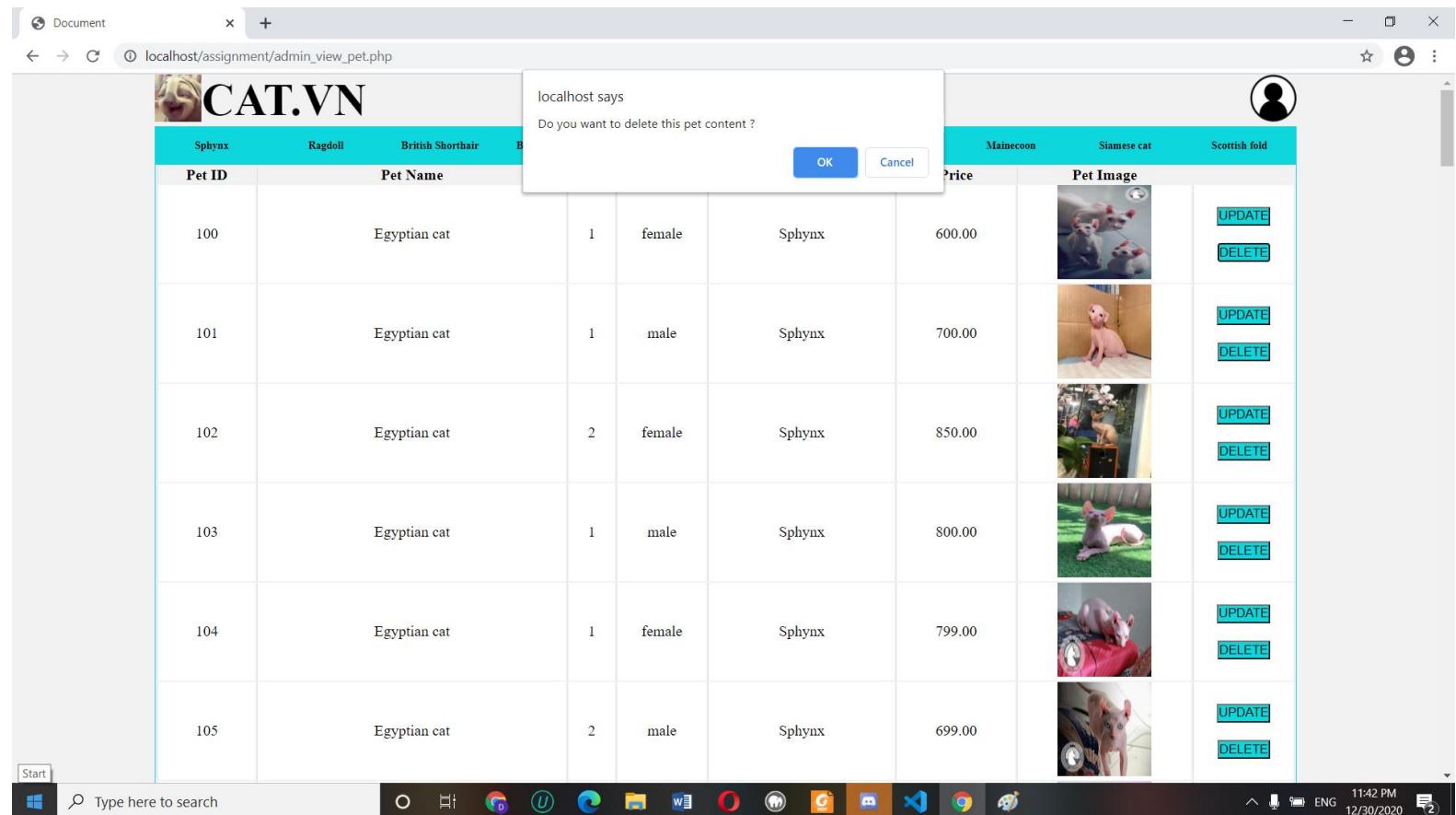
**f) Admin manage**



Sphynx	Ragdoll	British Shorthair	British Longhair	Persian cat	Russian blue	Munchkin	Mainecoon	Siamese cat	Scottish fold
Pet ID	Pet Name		Age	Gender	Pet type	Price	Pet Image		
100	Egyptian cat		1	female	Sphynx	600.00		<a href="#">UPDATE</a>	<a href="#">DELETE</a>
101	Egyptian cat		1	male	Sphynx	700.00		<a href="#">UPDATE</a>	<a href="#">DELETE</a>
102	Egyptian cat		2	female	Sphynx	850.00		<a href="#">UPDATE</a>	<a href="#">DELETE</a>
103	Egyptian cat		1	male	Sphynx	800.00		<a href="#">UPDATE</a>	<a href="#">DELETE</a>
104	Egyptian cat		1	female	Sphynx	799.00		<a href="#">UPDATE</a>	<a href="#">DELETE</a>
105	Egyptian cat		2	male	Sphynx	699.00		<a href="#">UPDATE</a>	<a href="#">DELETE</a>

(Image14: view cat)

The admin can edit and delete information about cats on the cat management page. When the delete button is pressed, a message pops up to confirm the task. After successful deletion, automatically redirect the admin back to the management page.



(Image15: delete message pops up)

The admin updates the information about the cat after pressing the update button, after a successful update page will automatically navigate to the management page.

Document    x    +    localhost/assignment/admin\_update\_pet.php    -    □    ×    ☆    E    :

