

**EIE4432 WEB SYSTEMS AND TECHNOLOGIES**  
**Individual Project**  
**Online lost-and-found system**

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# 1. Function Specification

Functions	Finished or not
User registration with user id, nick name, email, profile image, gender, and birthday	Yes
Users update personal information, including nick name, email and profile image	Yes
Users login with user id and password	Yes
The admin uses default id "admin" and password "adminpass" to login in	Yes
Users reset password with user id, email and birthday	Yes
Remember login status using cookie	Yes
Users logout and delete cookie	Yes
Users creates a notice with the following information: type (lost/found), date, venue, contact, description, and image	Yes
Users view a list page of all pending notices in the system. Each notice has "respond" and "view" buttons	Yes
Users view a list page of all notices that are created or responded by the user	Yes
Users respond to a notice by sending a message in the textbox to the owner of the notice. The notice will be marked as completed	Yes
Admin views 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.	Yes
Admin views two list pages of all pending or completed notices in the system	Yes
Admin views a list page of all pending or completed notices in the system created by a user, specified by the user id	Yes
Admin uses a chart to show the statistics of the number of notices in different age ranges among users	Yes

## 2. Database Design

Entity Relationship Diagram:

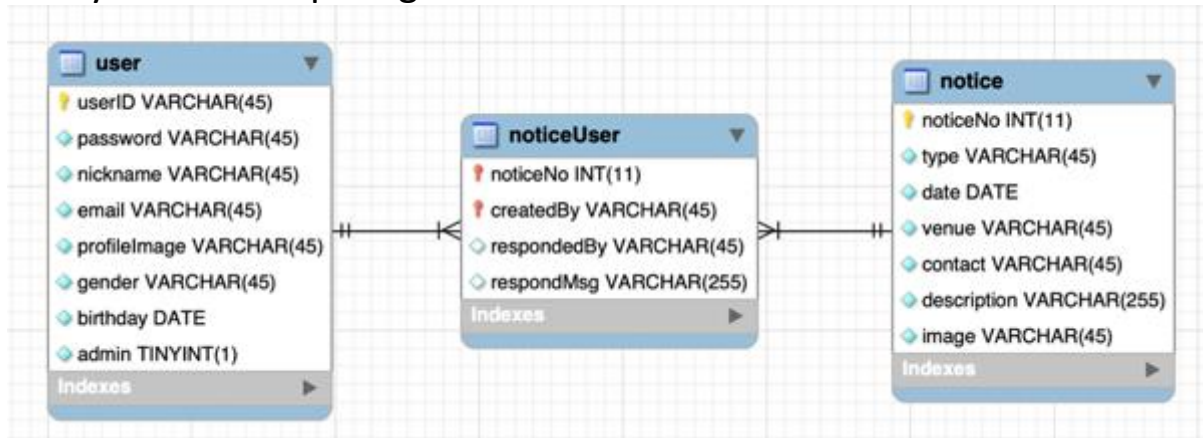


Table `user` is used to store the personal information of the users.

Table `notice` is used to store the details of the notices.

Table `noticeUser` is used to store the relationships between the users and the notices, more specifically, it stores the user who created the notice and the user who responded to it. Also, it stores the responded message.

Table `user`

Column Name	Description
userID (PK)	It is the primary key that identify the specific user.
password	It is the field to store the password of user.
nickname	It is the field to store the nickname of user.
email	It is the field to store the email of user.
profileImage	It is the field to store the profile image of user.
gender	It is the field to store the gender of user.
birthday	It is the field to store the birthday of user.
admin	It is the field to store the role of user. 0 is for user, 1 is for admin. The default value is 0.

Table `notice`

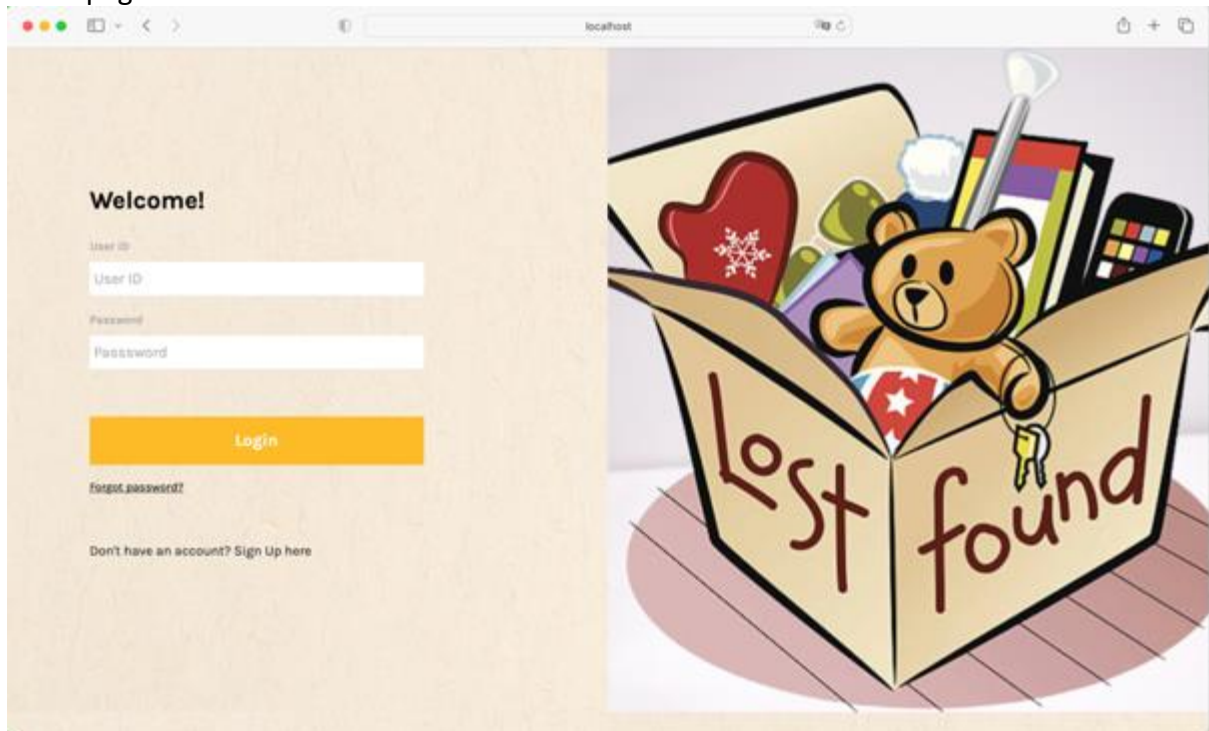
Column Name	Description
noticeNo (PK)	It is the auto-increment primary key that identify the specific notice.
type	It is the field to store the type (either lost or found) of notice.
date	It is the field to store the date when the user lost or found the item.
venue	It is the field to store the venue where the user lost or found the item.
contact	It is the field to store the contact info of the user who created the item.
description	It is the field to store the description of item.
image	It is the field to store the image of item.

Table `noticeUser`

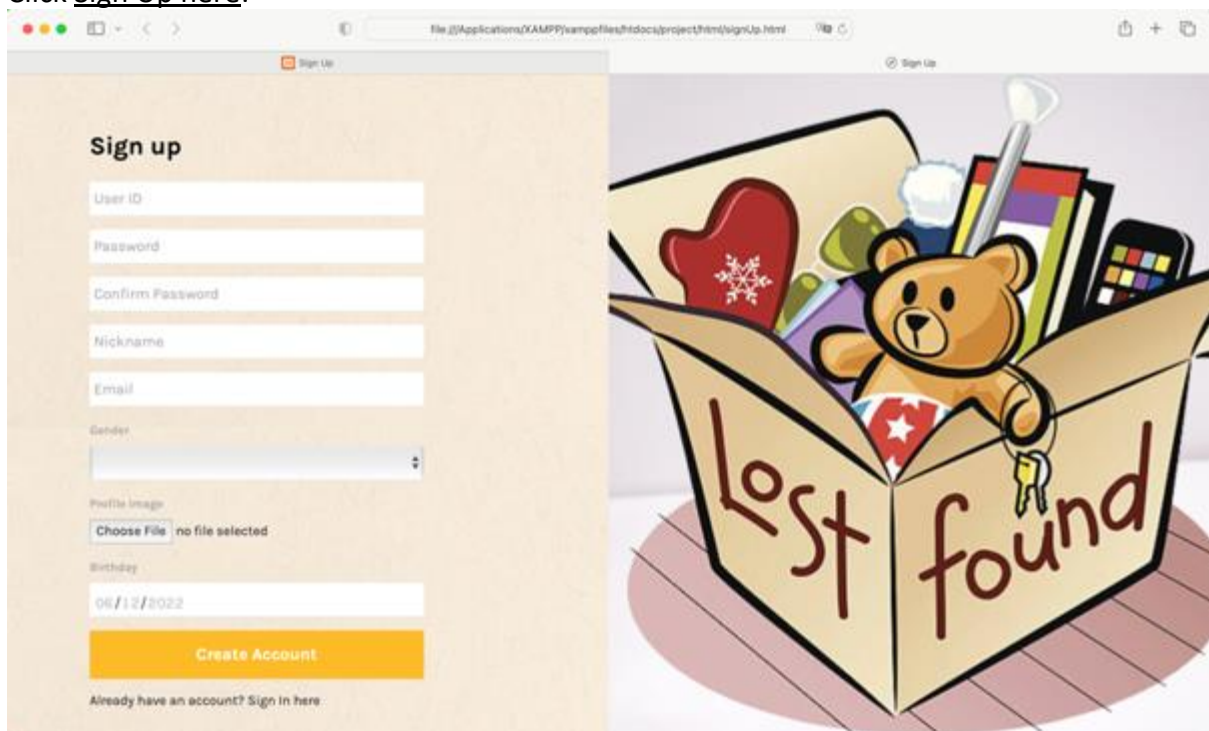
Column Name	Description
noticeNo (PK)	It is the composite primary key (noticeNo + createdBy) that identify the specific relationship between the user and the notice (created or responded to). It is the foreign key that refers to the noticeNo in table `notice`.
createdBy (PK)	It is the composite primary key (noticeNo + createdBy) that identify the specific relationship between the user and the notice (created or responded to). It is the foreign key that refers to the userID in table `user`.
respondedBy	It is the field to store the user who responded to the notice. It can be null. If it is not null, the notice is a completed notice.
respondMsg	It is the field to store the responded message. It can be null.

