

EIE 4432 Project Report

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● Introduction

For this project, we were required to create a lost and found system where users could register their accounts and use them to log in to the lost and found system to post notices of lost and found items. Users can interact with each other, reply to all pending notices and see the details of all notices. In addition to the user side, we have also created an administrator account to view the details of users and notices.

● Function Specification

Category	Functions	Finished or not
User Registration	User registration with user id, nick name, email, profile image, gender, and birthday	Finished
	Users update personal information, including nick name, email and profile image	Finished
	Not allowed an admin to register an account	Finished
	Prompt when input box is invalid	Finished
User Login	Two roles: admin and users	Finished
	Use id and password to login. The admin uses default id " <i>admin</i> " and password " <i>adminpass</i> " to login in.	Finished
	Remember login status using cookie	Finished
	User logout (and delete cookie)	Finished
	Forget and reset password (for users)	Finished
	Prompt when input box is invalid	Finished
User Operations	Create Notice: A user creates a notice with the following information: type (lost/found), date, venue, contact, description, and	Finished

	image.	
	View Notices: A list page of all pending notices in the system. Each notice has “respond” and “view” buttons.	Finished
	View My Notices: A list page of all notices that are created or responded by the user	Finished
	View Notice Detail: A detailed page of a notice (including response if it is completed)	Finished
	Respond to A Notice: A user responds to a notice by sending a message in the textbox to the owner of the notice. The notice will be marked as completed.	Finished
	View photos of the three latest notices: Three photos that loop on the application's homepage, which users can click on to see the corresponding details.	Finished
Admin Operations	View List of Registered Users: A list page of all registered users in the ascending order of users' nick name, showing the number of notices each user created and responded, respectively.	Finished
	View List of Pending/Completed Notices: Two list pages of all pending or completed notices in the system.	Finished
	View List of Notices of a User: A list page of all pending or completed notices in the system	Finished

	created by a user, specified by the user id.	
	System Statistics: Use a chart to show the statistics of the number of notices in different age ranges (e.g., [10, 30], [30,50], [50, 70], etc.) among users.	Finished

● Database Design

Table *personal*

Column Name	Description
userid(PK)	It is the unique key that users can set their own Settings to identify users.
pswd	It is the field to store the password of users.
email	It is the field to store the email of users.
birthday	It is the field to store the birthday of users.
age	It is the field to store the age that is calculated by birthday of users.
nickname	It is the field to store the nickname of users.
gender	It is the field to store the gender of users.
It is the field to store the birthday of users.	It is the field to store the address of the profile image of users.

	#	名字	类型	排序规则	属性	空	默认	注释	额外	操作
<input type="checkbox"/>	1	userid	varchar(20)	utf8mb4_general_ci		否	无			修改 删除 更多
<input type="checkbox"/>	2	pswd	varchar(20)	utf8mb4_general_ci		否	无			修改 删除 更多
<input type="checkbox"/>	3	email	varchar(30)	utf8mb4_general_ci		否	无			修改 删除 更多
<input type="checkbox"/>	4	birthday	date			否	无			修改 删除 更多
<input type="checkbox"/>	5	age	int(10)			否	无			修改 删除 更多
<input type="checkbox"/>	6	nickname	varchar(20)	utf8mb4_general_ci		否	无			修改 删除 更多
<input type="checkbox"/>	7	gender	varchar(10)	utf8mb4_general_ci		否	无			修改 删除 更多
<input type="checkbox"/>	8	profileimage	varchar(100)	utf8mb4_general_ci		否	无			修改 删除 更多

Table *notice*

Column Name	Description
object_id(PK)	It is the unique key to identify every notice that users create.
userid_c	It is the field to store the user id of users that create the notice.

userid_r	It is the field to store the user id of users that respond the notice.
nickname_c	It is the field to store the nick name of users that create the notice.
nickname_r	It is the field to store the nick name of users that respond the notice.
tp	It is the field to store the type of created notice.(e.g., lost or found)
dt	It is the field to store the date that the property was found or lost.
venue	It is the field to store the venue that the property was found or lost.
contact	It is the field to store the contact of the users who create the notice.
descr	It is the field to store the description of the lost or found property.
img	It is the field to store the photo of the property.
st	It is the field to store the state of the property.(e.g., pending or completed)
age	It is the field to store the age of the users who create the notice.
resp	It is the field to store the reply of the users who respond the notice.











	#	名字	类型	排序规则	属性	空	默认	注释	额外	操作
<input type="checkbox"/>	1	object_id	int(11)			否	无		AUTO_INCREMENT	修改 删除 更多
<input type="checkbox"/>	2	userid_c	varchar(20)	utf8mb4_general_ci		否	无			修改 删除 更多
<input type="checkbox"/>	3	userid_r	varchar(20)	utf8mb4_general_ci		否	无			修改 删除 更多
<input type="checkbox"/>	4	nickname_c	varchar(20)	utf8mb4_general_ci		否	无			修改 删除 更多
<input type="checkbox"/>	5	nickname_r	varchar(20)	utf8mb4_general_ci		否	无			修改 删除 更多
<input type="checkbox"/>	6	tp	varchar(10)	utf8mb4_general_ci		否	无			修改 删除 更多
<input type="checkbox"/>	7	dt	date			否	无			修改 删除 更多
<input type="checkbox"/>	8	venue	varchar(50)	utf8mb4_general_ci		否	无			修改 删除 更多
<input type="checkbox"/>	9	contact	int(11)			否	无			修改 删除 更多
<input type="checkbox"/>	10	descr	varchar(100)	utf8mb4_general_ci		否	无			修改 删除 更多
<input type="checkbox"/>	11	img	varchar(100)	utf8mb4_general_ci		否	无			修改 删除 更多
<input type="checkbox"/>	12	st	varchar(15)	utf8mb4_general_ci		否	无			修改 删除 更多
<input type="checkbox"/>	13	age	int(11)			否	无			修改 删除 更多
<input type="checkbox"/>	14	resp	varchar(500)	utf8mb4_general_ci		否	无			修改 删除 更多





Table administrator

















Column Name	Description
userid	It is the unique key to identify the administrators.
pswd	It is the field to store the password of the administrators.

	#	名字	类型	排序规则	属性	空	默认	注释	额外	操作
<input type="checkbox"/>	1	userid	varchar(20)	utf8mb4_general_ci		否	无			修改 删除 更多
<input type="checkbox"/>	2	pswd	varchar(20)	utf8mb4_general_ci		否	无			修改 删除 更多

Entity Relationship Diagram

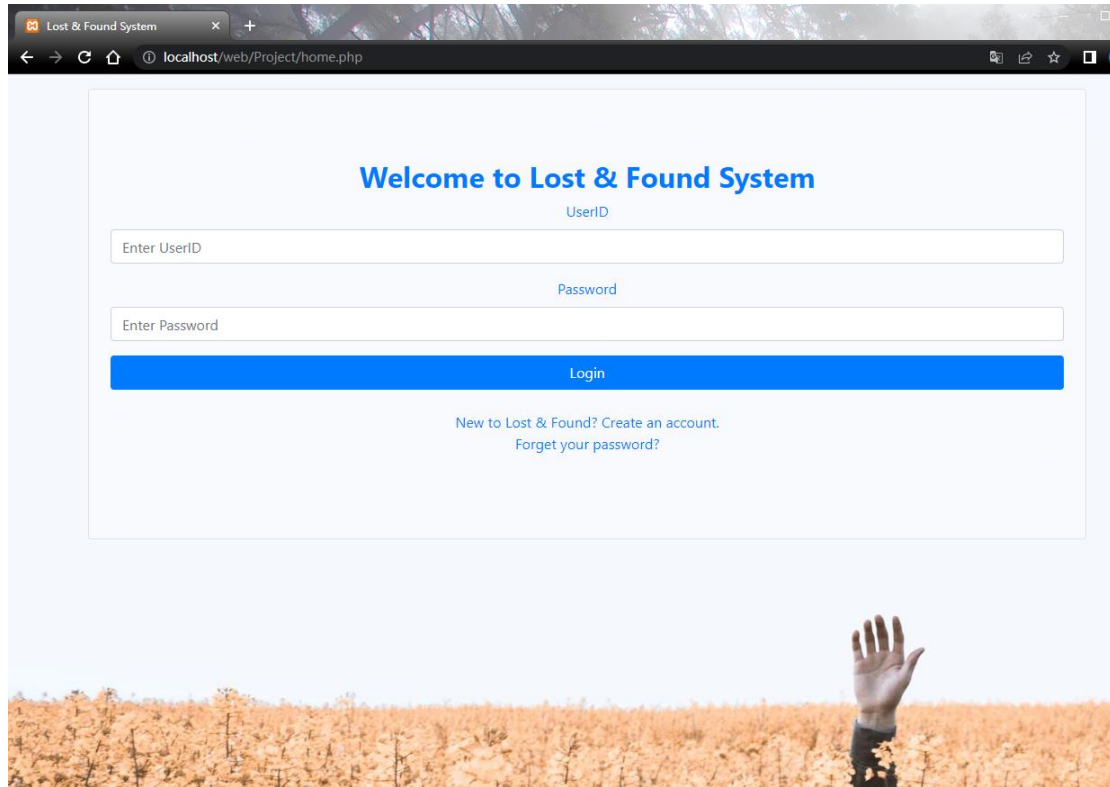
  lostnfound personal
 userid : varchar(20)
 pswd : varchar(20)
 email : varchar(30)
 birthday : date
 age : int(10)
 nickname : varchar(20)
 gender : varchar(10)
 profileimage : varchar(100)