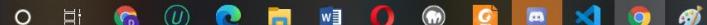
**Pet age**

**Image**  
  
 No file chosen

**Gender**

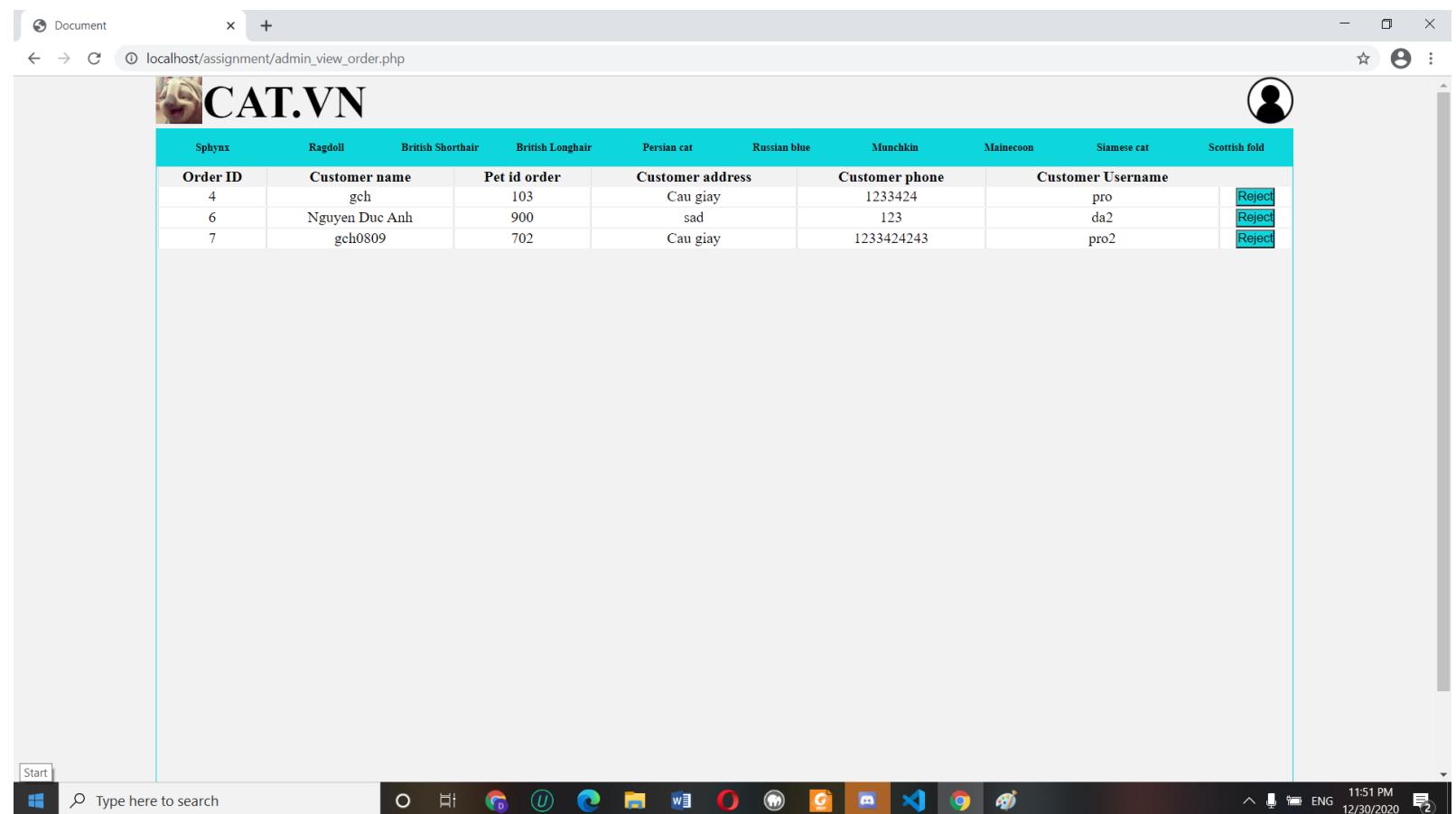
**Pet type**

**Price**

Type here to search      ENG 11:46 PM 12/30/2020

(Image16: update pet)

The other three management pages are cat type management, order management and account management with the same interface and functionality as the cat management page above. However, the order and account management pages do not have updating functionality.



The screenshot shows a web browser window displaying a table of cat orders. The table has 10 columns: Sphynx, Ragdoll, British Shorthair, British Longhair, Persian cat, Russian blue, Munchkin, Mainecoon, Siamese cat, and Scottish fold. The rows contain the following data:

Sphynx	Ragdoll	British Shorthair	British Longhair	Persian cat	Russian blue	Munchkin	Mainecoon	Siamese cat	Scottish fold
Order ID	Customer name	Pet id order		Customer address	Customer phone			Customer Username	
4	gch	103		Cau giay	1233424			pro	<button>Reject</button>
6	Nguyen Duc Anh	900		sad	123			da2	<button>Reject</button>
7	gch0809	702		Cau giay	1233424243			pro2	<button>Reject</button>

The browser window has a title bar "Document" and a URL "localhost/assignment/admin\_view\_order.php". The operating system taskbar at the bottom shows various pinned icons and the date/time "11:51 PM 12/30/2020".

(Image17: view order)