### 3. Demonstrate all functions

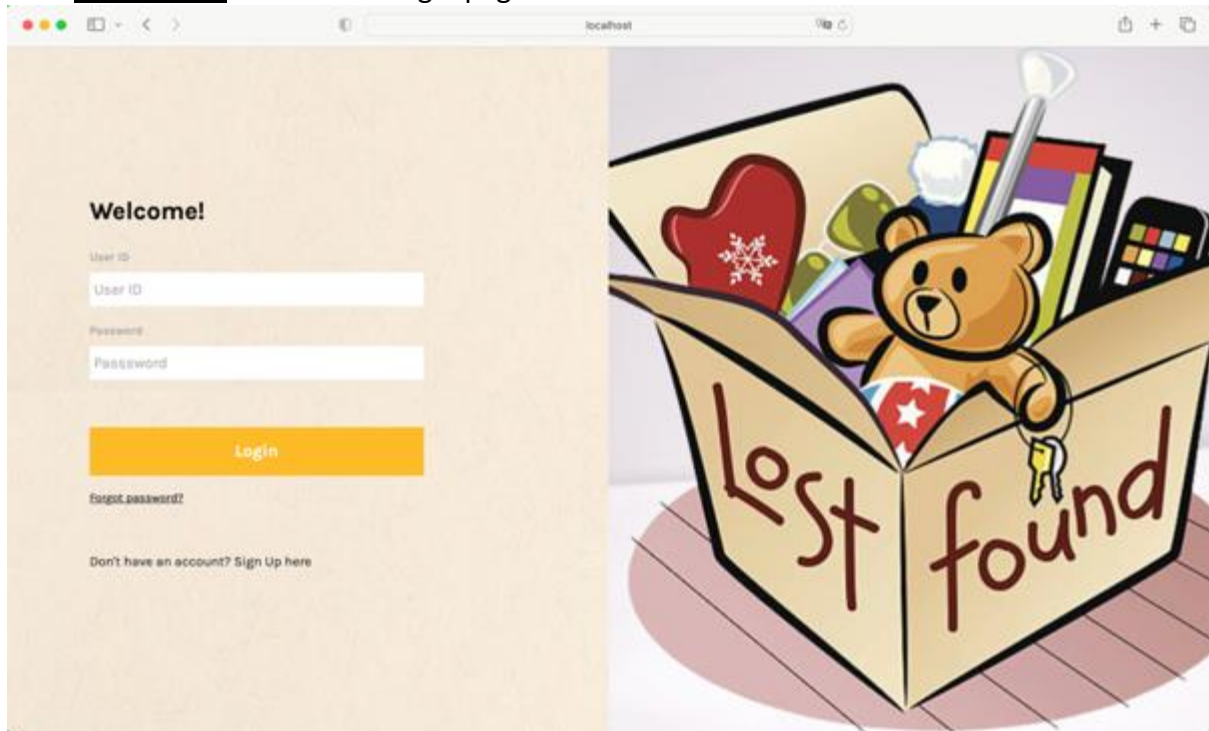
Index page:



Click Sign Up here:



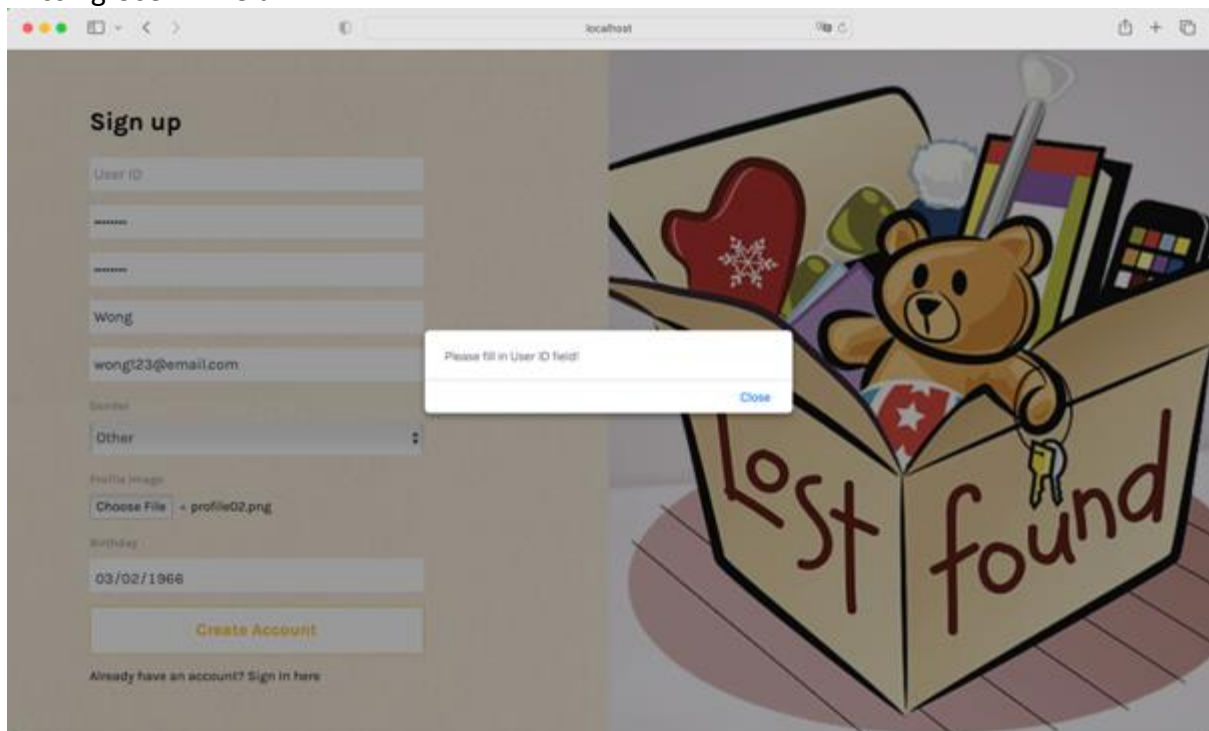
Click [Sign in here](#) to return to login page:



## Sign up

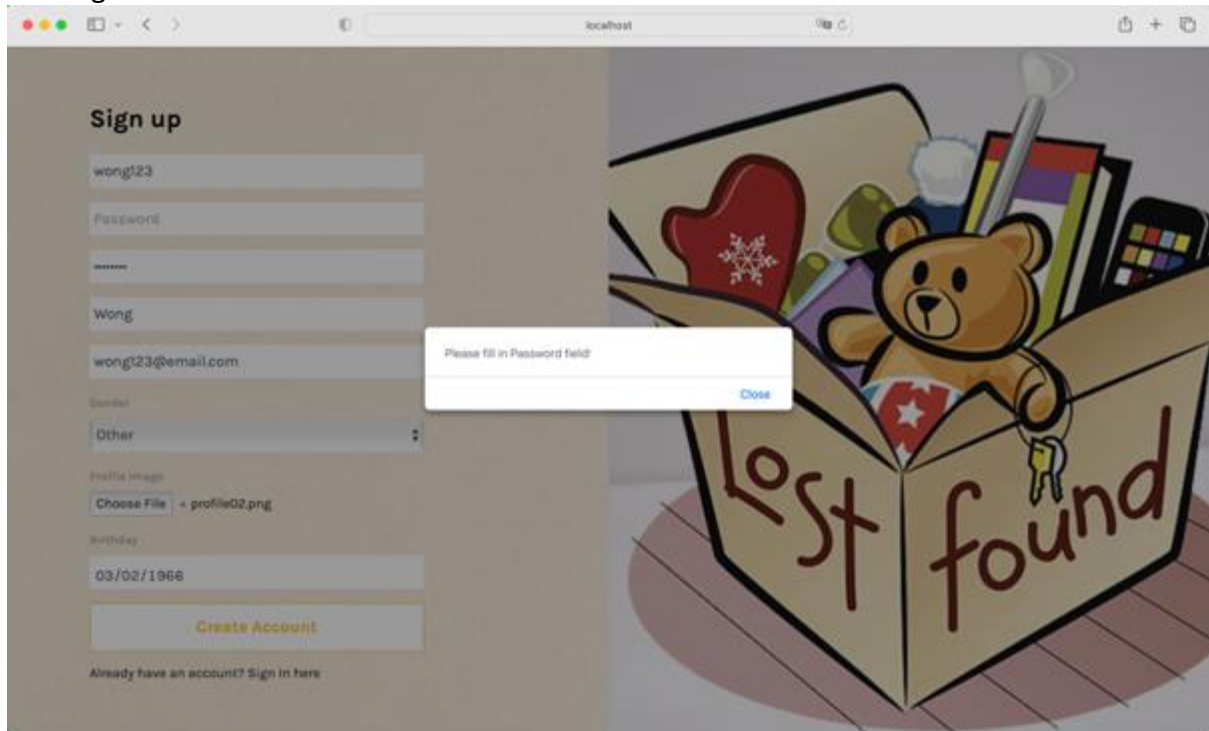
To create an account, you need to fill in all the information fields. The data you have entered will be verified. A pop-up notification will appear if there is an error

Missing User ID field:

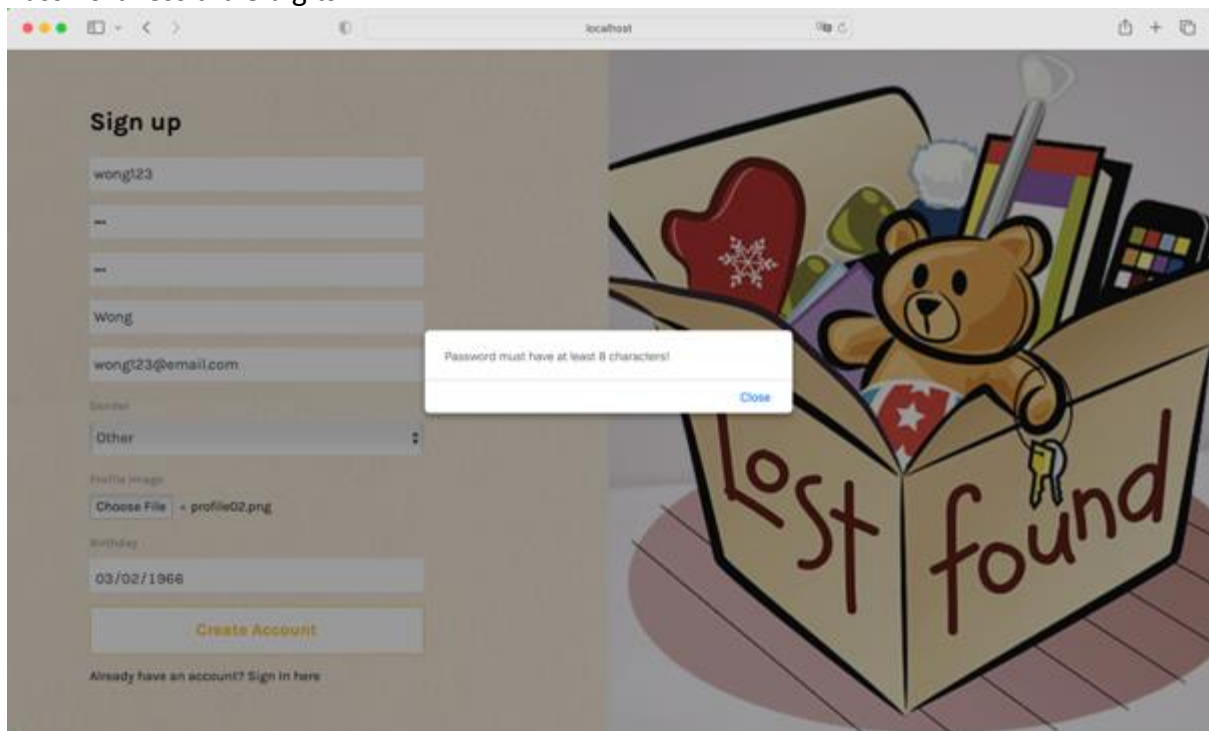




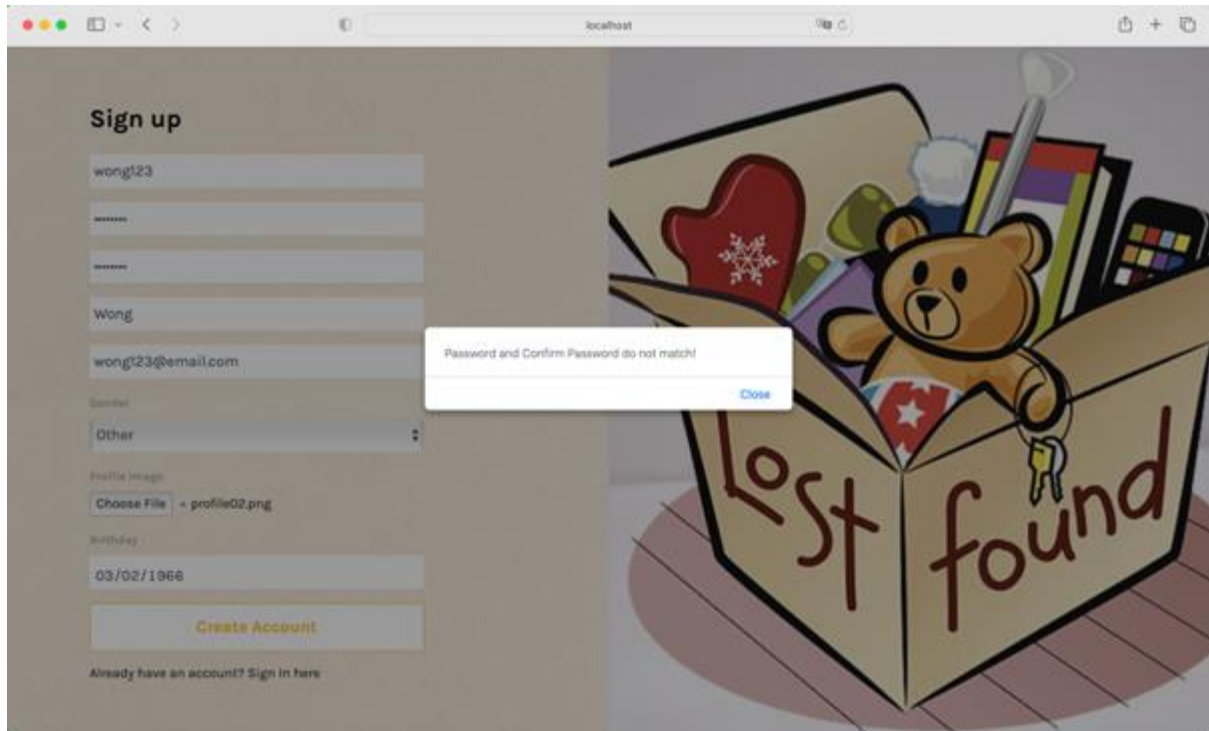
Missing Password field:



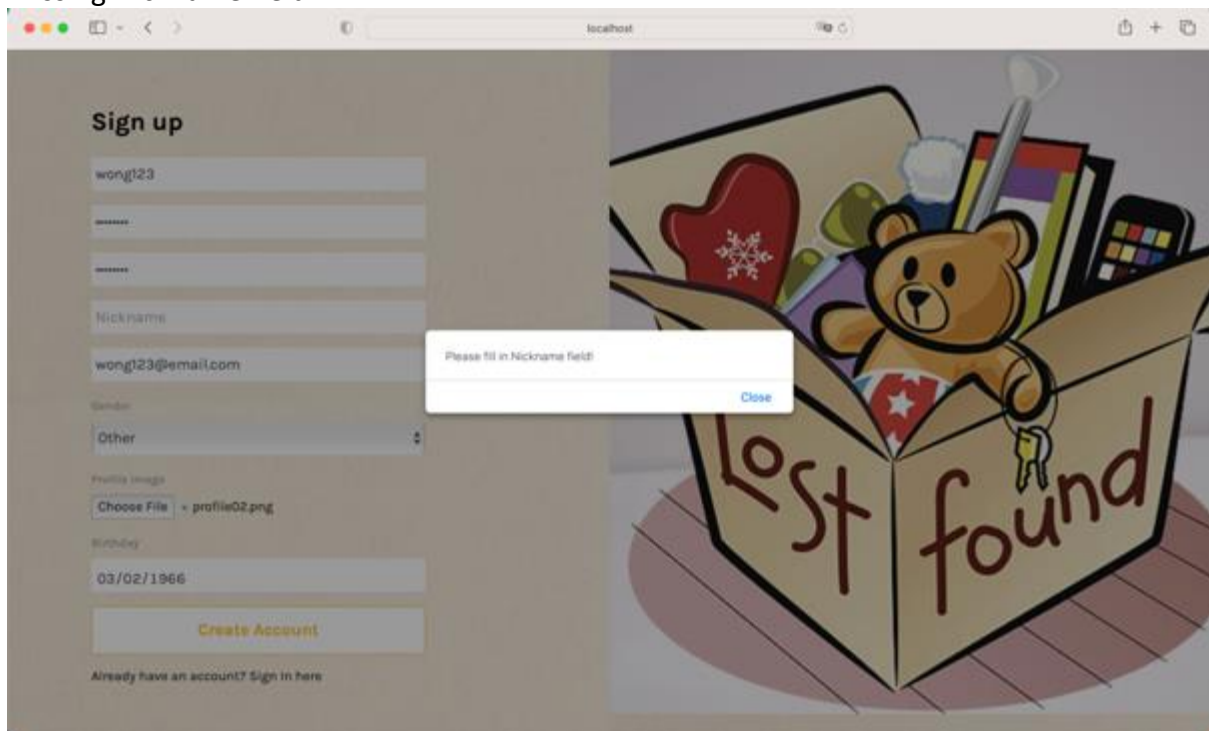
Password less tha 8 digits:



Password and Confirm Password do not match:



Missing Nickname field:





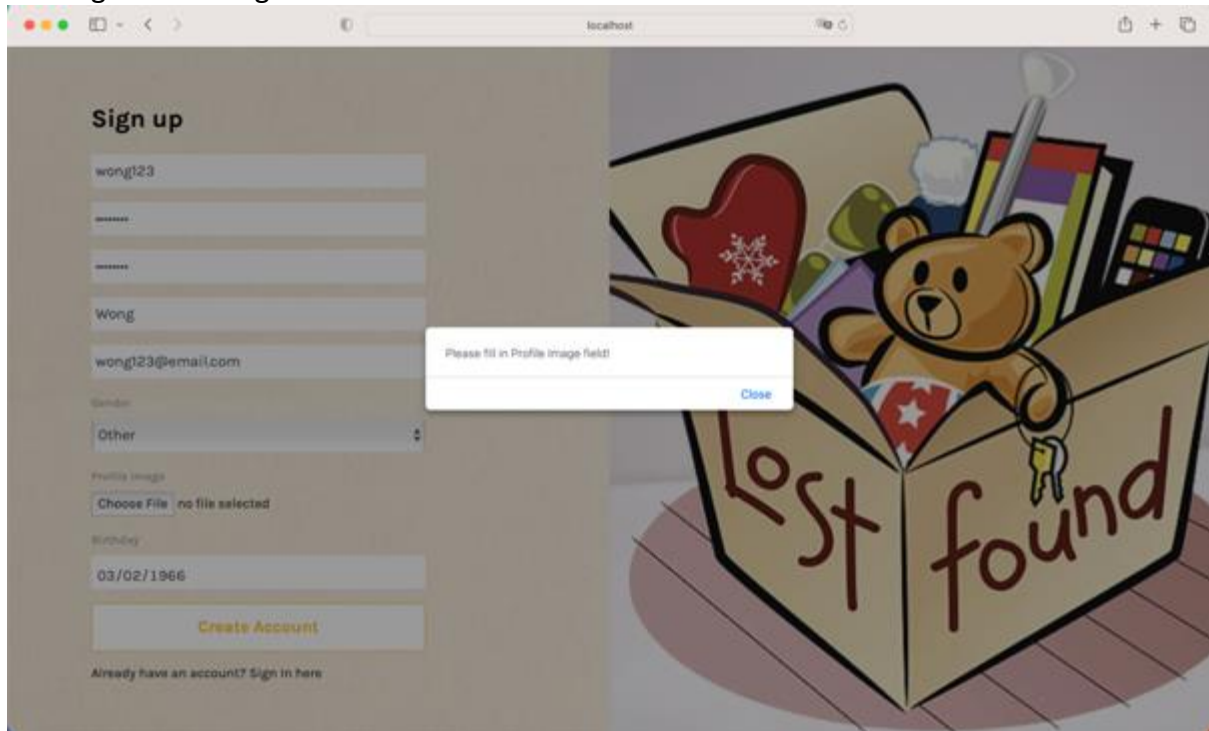
Missing Email field:

The screenshot shows a web browser window with the address bar set to 'localhost'. The page displays a 'Sign up' form on the left and a large illustration of a 'Lost found' box on the right. The box is open, revealing a teddy bear, a red heart with a snowflake, a book, a pen, and a calculator. A key hangs from the bottom of the box. The 'Sign up' form includes the following fields: a text input for 'wong123', two masked password inputs, a text input for 'Wong', an empty 'Email' field, a dropdown menu for 'Gender' with 'Other' selected, a 'Profile Image' section with a 'Choose File' button and 'profile02.png' listed, and a date input for '03/02/1966'. A 'Create Account' button is at the bottom of the form. A link 'Already have an account? Sign in here' is located below the button. A white error message box is centered over the form, stating 'Please fill in Email field!' with a 'Close' button.

Missing Gender field:

This screenshot is similar to the one above, but the 'Email' field is now filled with 'wong123@email.com'. The 'Gender' dropdown menu is empty, and a white error message box is centered over it, stating 'Please fill in Gender field!' with a 'Close' button. All other form elements and the 'Lost found' box illustration remain the same.

Missing Profile Image field:

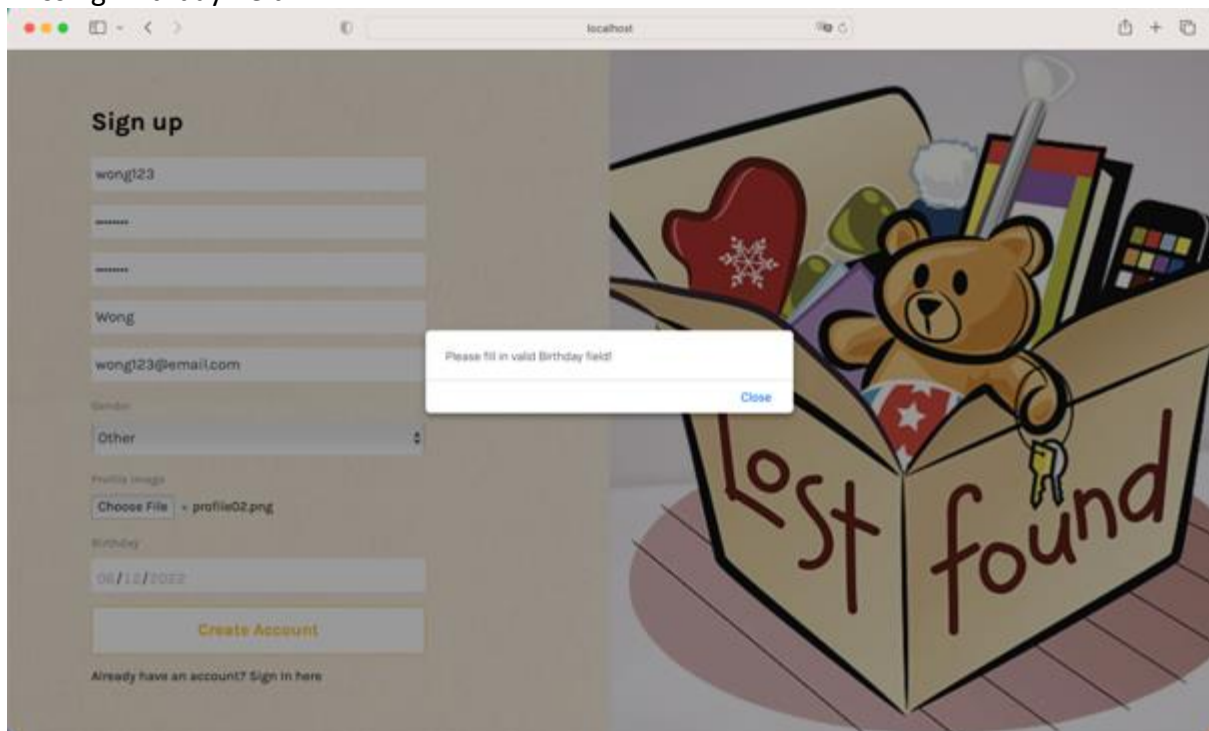


The screenshot shows a web browser window with the address bar set to 'localhost'. The page displays a 'Sign up' form on the left and a large illustration of a 'Lost found' box on the right. The box is open, revealing a teddy bear, a red heart, a book, a pen, and a calculator. A key hangs from the box. The form fields are as follows:

- Username: wong123
- Password: [masked]
- Confirm Password: [masked]
- First Name: Wong
- Email: wong123@email.com
- Gender: Other (selected from a dropdown)
- Profile Image: Choose File (no file selected)
- Birthday: 03/02/1966

A validation error message is displayed in a white box with a blue 'Close' button: "Please fill in Profile image field!". At the bottom of the form, there is a 'Create Account' button and a link: "Already have an account? Sign in here".