  lostnfound administrator
 userid : varchar(20)
 pswd : varchar(20)

  lostnfound notice
 object_id : int(11)
 userid_c : varchar(20)
 userid_r : varchar(20)
 nickname_c : varchar(20)
 nickname_r : varchar(20)
 tp : varchar(10)
 dt : date
 venue : varchar(50)
 contact : int(11)
 descr : varchar(100)
 img : varchar(100)
 st : varchar(15)
 age : int(11)
 resp : varchar(500)


- Function part

Users can enter *http://localhost/web/Project/home.php* to get to the home page(login page), and users can choose to use user id and password to login the lost and found system, or to click the *“Forget your password”* link to reset their password when they forget their password. And the new users can click *“New to Lost & Found? Create an account.”* Link to register their own accounts.











User Registration

When new users get into the registration page to register the accounts, users should create their own user id and password, also they need to input the email, birthday, gender, and create their own nick name. And users can upload a .jpg or .png format file to be used as their own profile image.




Registration Information














UserID 	Password 
<input type="text" value="Enter UserID"/>	<input type="password" value="Enter Password"/>
Email 	Birthday 
<input type="text" value="Enter email"/>	<input type="text" value="mm/dd/yyyy"/> 
Nick Name 	Gender 
<input type="text" value="Enter Password"/>	<input checked="" type="radio"/> Female <input type="radio"/> Male
Profile Image 	
<input type="button" value="Choose File"/> No file chosen	

[Already have an account?](#)

When the user clicks directly on the "Next" button, the system will remind the user to complete each empty input box.



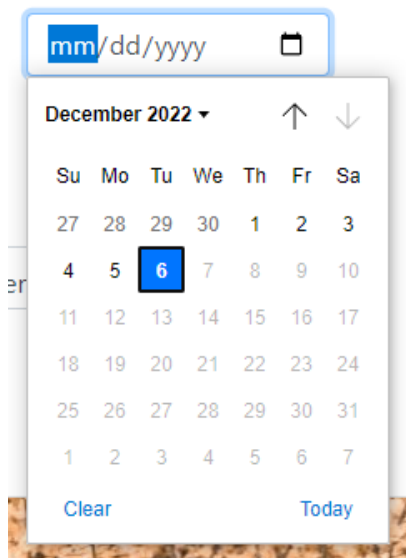
Registration Information

UserID  <input type="text" value="Enter UserID"/> 	Password  <input type="password" value="Enter Password"/> 
Please fill out this field.	Please fill out this field.
Email  <input type="text" value="Enter email"/> 	Birthday  <input type="text" value="mm/dd/yyyy"/> 
Please fill out this field.	Birthday is invalid.
Nick Name  <input type="text" value="Enter Password"/> 	Gender  <input checked="" type="radio"/> Female <input type="radio"/> Male
Please fill out this field.	
Profile Image  <div><input type="button" value="Choose File"/> <input type="text" value="No file chosen"/> </div>	

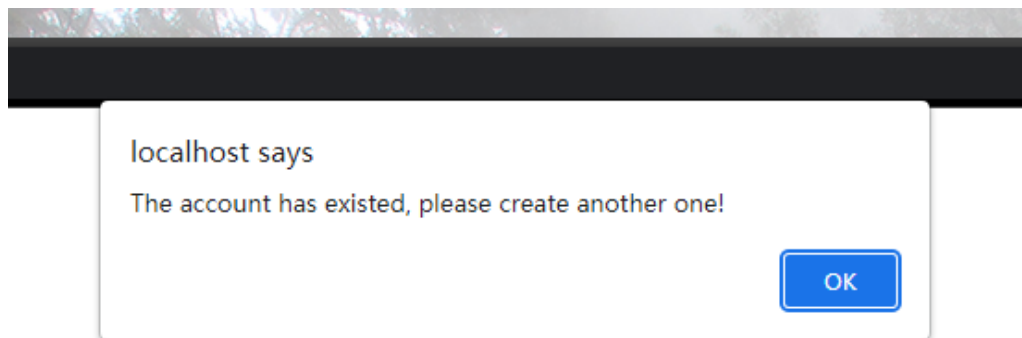
Valid.

[Already have an account?](#)

And the system restricts users from choosing a time after today as their birthday.

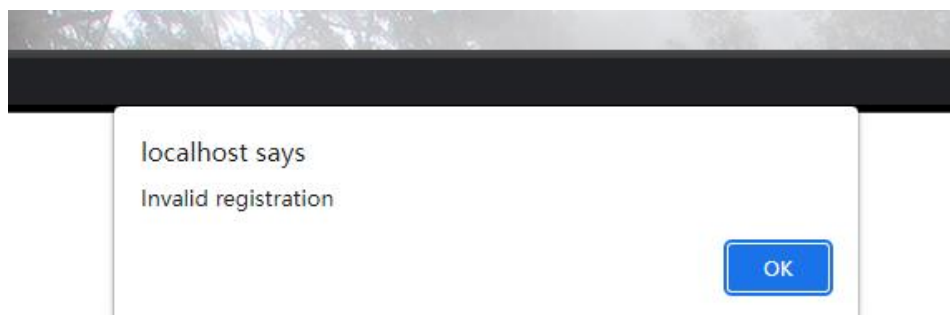


And when users want to register an existed account(user id), the system will prompt as follows




And after clicking the “OK”, the page will automatically jump to the registration page for the user to re-enter.

And when users want to register an administrator account, the system will prompt as follows



And, after clicking the “OK”, the page will automatically jump to the home page(login page). When the user has successfully registered, the system will prompt "Registration successful" and after clicking "OK", the user will automatically jump to the login screen.



Registration Information

UserID

Password

Email

Birthday

Nick Name

Gender
 ☒ Female ☐ Male

Profile Image
 avatar5.jpg

[Already have an account?](#)

localhost says

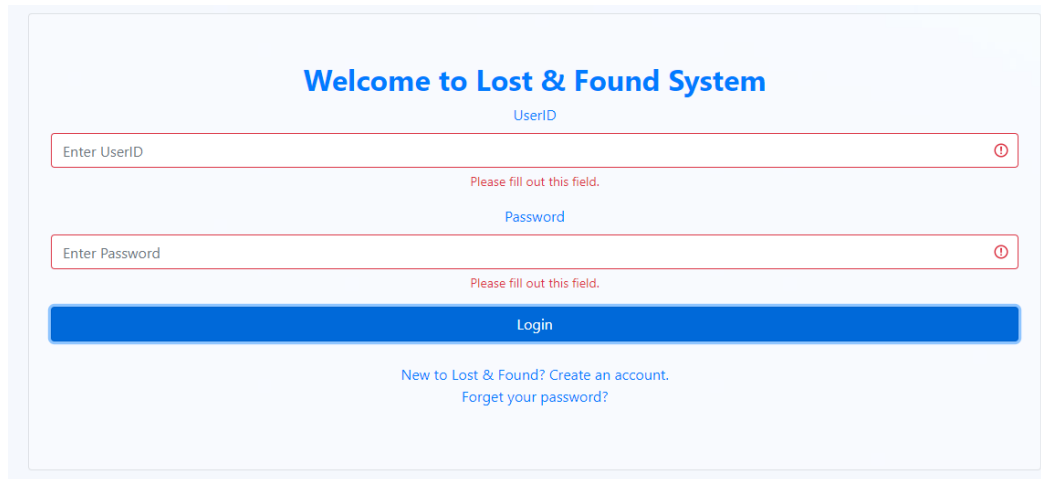
Register successfully!