S Document    X +

localhost/assignment/admin\_view\_user.php

**CAT.VN**

User ID Username Password User type

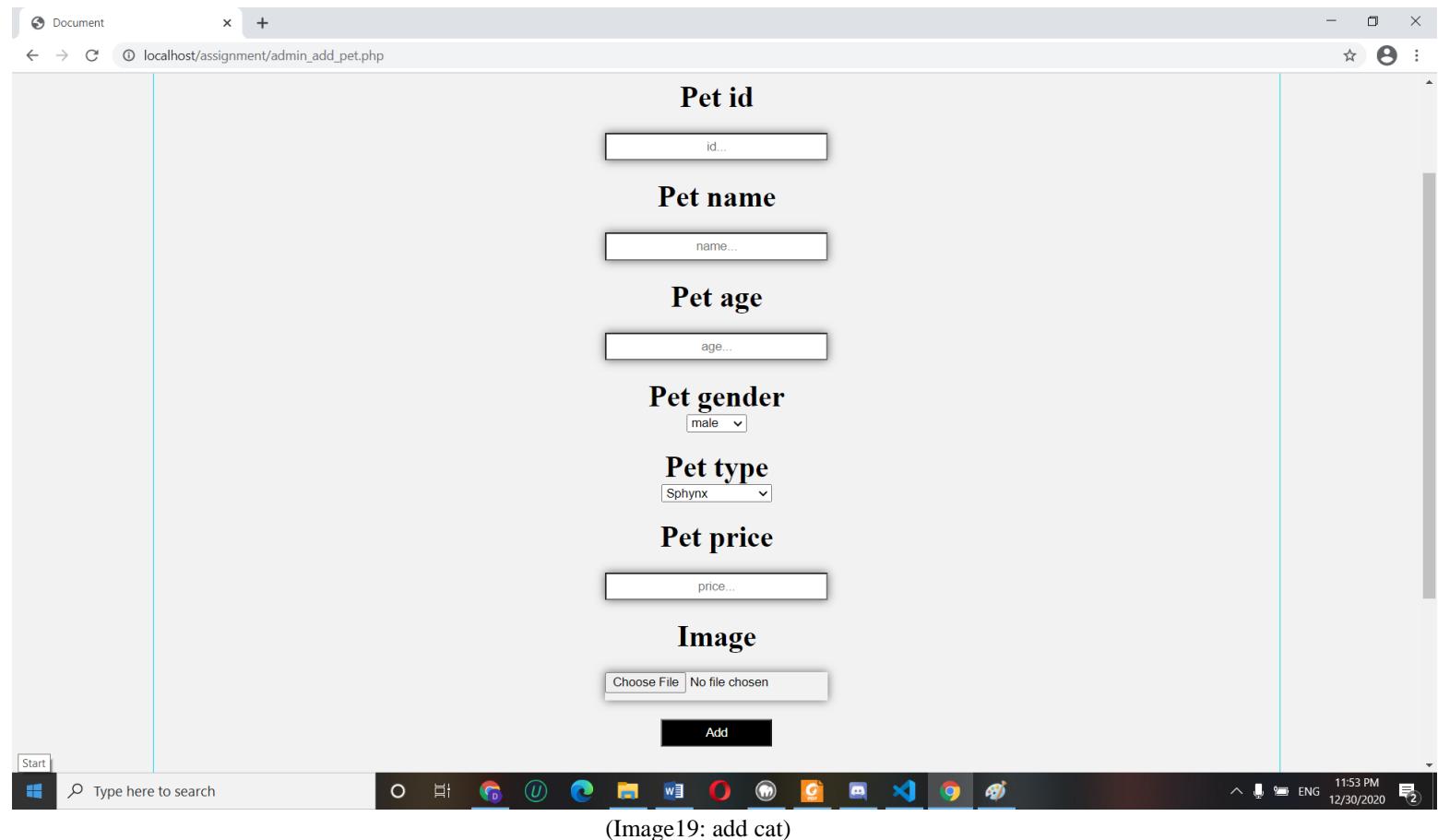
Sphynx	Ragdoll	British Shorthair	British Longhair	Persian cat	Russian blue	Munchkin	Mainecon	Siamese cat	Scottish fold
User ID	Username	Password						User type	
1	admin	202cb962ac59075b964b07152d234b70						admin	<b>DELETE</b>
4	da2	c4ca4238a0b923820dcc509a6f75849b						admin	<b>DELETE</b>
10	da3	c4ca4238a0b923820dcc509a6f75849b						admin	<b>DELETE</b>
11	pro	c4ca4238a0b923820dcc509a6f75849b						user	<b>DELETE</b>
13	Nguyen Duc Anh	c4ca4238a0b923820dcc509a6f75849b						user	<b>DELETE</b>
14	pro2	c4ca4238a0b923820dcc509a6f75849b						user	<b>DELETE</b>

Type here to search

11:52 PM 12/30/2020

(Image18: manage user)