Missing Birthday field:

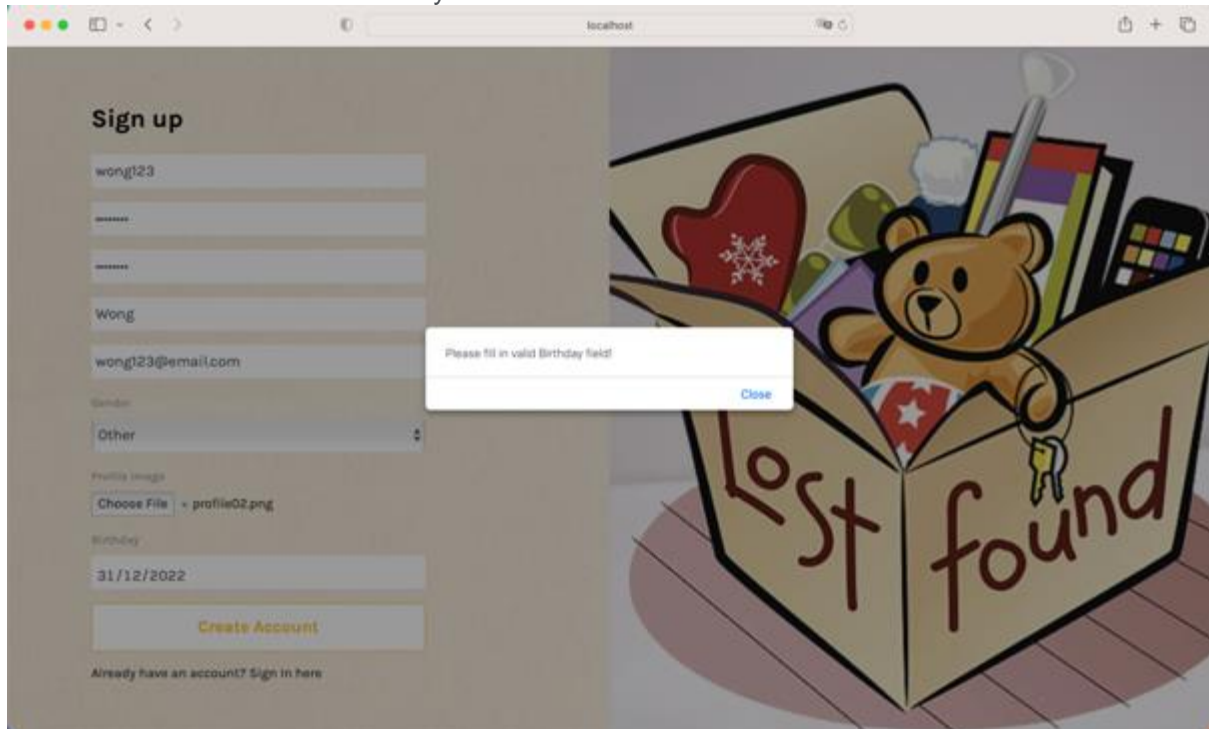


The screenshot shows the same web browser window and 'Sign up' form as the previous image. The form fields are now filled with different data:

- Username: wong123
- Password: [masked]
- Confirm Password: [masked]
- First Name: Wong
- Email: wong123@email.com
- Gender: Other (selected from a dropdown)
- Profile Image: Choose File (profile02.png selected)
- Birthday: 08/12/2022

A validation error message is displayed in a white box with a blue 'Close' button: "Please fill in valid Birthday field!". The 'Create Account' button and the "Already have an account? Sign in here" link are still present at the bottom of the form.

Select a future date for the Birthday field:

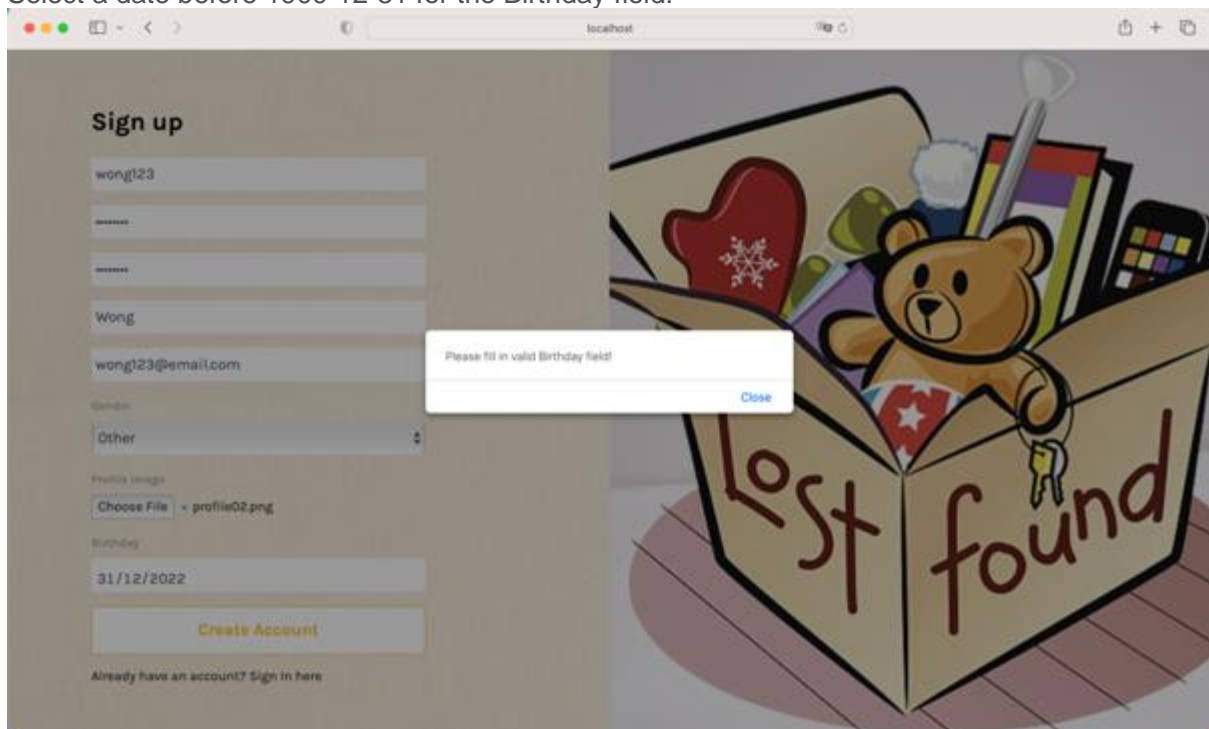


The screenshot shows a web browser window with the address bar set to 'localhost'. The page displays a 'Sign up' form on the left and a cartoon illustration of a 'Lost found' box on the right. The form fields are as follows:

- Username: wong123
- Password: [masked]
- Confirm Password: [masked]
- First Name: Wong
- Email: wong123@email.com
- Gender: Other
- Profile Image: Choose File - profile02.png
- Birthday: 31/12/2022

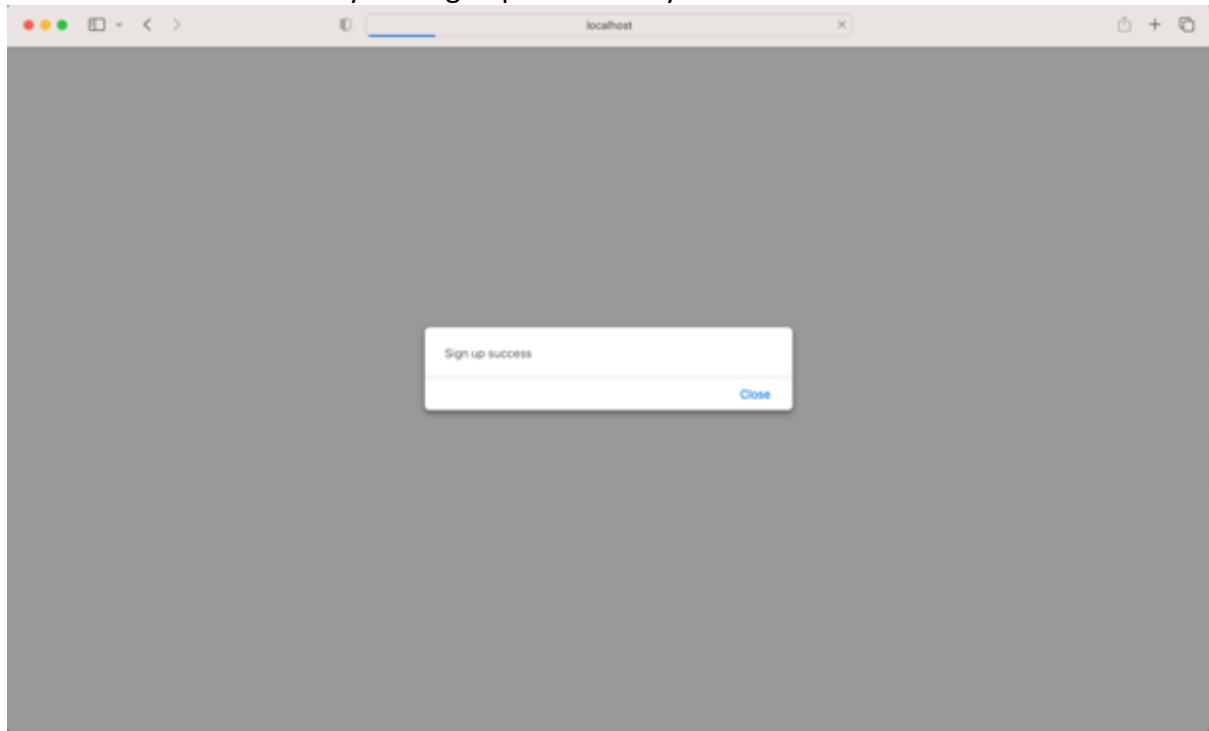
A validation error message is displayed in a white box over the form: "Please fill in valid Birthday field!". The message has a "Close" button. At the bottom of the form is a "Create Account" button. Below the form, it says "Already have an account? Sign in here".