	userid	pwd	email	birthday	age	nickname	gender	profileimage
<input type="checkbox"/>	20094526	123	1244356@1678.com	1980-06-19	42	Marry	female	./uploads/a7c2a7c4b2b7c0fcd34d9376882b9719.jpg
<input type="checkbox"/>	20094527	12566	20094527d@connect.polyu.hk	2002-01-08	20	Wen	male	./uploads/9356047bd44705b9a03eca1a90c42516.jpg
<input type="checkbox"/>	27440588	123	123@gmail.com	1989-04-15	33	Mike	male	./uploads/e28627cd9d0bd3f5ecb73104b0f9b190.jpg
<input type="checkbox"/>	28760533	12345	1443@gmail.com	1995-08-31	27	Susan	female	./uploads/59522345376a726360958dc9f94608c9.png
<input type="checkbox"/>	28770439	123	132@gmail.com	2003-07-17	19	Adam	male	./uploads/ff9fb53bbefa894d758bca7d776b629c.png

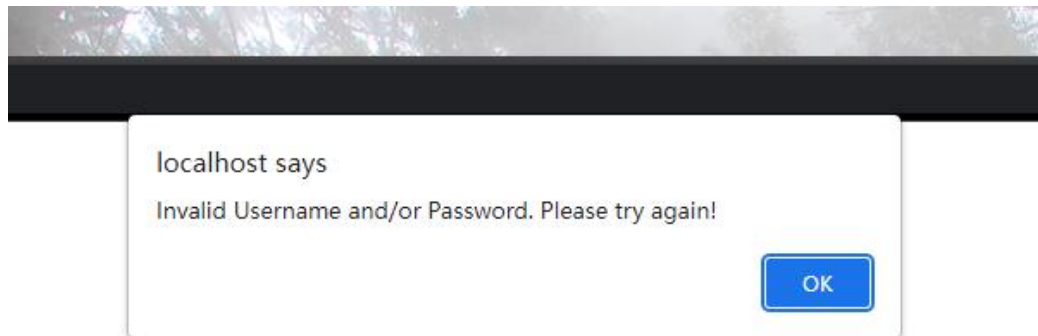
User Login

The system has a user side and an administrator side. Users can log in to the user side by registering to deposit an account into the database, and administrators can log in to the administrator side using their unique account. The functions of the user side and the administrator side are different.

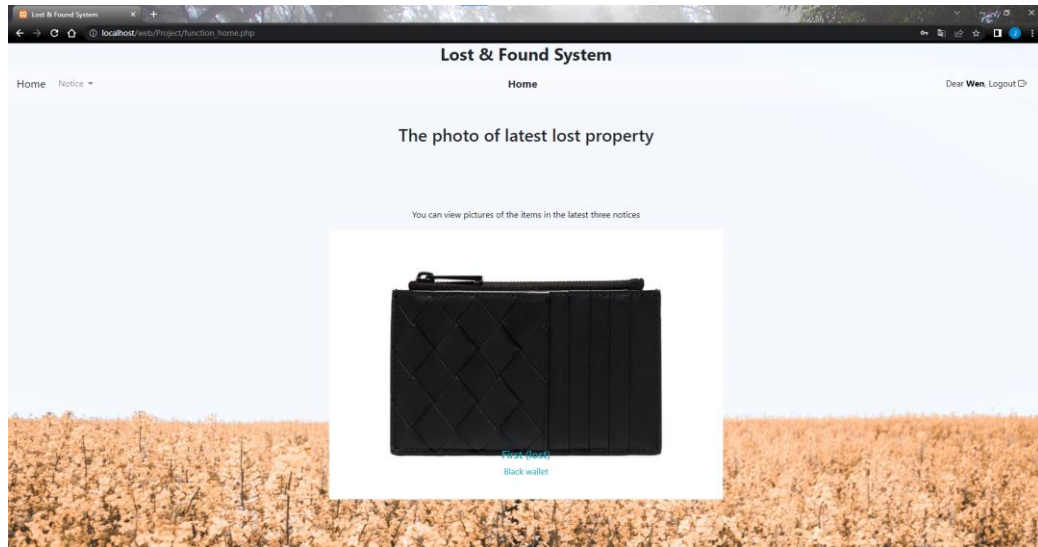
When users directly click on the “*Login*” without anything on the textbox of “*UserID*” or “*Password*”, the system will alert the users to fill out the field.



When a user enters the wrong account, the system will prompt them as follows and jump back to the login page

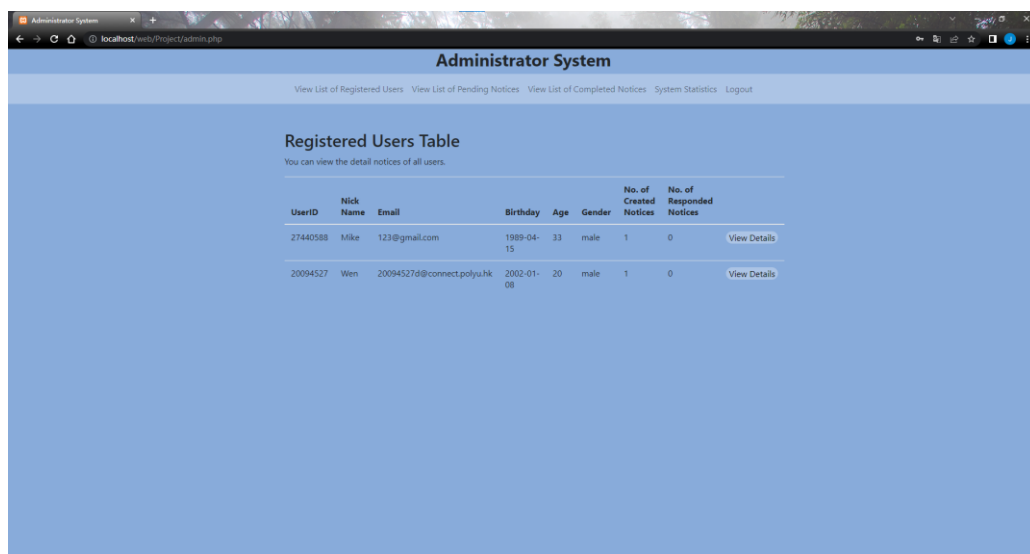


User side



		userid	pswd	email	birthday	age	nickname	gender	profileimage
<input type="checkbox"/>	编辑	20094526	123	1244356@1678.com	1980-06-19	42	Marry	female	/uploads/a7c2a7c4b2b7c0fcd34d9376882b9719.jpg
<input type="checkbox"/>	编辑	20094527	12566	20094527d@connect.polyu.hk	2002-01-08	20	Wen	male	/uploads/9356047bd44705b9a03eca1a90c42516.jpg
<input type="checkbox"/>	编辑	27440588	123	123@gmail.com	1989-04-15	33	Mike	male	/uploads/e28627cd9d0bd3f5ecb73104b0f9b190.jpg
<input type="checkbox"/>	编辑	28760533	12345	1443@gmail.com	1995-08-31	27	Susan	female	/uploads/59522345376a726360958dc9f94608c9.png
<input type="checkbox"/>	编辑	28770439	123	132@gmail.com	2003-07-17	19	Adam	male	/uploads/ff9fb53bbefa894d758bca7d776b629c.png

Administrator side



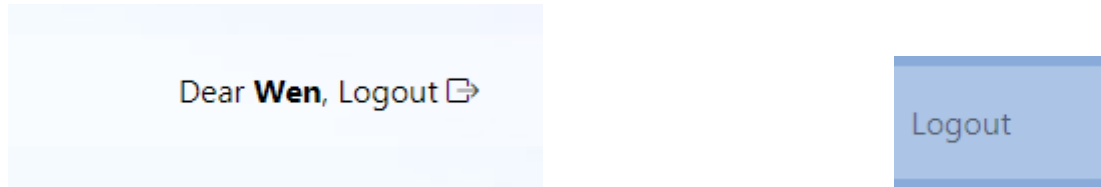
		userid	pswd
<input type="checkbox"/>	编辑	admin	adminpass

And both the user side and the administrator side use cookies to remember the account status.