### g) Admin adding



Document    x    +

localhost/assignment/admin\_add\_pet.php

**Pet id**

**Pet name**

**Pet age**

**Pet gender**

male

**Pet type**

Sphynx

**Pet price**

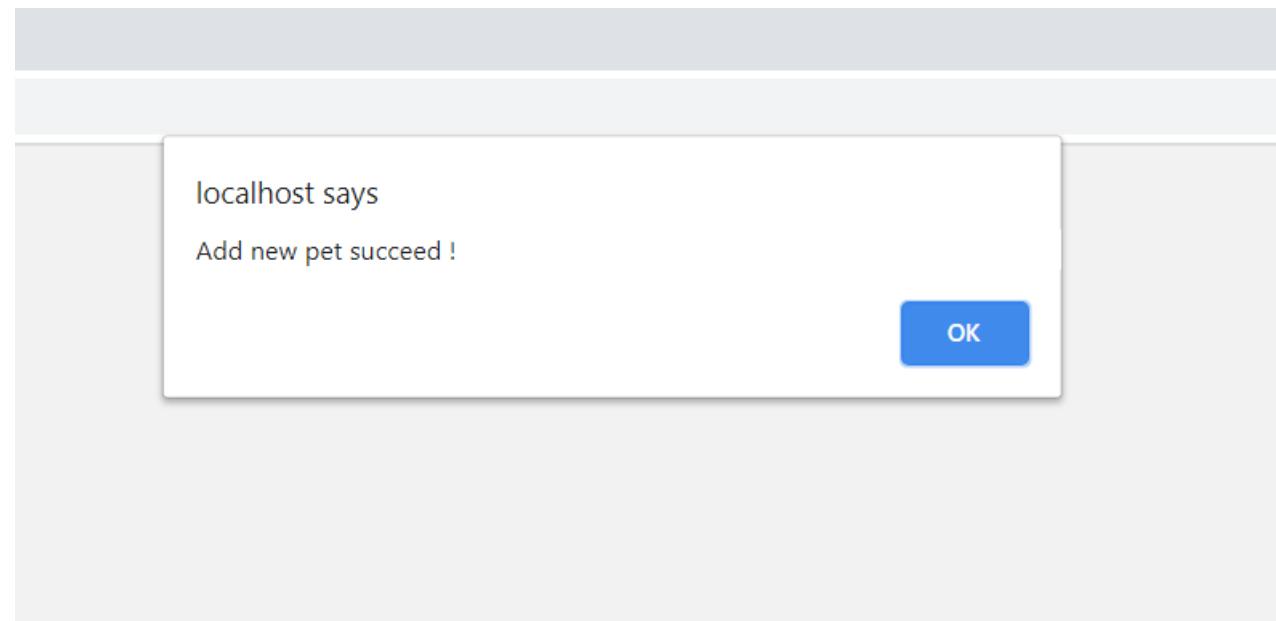