Select a date before 1900-12-31 for the Birthday field:

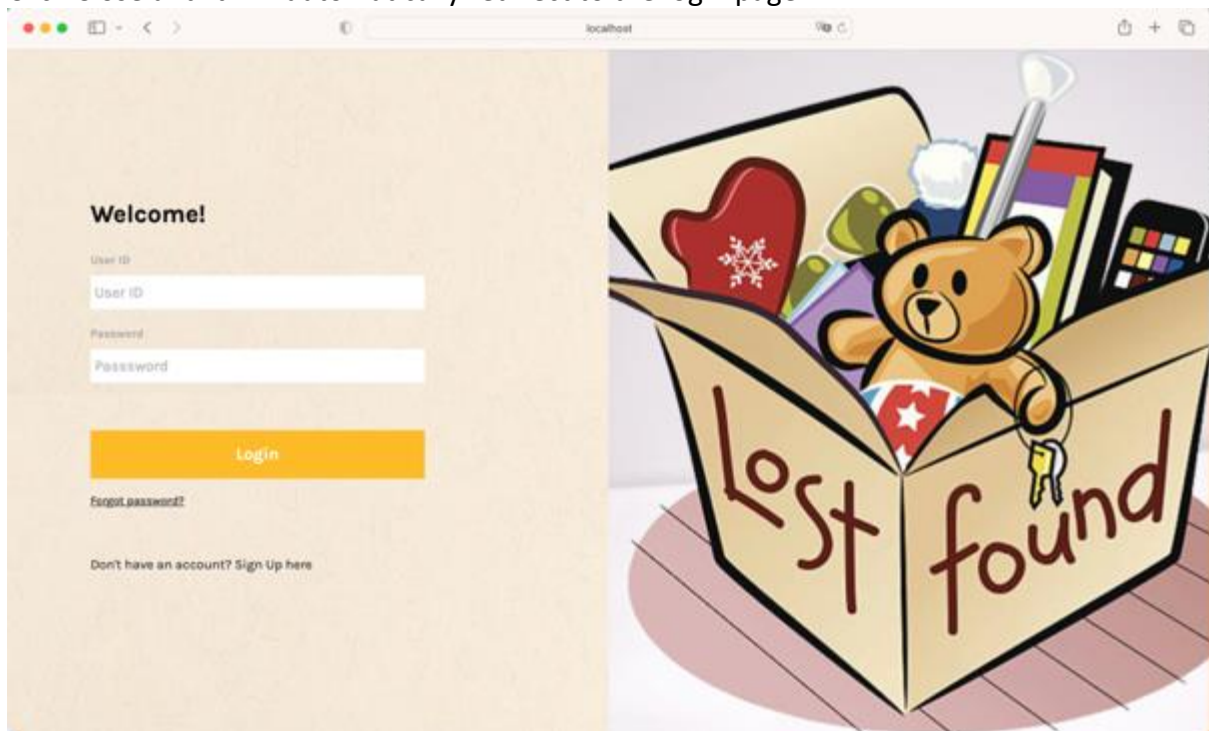


This screenshot is identical to the one above, showing the same 'Sign up' form and 'Lost found' box illustration. The form fields are the same, and the validation error message "Please fill in valid Birthday field!" is still present over the Birthday field.

Fill in all the fields correctly and sign up successfully:



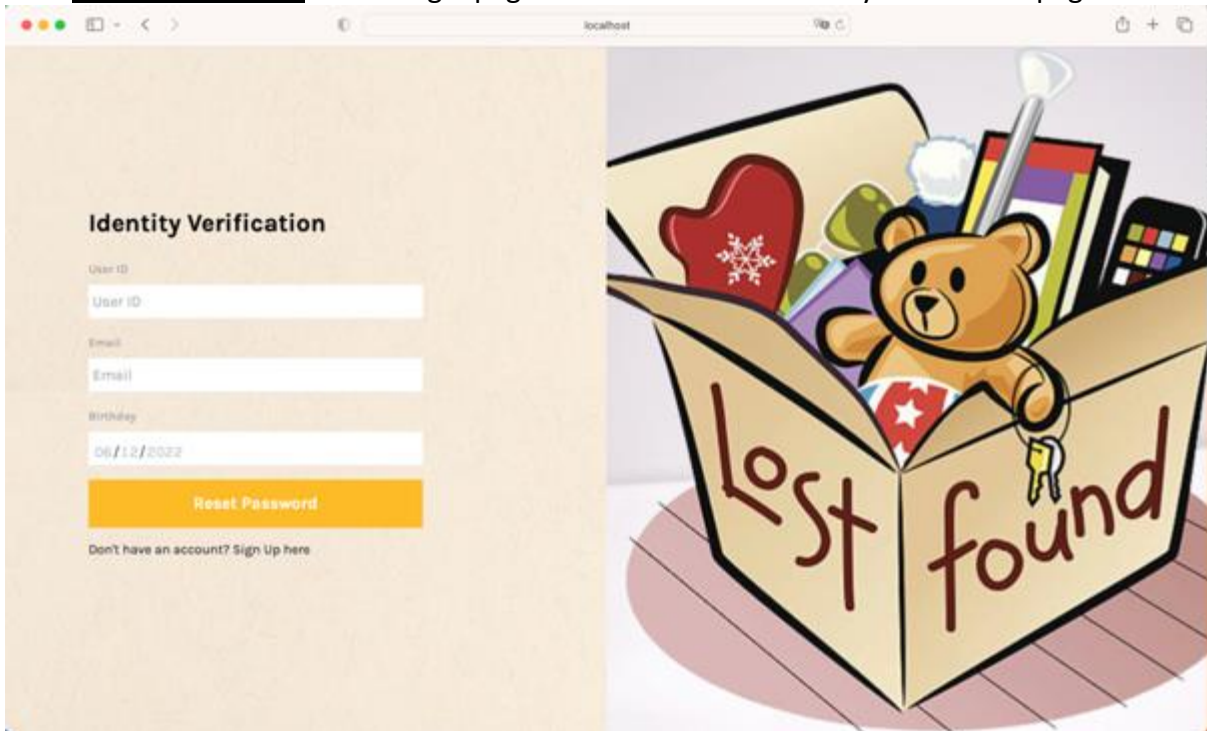
Click Close and it will automatically redirect to the login page:



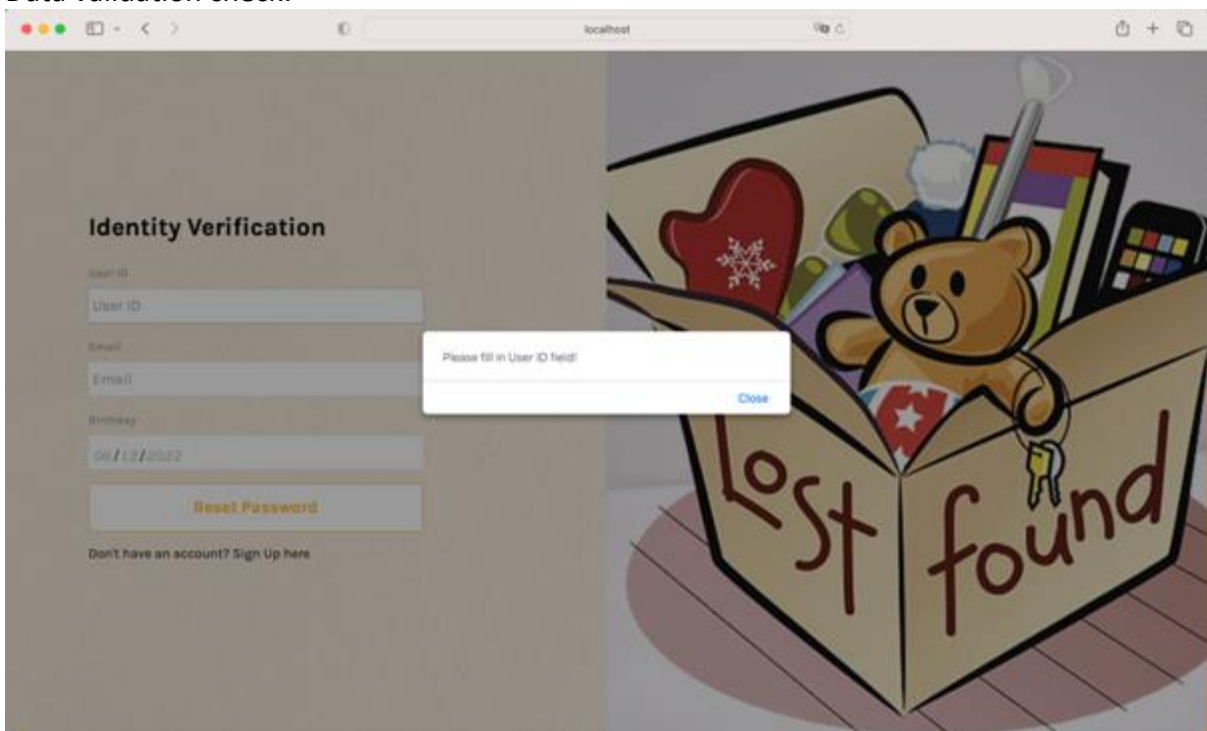


## Forgot and reset password

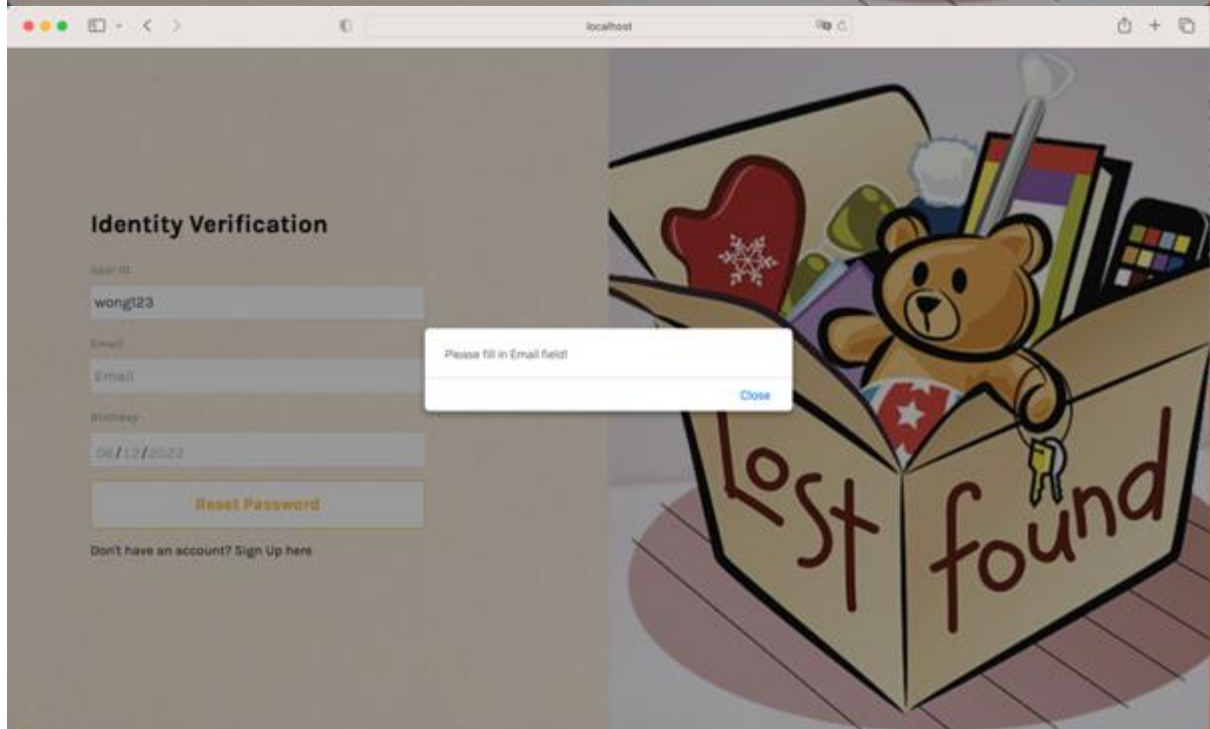
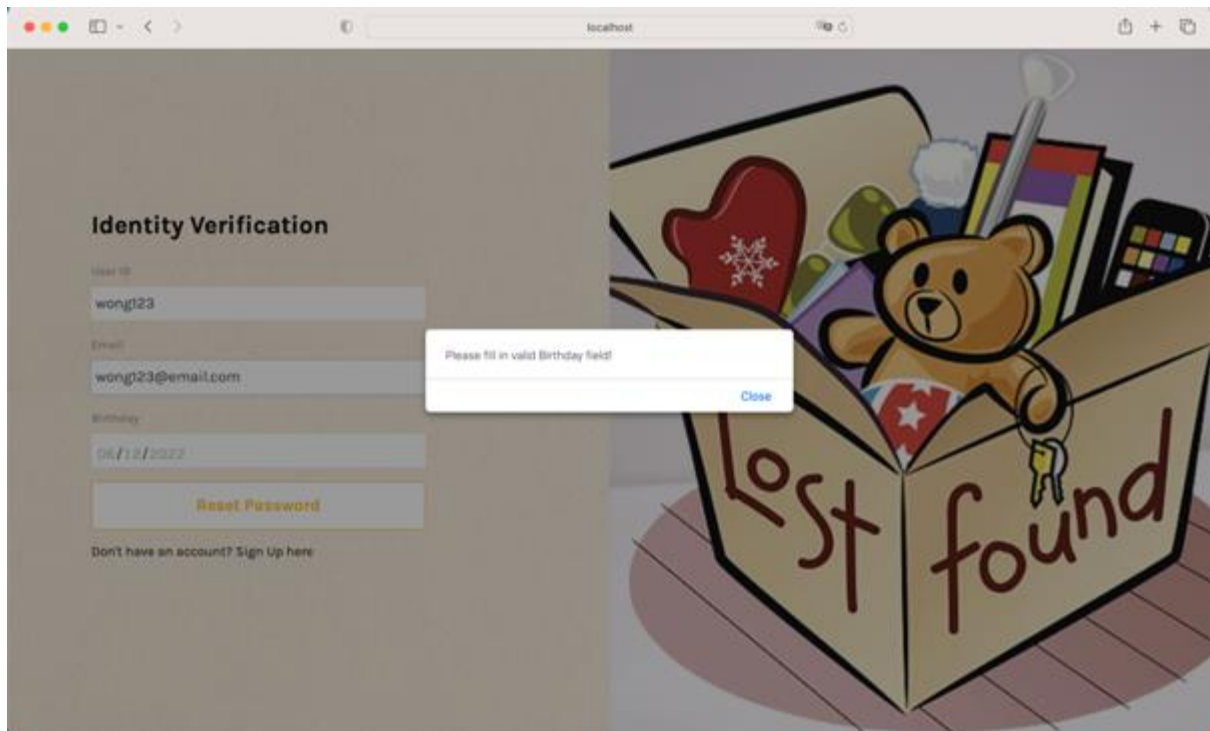
Click Forgot password? on the login page to redirect to the identity verification page:



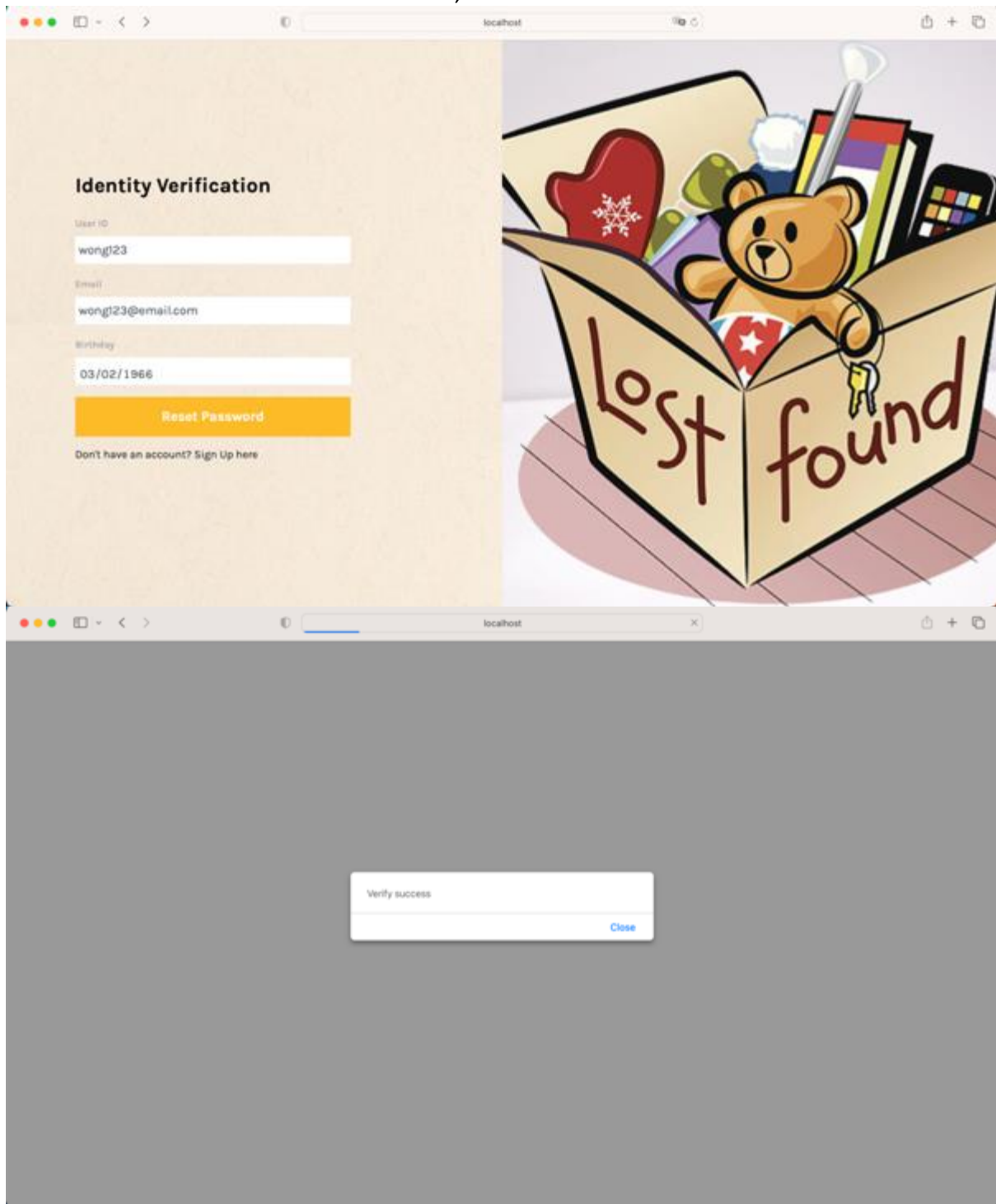
Data validation check:



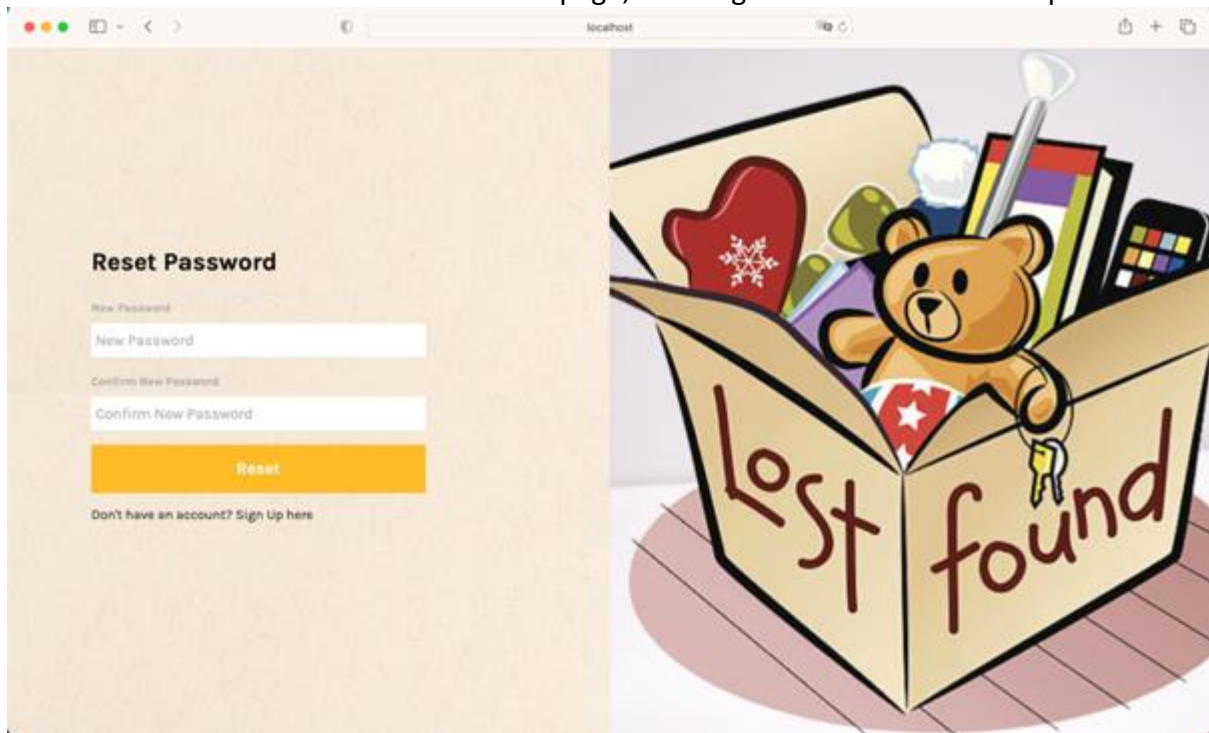




If all fields match the data in the database, the validation is successful:

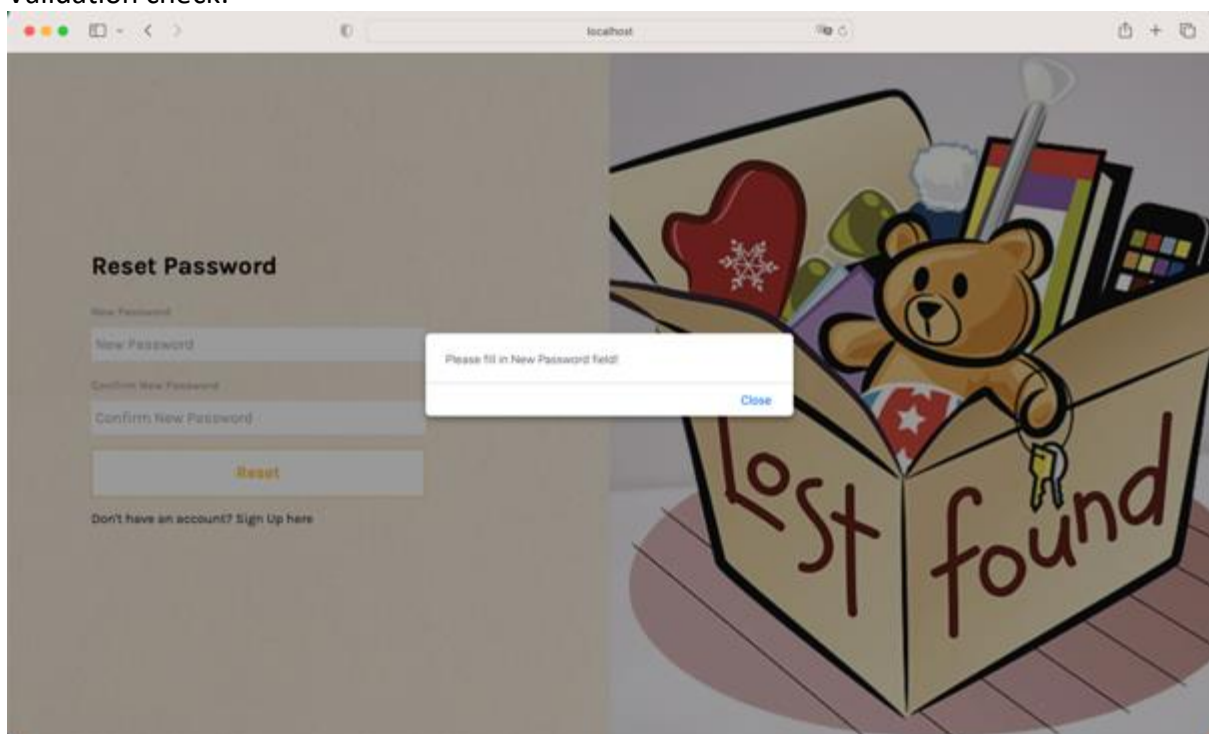


It will then redirect to the Reset Password page, allowing the user to reset their password:

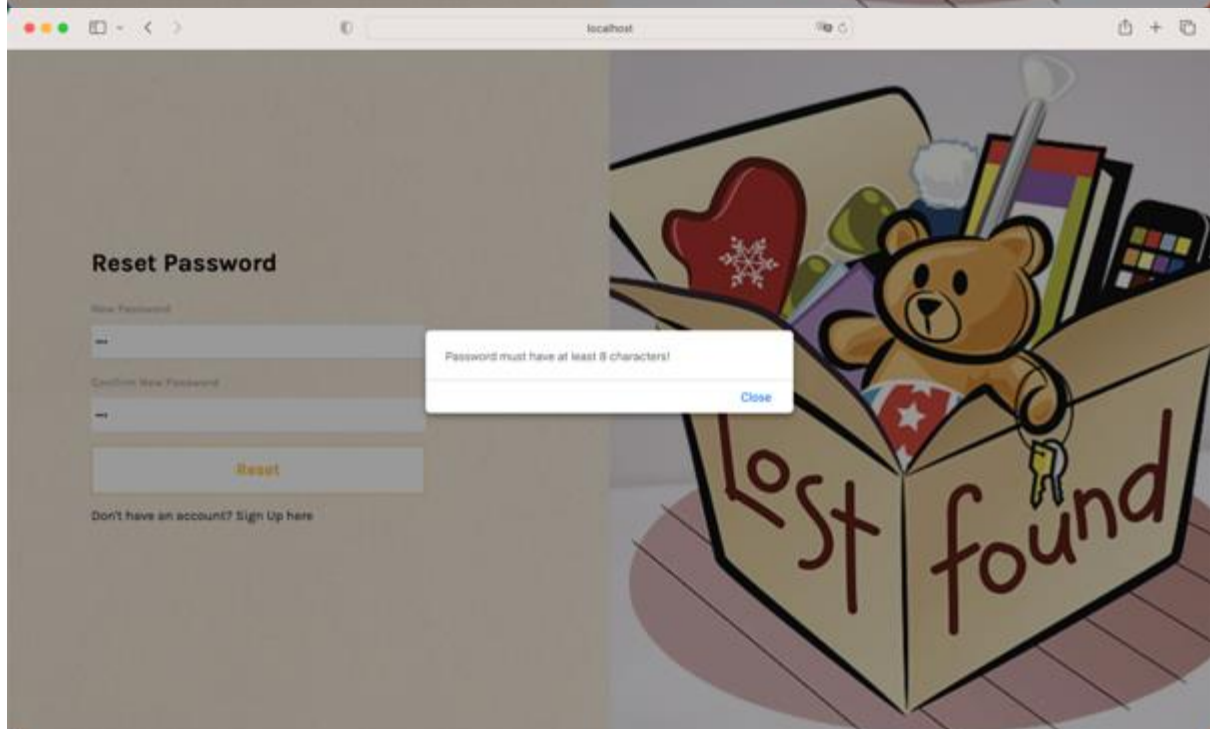
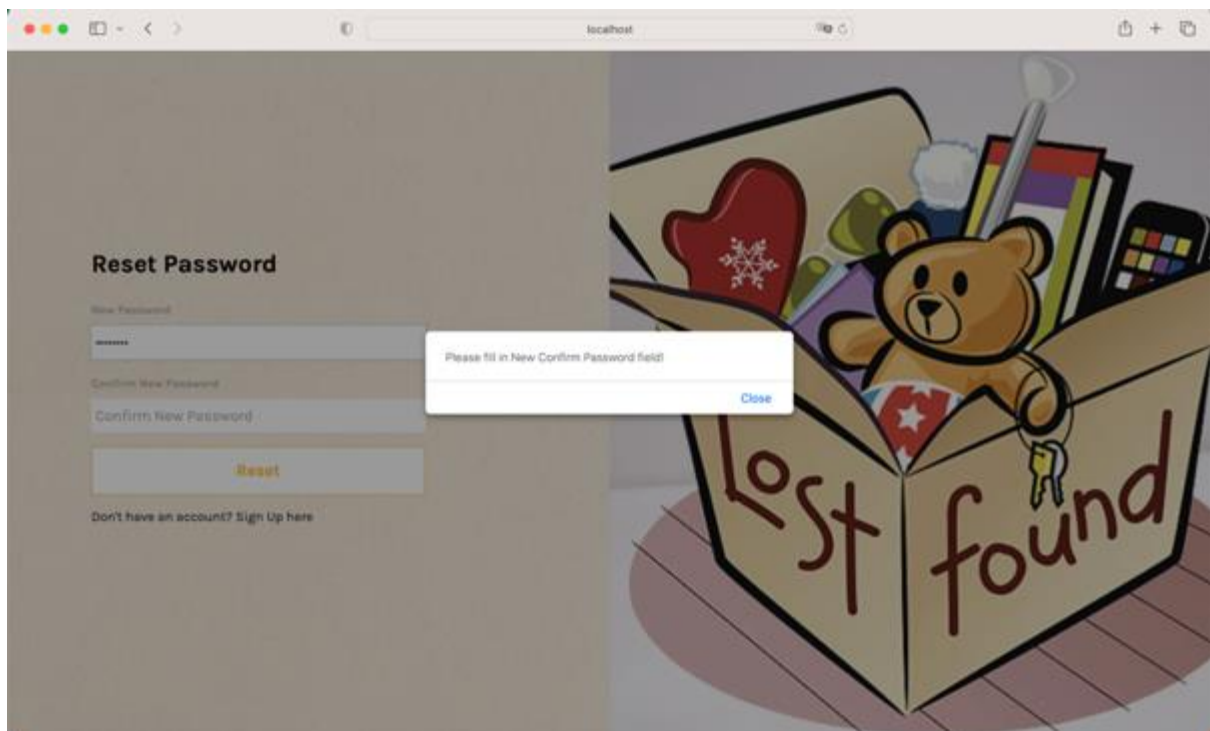


A screenshot of a web browser displaying the 'Reset Password' page. The page has a light beige background. On the left, there is a form with the title 'Reset Password'. Below the title, there are two input fields: 'New Password' and 'Confirm New Password'. A yellow 'Reset' button is positioned below the second field. At the bottom of the form, there is a link that says 'Don't have an account? Sign Up here'. On the right side of the page, there is a large illustration of an open cardboard box labeled 'Lost found'. Inside the box, there is a teddy bear, a red heart with a snowflake, a lit candle, a book, and a smartphone. A key is hanging from the bottom of the box.

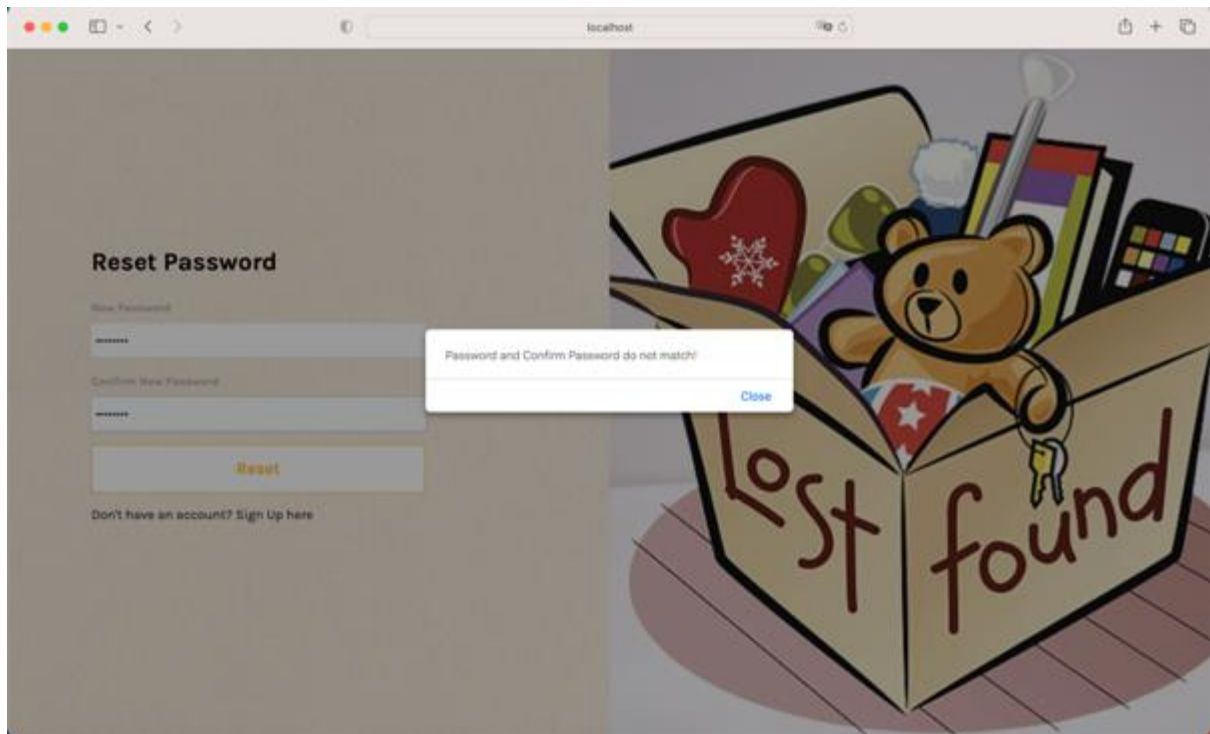
Validation check:



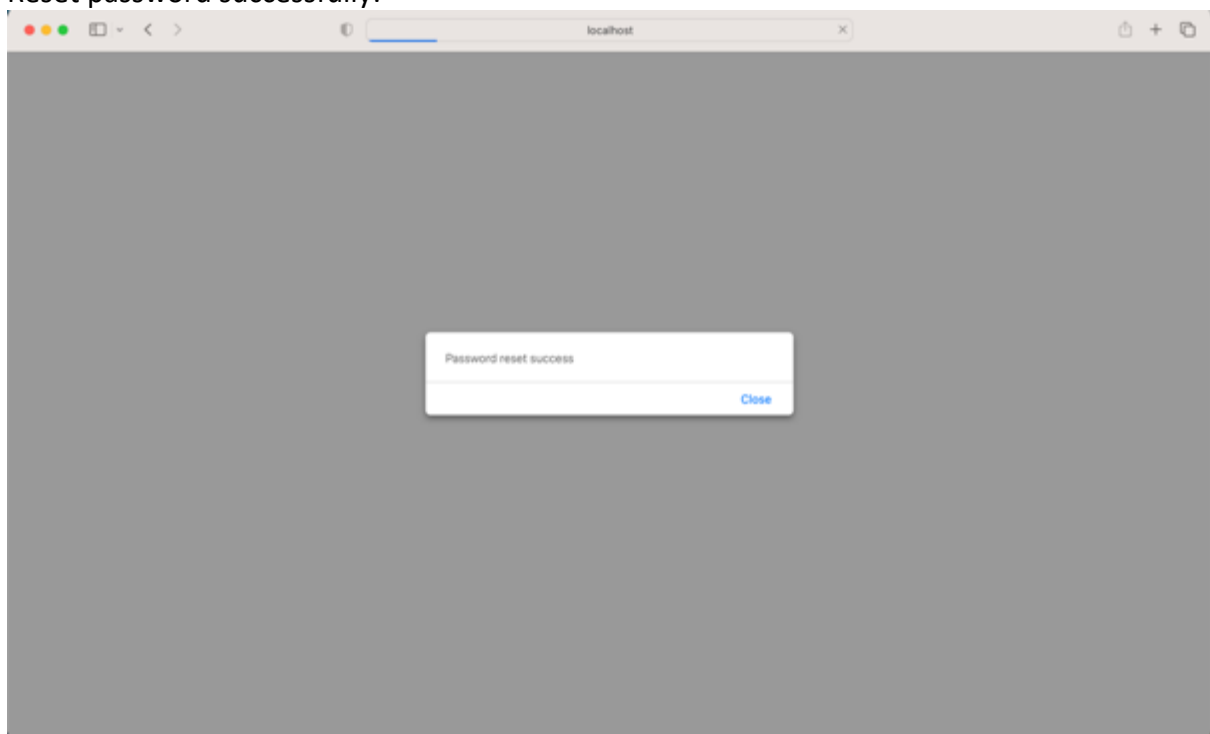
A screenshot of the same 'Reset Password' page, but with a validation error. A white modal box is displayed in the center of the page, containing the text 'Please fill in New Password field!' and a 'Close' button. The form fields and the 'Reset' button are now disabled, indicated by a grey background. The illustration on the right remains the same.