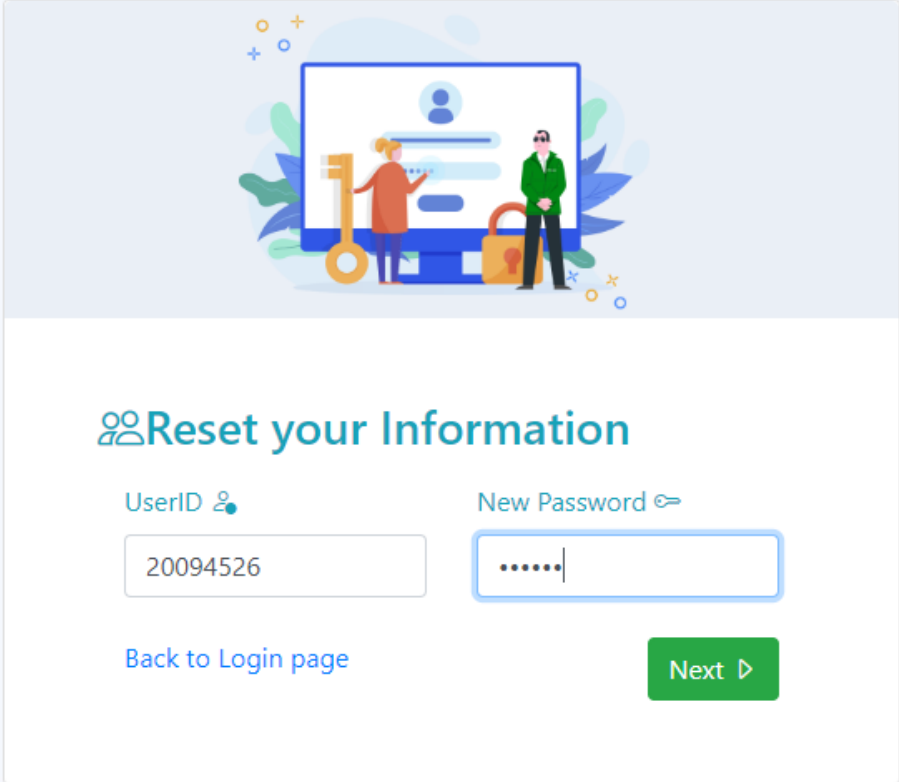
```
if(!isset($_COOKIE["userid"])){
    setcookie("userid", $userid, time() + (60 * 60 * 24));
    setcookie("pswd", $pswd, time() + (60 * 60 * 24));
}
```

```
if($userid=='admin' & $pswd=='adminpass'){  
    setcookie("userid", $userid, time() + (60 * 60 * 24));  
    setcookie("pswd", $pswd , time() + (60 * 60 * 24));  
}
```

And both can click on the logout link on the page to log out of the current account and delete the cookie.





Also, when users forget their password, they can reset their own password based on their unique user id after clicking the “*Forget your password*” link on the home page (login page). Since the user id of each user is not known to other users, it is relatively safe to use the user id to reset the password.



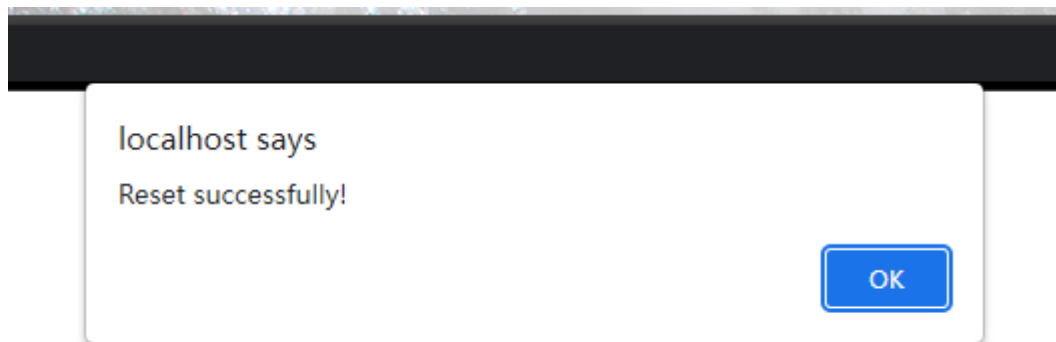
The image shows a "Reset your Information" form. At the top, there is an illustration of two people, one holding a large key and the other standing next to a padlock, with a computer screen in the background. Below the illustration, the title "Reset your Information" is displayed with a user icon. There are two input fields: "UserID" with a user icon and "New Password" with a password icon. The UserID field contains the text "20094526". The New Password field contains six dots. Below the UserID field is a link "Back to Login page". Below the New Password field is a green button labeled "Next" with a right-pointing arrow.
















Reset your Information

UserID 

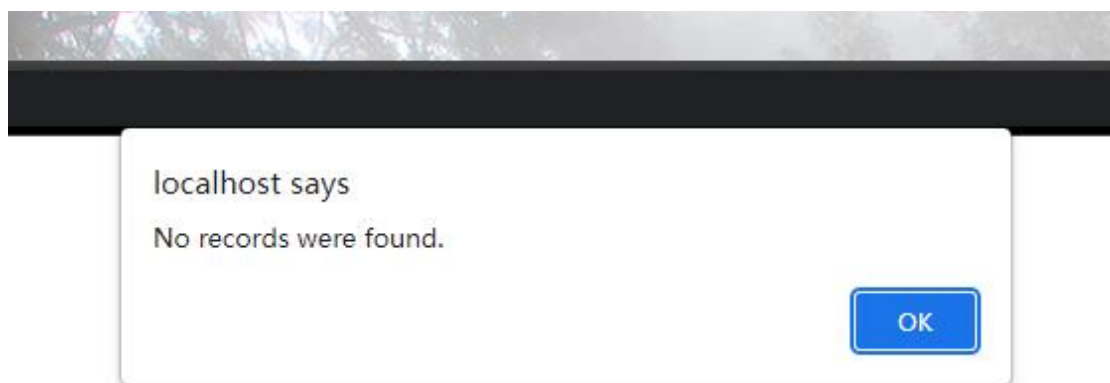
New Password 

[Back to Login page](#) [Next >](#)



		userid	pswd	email	birthday	age	nickname	gender	profileimage
<input type="checkbox"/>	  	20094526	123456	1244356@1678.com	1980-06-19	42	Marry	female	./uploads/a7c2a7c4b2b7c0fcd34d9376882b9719.jpg
<input type="checkbox"/>	  	20094527	12566	20094527d@connect.polyu.hk	2002-01-08	20	Wen	male	./uploads/9356047bd44705b9a03eca1a90c42516.jpg
<input type="checkbox"/>	  	27440588	123	123@gmail.com	1989-04-15	33	Mike	male	./uploads/e28627cd9d0bd3f5ecb73104b0f9b190.jpg
<input type="checkbox"/>	  	28760533	12345	1443@gmail.com	1995-08-31	27	Susan	female	./uploads/59522345376a726360958dc9f94608c9.png
<input type="checkbox"/>	  	28770439	123	132@gmail.com	2003-07-17	19	Adam	male	./uploads/ff9fb53bbefa894d758bca7d776b629c.png