**Image**

Choose File No file chosen

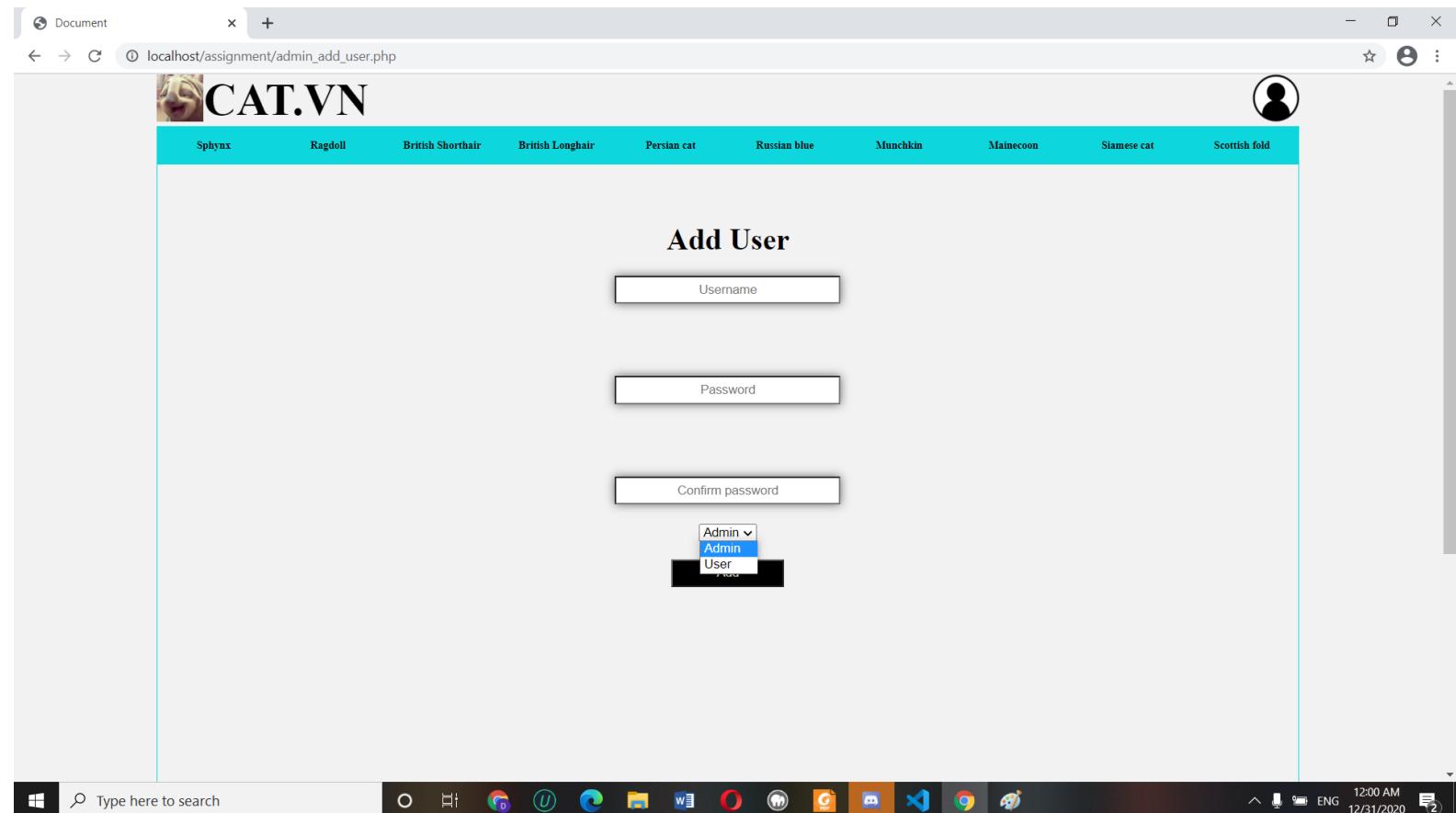
Add

(Image19: add cat)

After admin successfully adding the cat, a message pops up and the page will automatically navigate back to the cat management page. Adding cat categories have the same interface and functionality as adding cat page above.



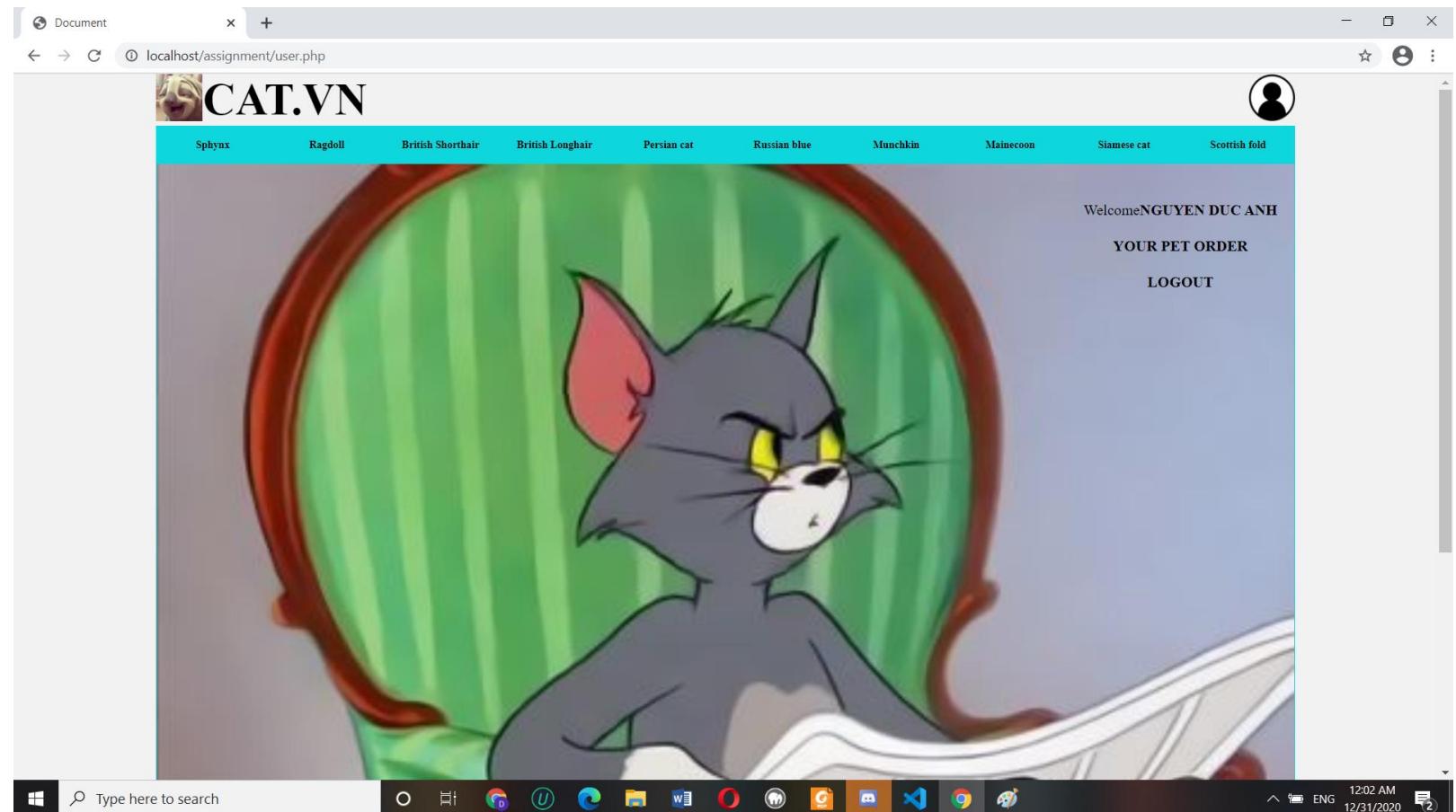
(Image20: add pep message pops up)