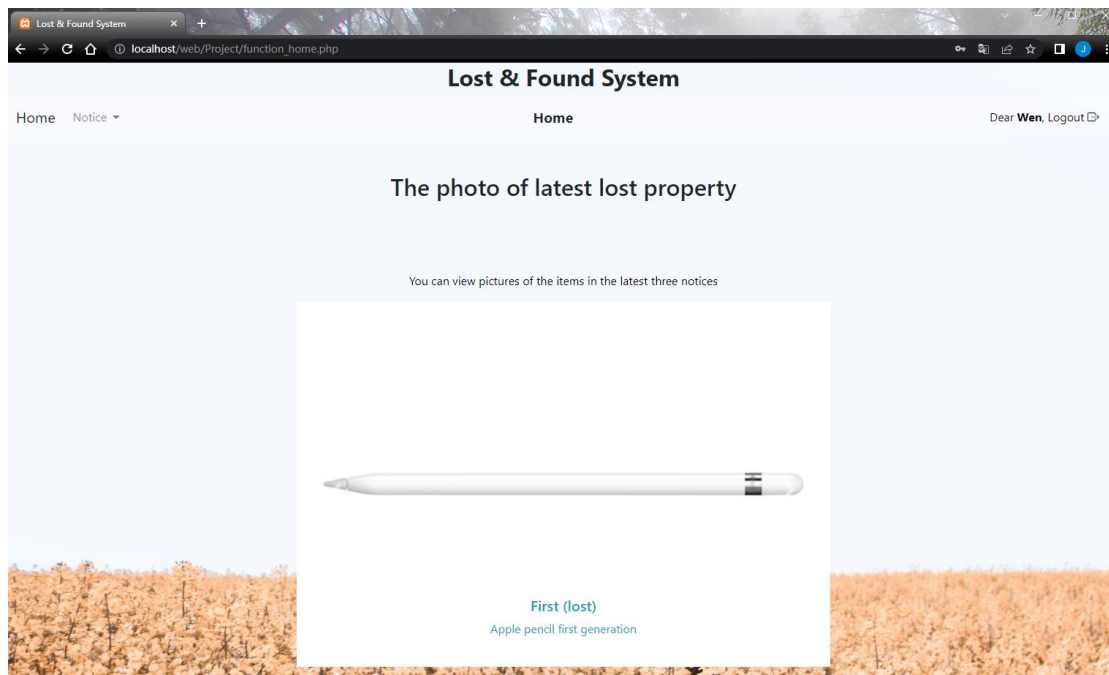
And when users want to reset an account that does not exist in the database(e.g., the administrator account), the system will prompt as follows



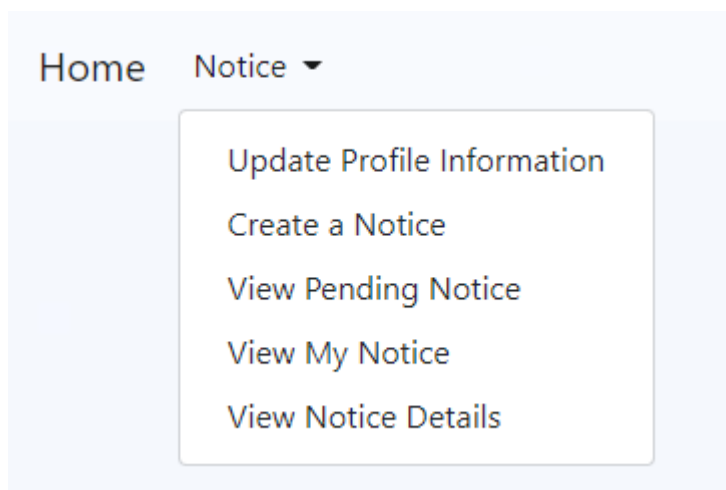
And after clicking the “OK”, the page will jump to the home page(login page).

User Operation

Once the users have successfully logged in, they will go to the home page of the application where they will see a photo carousel with the latest three notices of items. The users can choose to click on the photo of interest to see its details, or the user can use the navigation bar above to see all pending notices, see their own notices, or see all notices to see the details.



When users want to post a notice, they can click on the "Notice" link in the navigation bar and click on "Create a notice" to access the posting screen.



The users can select whether the property is lost or found, fill in the date, location and contact details, and write a description and attach a photo of the item to help locate the lost item or owner. Alternatively, users can choose to click on the "Back to the home page" link to return to the home page to find additional notices. After finishing the notice, it will automatically jump to the "My Notice Table" page.



Create a Notice

Type Date 

☒ Lost ☐ Found 12/04/2022 

Venue  Contact 

Canteen 256788

Description 

iPhone in purple, 6.1 inch.

Image of object 

phone.jpeg

[Back to home page](#)

localhost says

You create a notice successfully!

OK

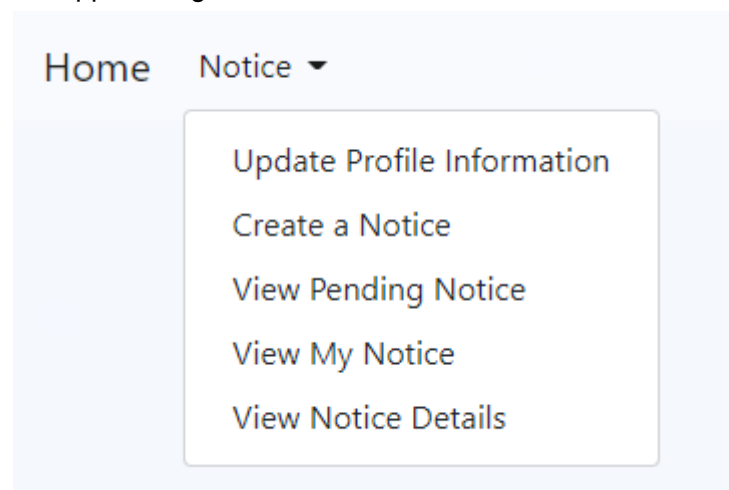
My Notice Table

You can view the details of all your notices, including that are created and responded.

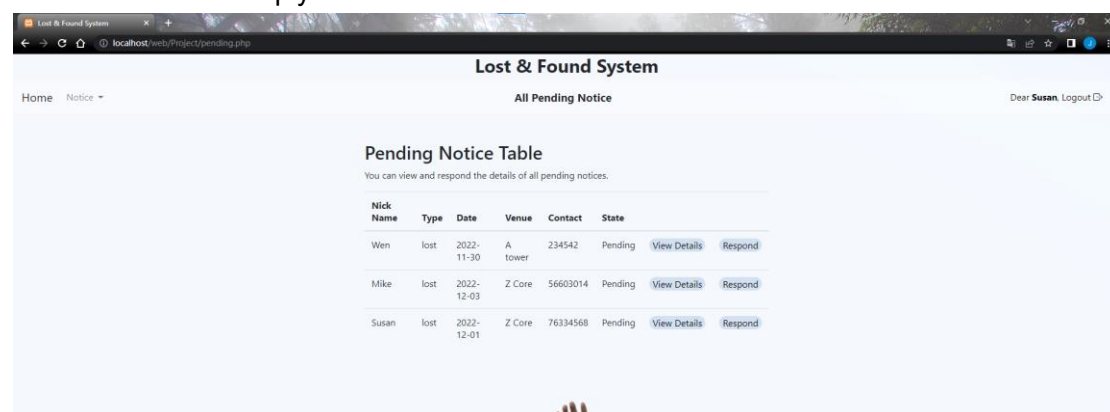
Type	Operation	Date	Venue	State	
lost	Create	2022-12-04	Canteen	Pending	View Details

	object_id	userid_c	userid_r	nickname_c	nickname_r	tp	dt	venue	contact	descr	img	st	age	resp
<input type="checkbox"/>	17	20094527	28760533	Wen	Susan	lost	2022-11-30	A tower	234542	Black bag	./uploads/a6a400e9fa21431ce423b2c9d6ad1d8c.jpg	Completed	20	I have it.
<input type="checkbox"/>	18	27440588		Mike		lost	2022-12-03	Z Core	56603014	Black wallet	./uploads/1a693805446d96201768a987949305a6.jpg	Pending	33	
<input type="checkbox"/>	19	28760533		Susan		lost	2022-12-01	Z Core	76334568	Apple pencil first generation	./uploads/31d21b7c20c2886726b45e43e4c47749.jpg	Pending	27	
<input type="checkbox"/>	20	28770439		Adam		lost	2022-12-04	Library	56703014	Black coat	./uploads/766dcb1524c6bf89704bfb07410a23c6.jpg	Pending	19	
<input type="checkbox"/>	21	20094526		Marry		lost	2022-12-04	Canteen	256788	IPhone in purple, 6.1 inch.	./uploads/9a943b8e9405239689c9cb36b601a814b.jpeg	Pending	42	