(Image21: add user)

The admin can add both admin and user accounts on the user add page

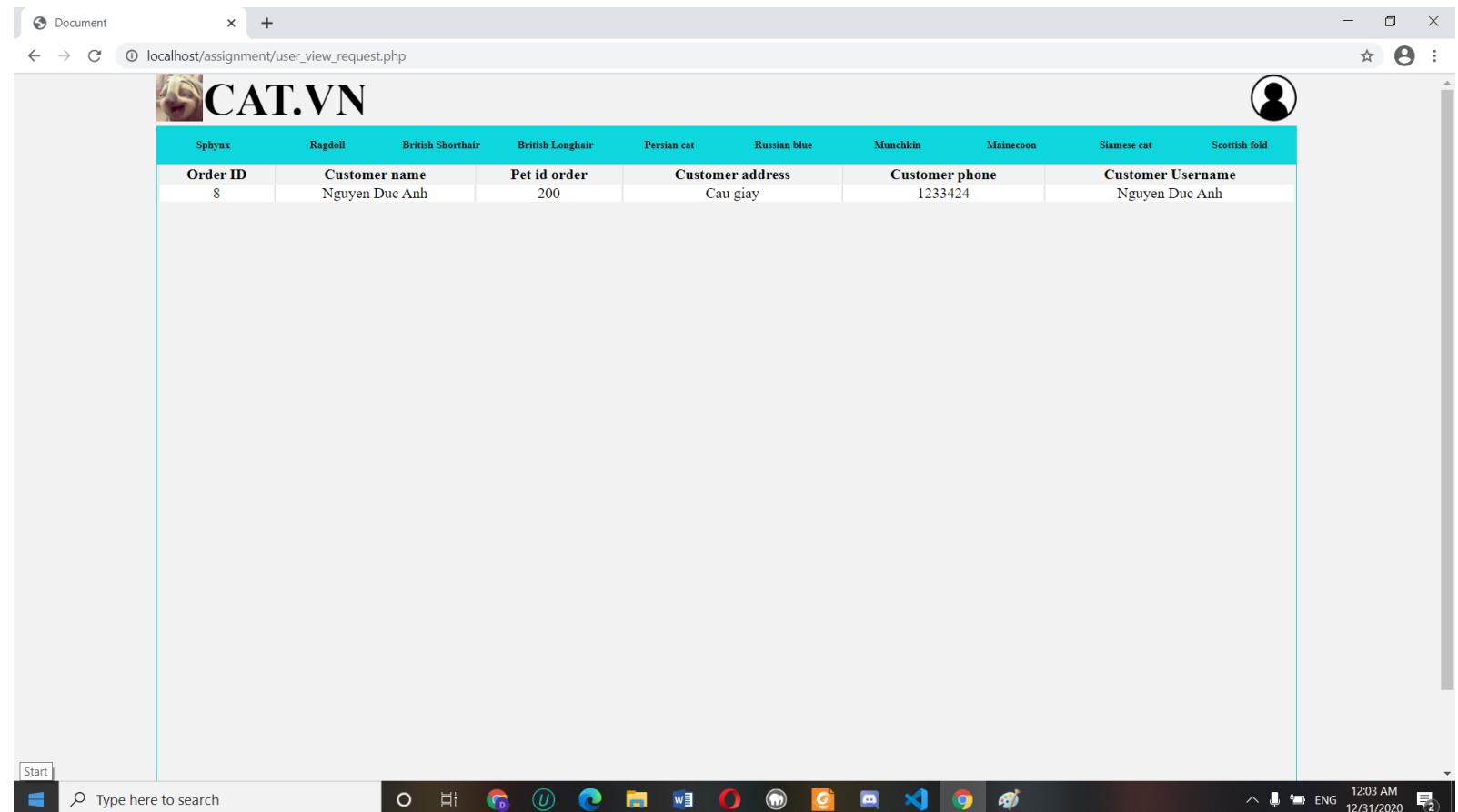
**h) User home page**



(Image22: user)

User is redirected to the profile page after login

**i) User order**



(Image23: user view order)

Users view cat order information by clicking on the "your pet order" link in navigation.

#### IV. Website Testing

Page	Test	Test activity	Result	Expected Result	Status
Homepage	Navigation to homepage	Click on left logo	Redirect to index.php	Same	Pass

	Navigation to login	Click on right icon	Redirect to general_login.php	Same	Pass
	Cat type detail	Click on top navigation	Redirect to general_detail_type.php	Same	Pass
	Cat detail	Click on a cat box	Redirect to general_detail_pet.php	Same	Pass
Login	Correct admin account input	Input correct username and password	Redirect to admin.php	Same	Pass
	Correct user account input	Input correct username and password	Redirect to user.php	Same	Pass
	Incorrect input	Incorrect input username/password  Incorrect input username and password	Login failed	Same	Pass
Register	Input new data	Input username, password and password confirm	Register successful	Same	Pass
	input existing data	Input an existing username, password and password confirm	Register failed	Same	Pass
	Input invalid data	Input invalid username	Register failed	Same	Pass
	Input incorrect data	Input username and confirm password is different from password	Register failed	Same	Pass
Add cat	Correct input	Input correct data	Add successful	Same	Pass
	Incorrect input	Input letters to id cat	Add failed	Same	Pass
	Input existing data	Input an existing id to cat id	Add failed	Same	Pass
Delete cat	Delete data	Click on delete button	Delete successful	Same	Pass
Update cat	Correct input	Input correct data	Update successful	Same	Pass
	Incorrect input	Input letters to price	Update failed	Same	Pass

Add user	Correct input	Input correct username, password and password confirm	Add user successful	Same	Pass
	Input existing data	Input existing username but user type is different	Add user failed	Add user successful	Failed
Delete user	Delete data	Click on delete button of user account	Delete user successful and also delete user order	Same	Pass

(figure15: test cases)

Out of the twenty cases tested, one failed out of my expectations. I did not consider this case when coding. The reason for this error is that it is only comparing the username value in the if statement in the add user file. Therefore, to fix this error, I need to add a user type value comparison statement to the if conditional statement.

## V. Evaluate

Pros: The website is simply designed, the layout is consistent, and includes all the necessary functions for users to navigate and buy cats.

Cons: The website is still too basic and lacks many functions such as shopping cart, search, and filter functions. In addition, the website interface is not too special, users can not know which category they are accessing because there is no sign of change happening. Moreover, consider in database, it is very necessary to split the user table into two tables, the user account, and the admin account. The user account table includes customer information such as name, phone number, ... Therefore, avoid the case that an account has many customer names and simplifies the step of buying cats, specifically, customers just need to press the buy button instead of filling out an information form each time buying.

In the future, I need to improve web design, improve order functionality, add shopping cart functionality,

## VI. Conclusion

In short, this article has covered the concept of website design principles and specifically introduced a website that I design for both the front and back end. However, this basic site lacks a lot of functionality and needs further improvement.

## VII. Reference

Benyon, D., 2014. *Designing Interactive Systems*. pp.86 - 87.