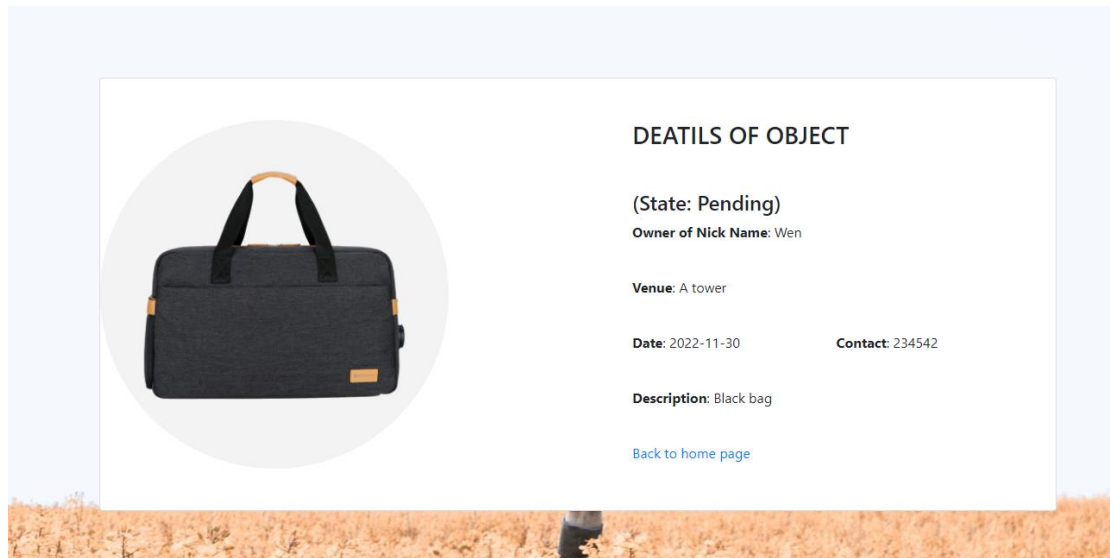
When users want to see all pending notices, they can click on "View Pending Notice" in the upper navigation bar under "Notices".



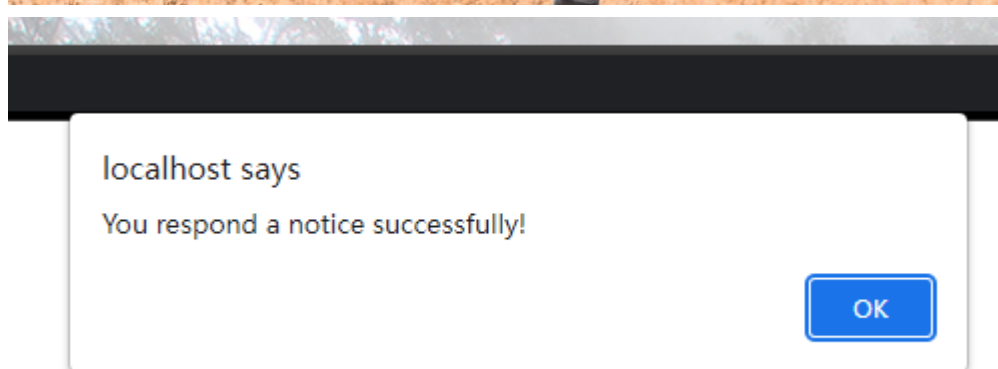
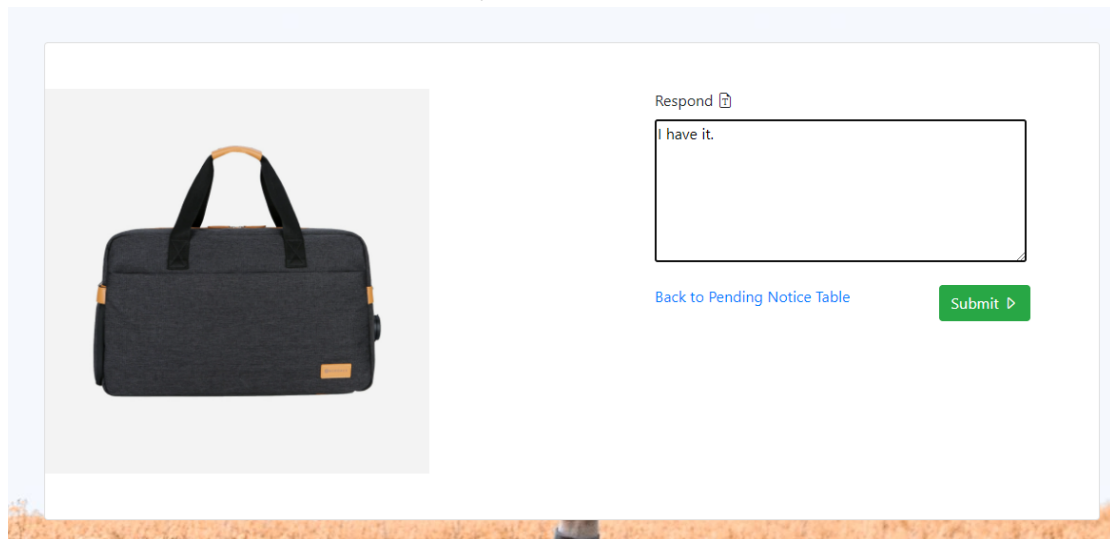
Users can see all pending notices on the Pending Notices page and can view the details of each notice and reply to the notice.

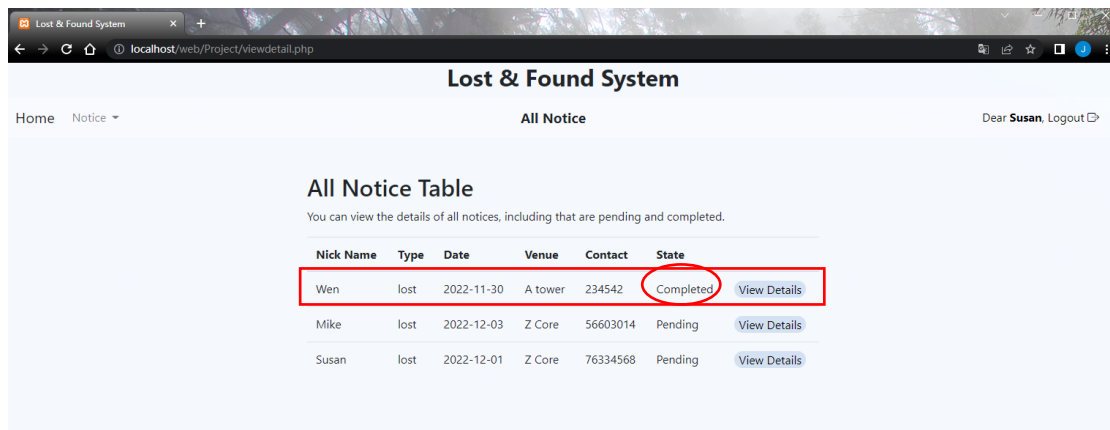
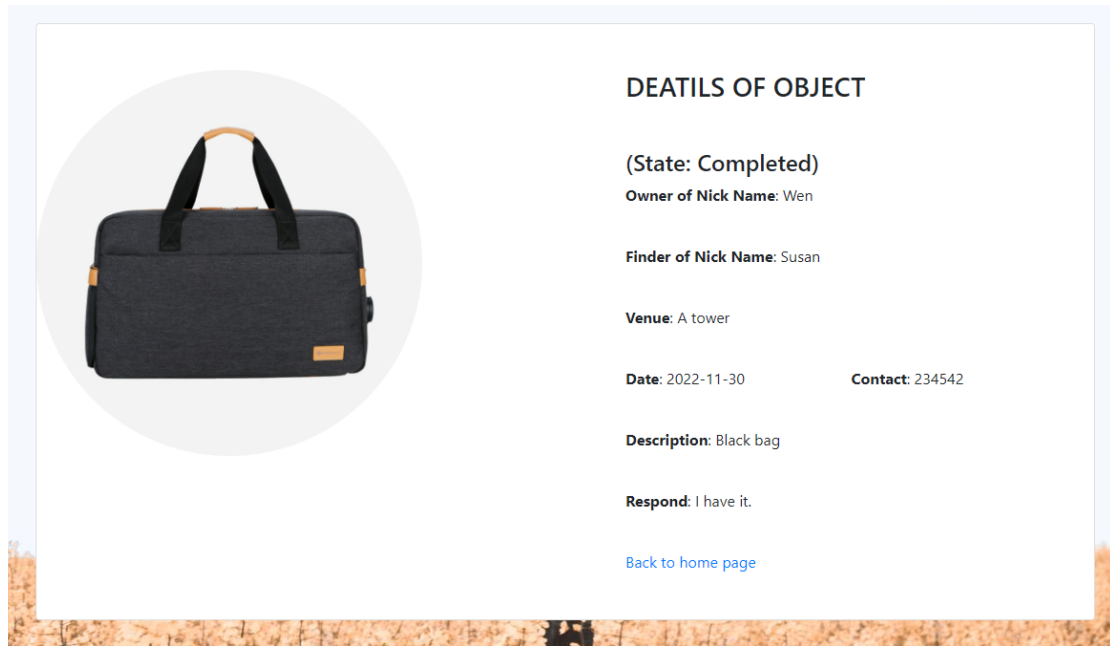


Once the user has clicked on the "view details" button, they can see the nickname of the owner of the notice, the location of the loss, the date and contact details, and a description of the item.

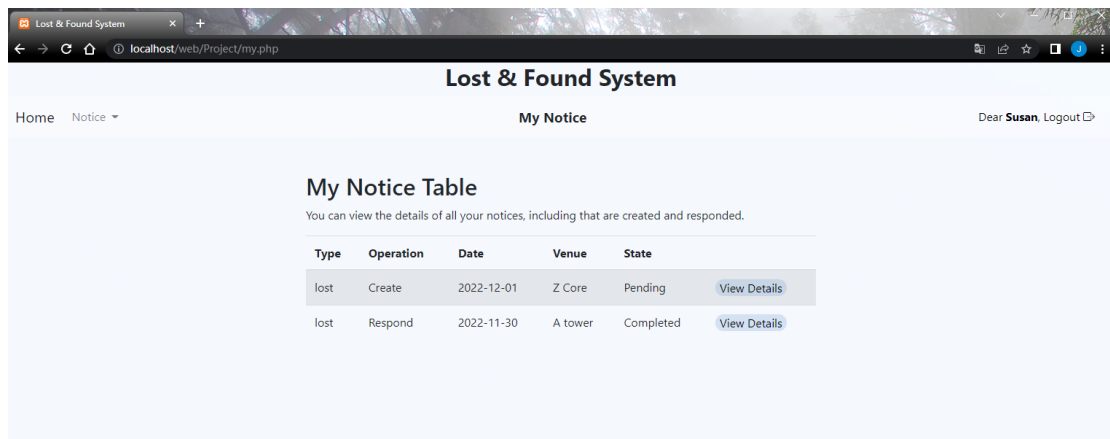


The users can then choose whether or not to reply to the item. If the users choose to reply, the notice will disappear from the pending notices table (Users can still view its details in the "All Notice Table" page or, if they have answered it themselves, they can also view it in the "My Notice Table" page.), its status will be changed to "*Completed*" and the nickname of the person who replied and the reply will appear on the notice details.

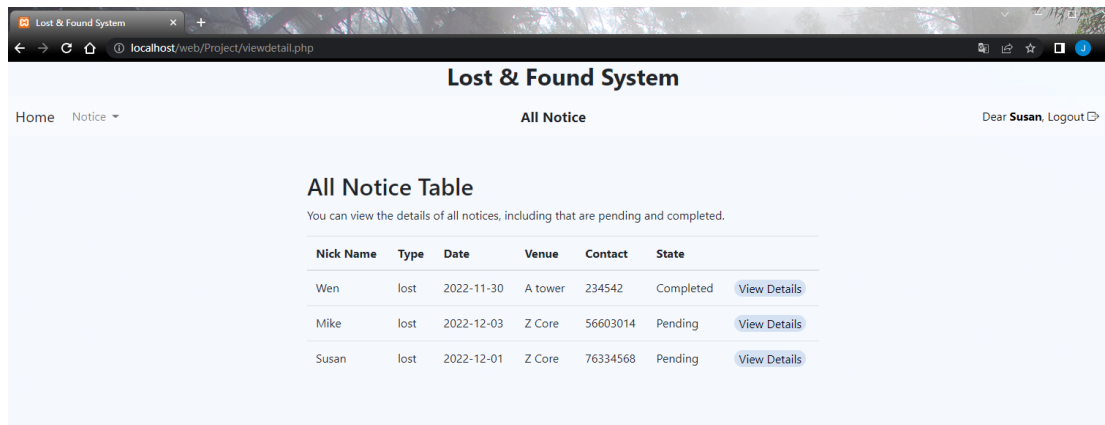




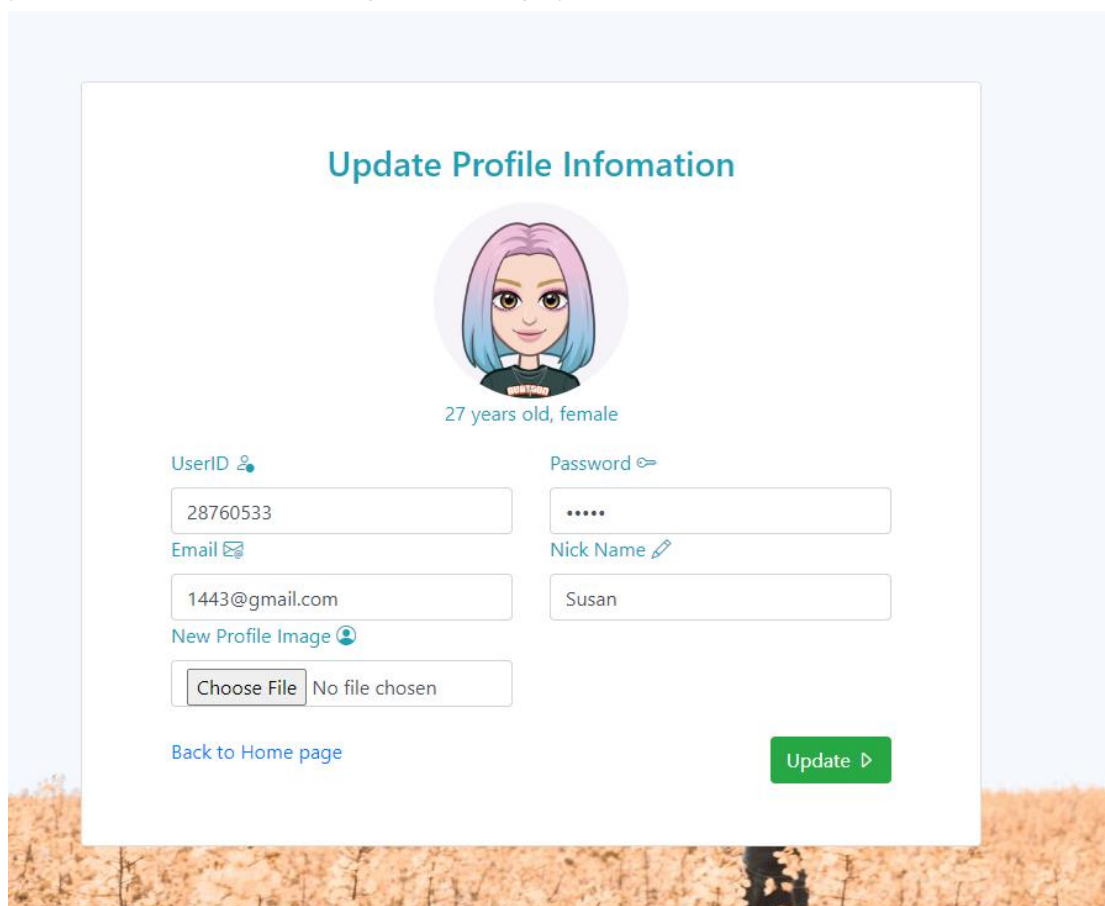
Users can also click on "View My Notice" in the top navigation bar to see all their notices, including those they have created or replied to. They can view the details of each of their notices.



When the users want to view the details of all notices, the users can click on "View Notice Details" to view all notices, whether completed or not.



Furthermore, if users wish to change their personal information, such as their avatar, email address, nickname, password, etc., they can click on "*Update Profile Information*" to go to your personal information page and change your information.



When the users have any of the input boxes empty, if the user chooses to click "*Update*", the empty box will be prompted for the users to enter. But if users do not want to change their avatar, users can choose not to upload any files and click "*Update*" to keep your previous avatar. If the users want to update a certain piece of information, for example just the nickname or email, then just change that piece of information and click "*Update*".

Update Profile Infomation



27 years old, female

UserID

28760533

Valid.

Email

Please fill out this field.

New Profile Image

Choose File

No file chosen

Valid.

Password

Please fill out this field.

Nick Name

Susan

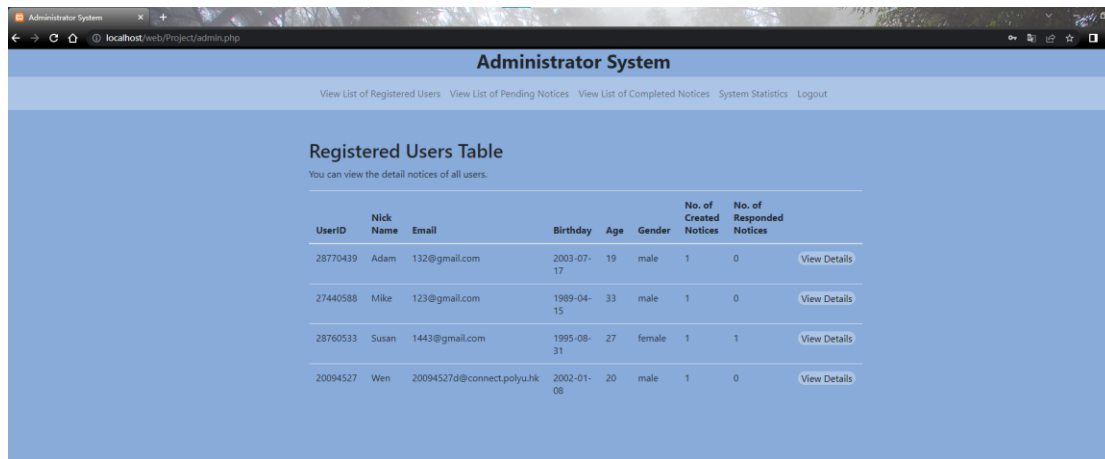
Valid.

[Back to Home page](#)

Update

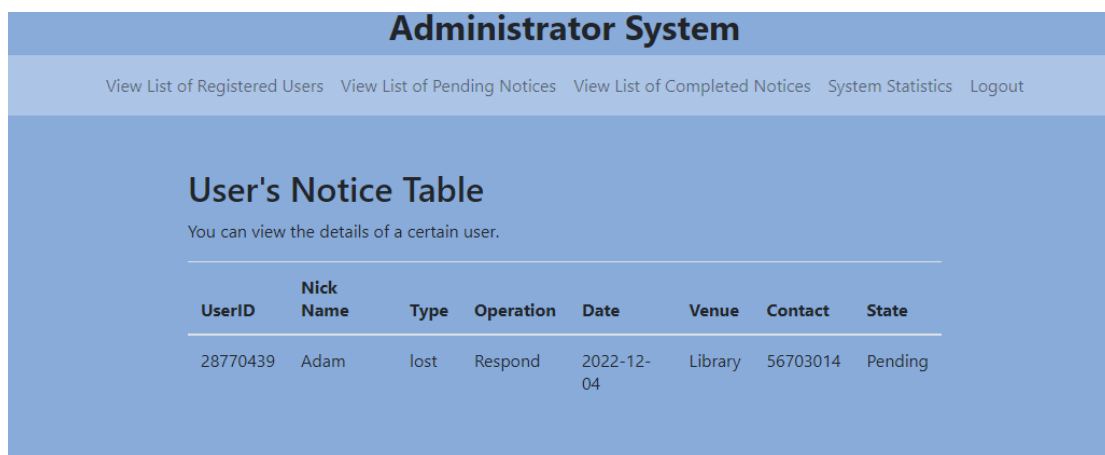
Admin Operation

When the administrator logs in successfully, he/she will see a table of registered users in ascending order by their nickname directly, with statistics on the details of all registered users, including the number of notices they have created and the number of notices they have replied to. The administrator can also click on “*View Details*” to see details of all pending or completed notices created by each user.



The screenshot shows a web browser window with the URL `localhost/web/Project/admin.php`. The page title is "Administrator System". Below the title is a navigation bar with links: "View List of Registered Users", "View List of Pending Notices", "View List of Completed Notices", "System Statistics", and "Logout". The main content area is titled "Registered Users Table" and includes a sub-header "You can view the detail notices of all users." Below this is a table with the following data:

UserID	Nick Name	Email	Birthday	Age	Gender	No. of Created Notices	No. of Responded Notices	
28770439	Adam	132@gmail.com	2003-07-17	19	male	1	0	View Details
27440588	Mike	123@gmail.com	1989-04-15	33	male	1	0	View Details
28760533	Susan	1443@gmail.com	1995-08-31	27	female	1	1	View Details
20094527	Wen	20094527d@connect.polyu.hk	2002-01-08	20	male	1	0	View Details



The screenshot shows the same "Administrator System" interface, but the main content area is titled "User's Notice Table" and includes a sub-header "You can view the details of a certain user." Below this is a table with the following data:

UserID	Nick Name	Type	Operation	Date	Venue	Contact	State
28770439	Adam	lost	Respond	2022-12-04	Library	56703014	Pending

Administrators can also click on “*View List of Pending Notices*” in the top navigation bar to see all pending notices in the system, or “*View List of Completed Notices*” to see all completed notices in the system.

Administrator System

[View List of Registered Users](#) [View List of Pending Notices](#) [View List of Completed Notices](#) [System Statistics](#) [Logout](#)

Pending Notices Table

You can view all pending notices.

UserID of creator	UserID of replier	Nickname of creator	Nickname of replier	Type	Date	Venue	Contact	State
27440588		Mike		lost	2022-12-03	Z Core	56603014	Pending
28760533		Susan		lost	2022-12-01	Z Core	76334568	Pending
28770439		Adam		lost	2022-12-04	Library	56703014	Pending

Administrator System

[View List of Registered Users](#) [View List of Pending Notices](#) [View List of Completed Notices](#) [System Statistics](#) [Logout](#)

Completed Notices Table

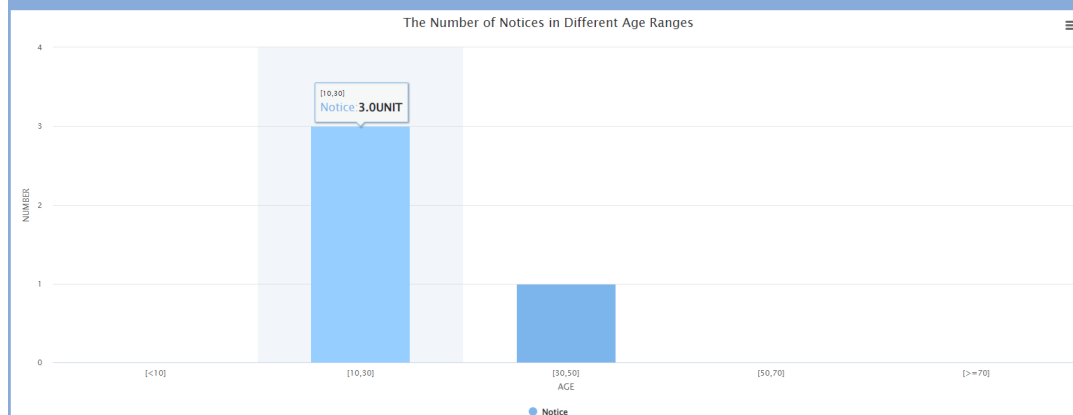
You can view all completed notices.

UserID of creator	UserID of replier	Nickname of creator	Nickname of replier	Type	Date	Venue	Contact	State
20094527	28760533	Wen	Susan	lost	2022-11-30	A tower	234542	Completed

If the administrator would like to view a statistical chart of all notices by age, he/she can click on "System Statistics" above to access the chart page.

Administrator System

[View List of Registered Users](#) [View List of Pending Notices](#) [View List of Completed Notices](#) [System Statistics](#) [Logout](#)



User Interface

I use Bootstrap to layout and decorate the page and set up user validation.