Reset password successfully:





## Login

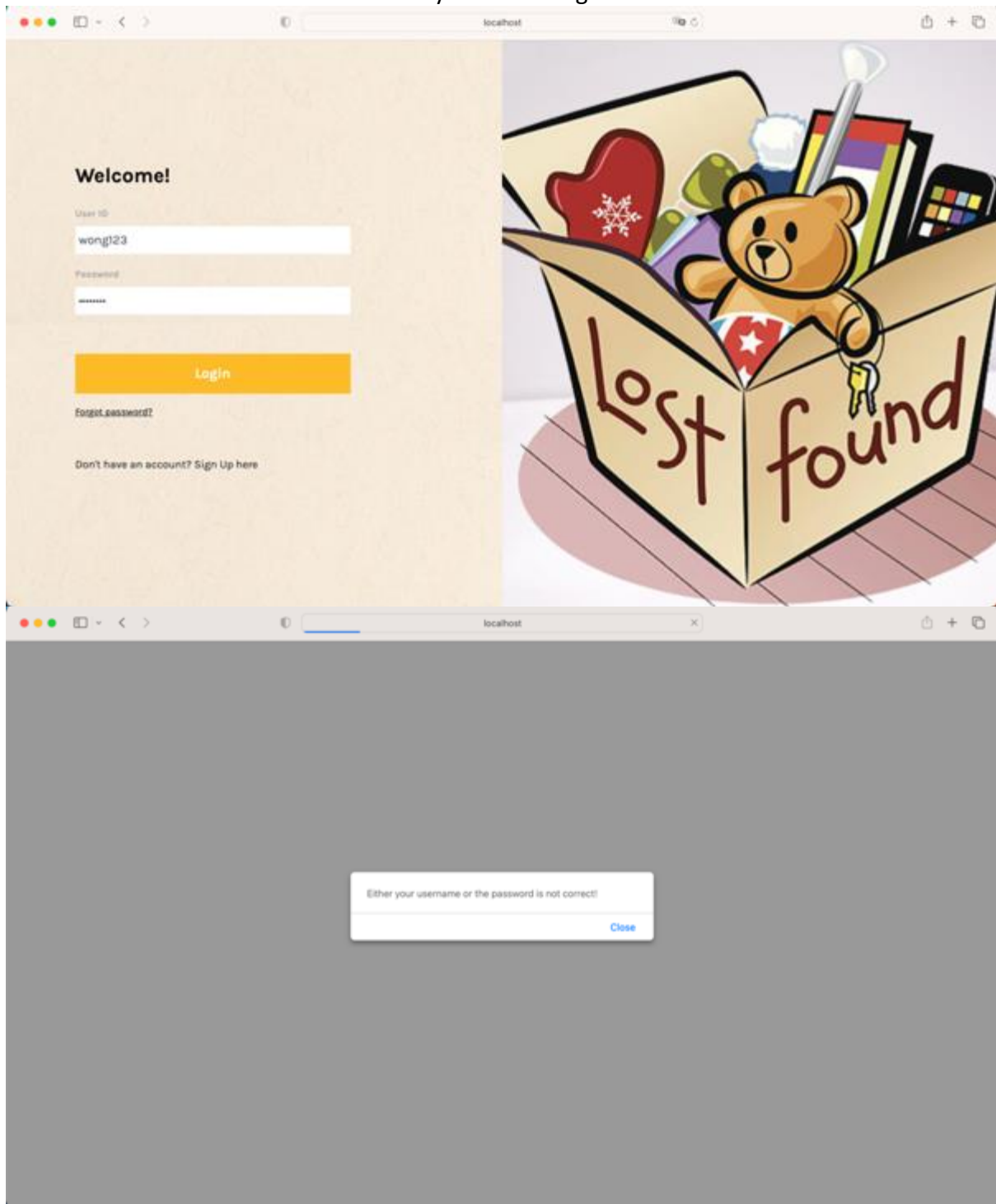
Validation check:

The image displays two screenshots of a web application's login page, illustrating validation checks. The page has a light gray background with a large illustration of a cardboard box labeled "Lost found" on the right side. Inside the box are various items: a red heart with a snowflake, a teddy bear, a stack of books, a pen, and a calculator. A key is hanging from the box.

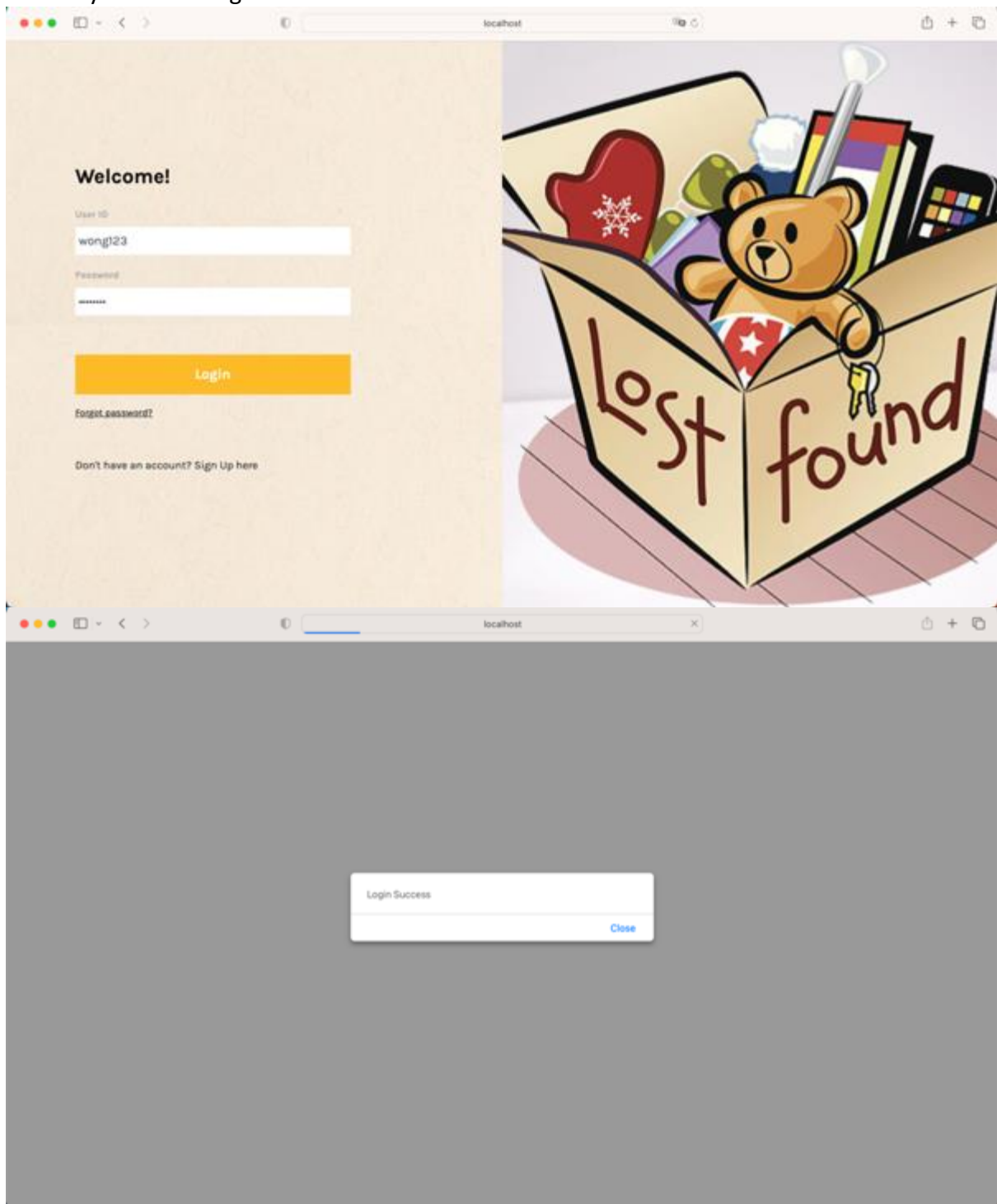
**Top Screenshot:** The login form is titled "Welcome!". It contains fields for "User ID" and "Password", a "Login" button, and links for "Forgot password?" and "Don't have an account? Sign Up here". A modal dialog box is displayed over the form, stating "Please fill in User ID field!" with a "Close" button. The "User ID" field is empty.

**Bottom Screenshot:** The same login form is shown, but the "User ID" field is now filled with the text "wong123". A new modal dialog box is displayed, stating "Please fill in Password field!" with a "Close" button. The "Password" field is empty.

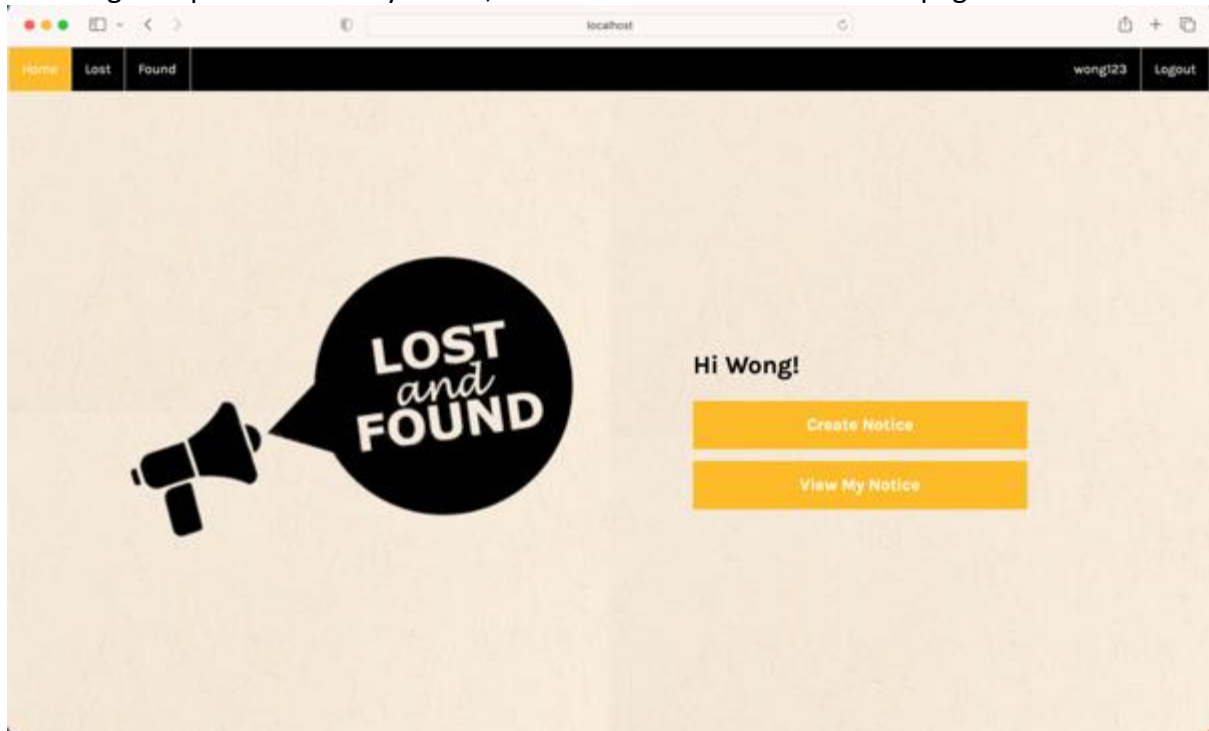
Fill in the User ID or Password incorrectly and click Login:



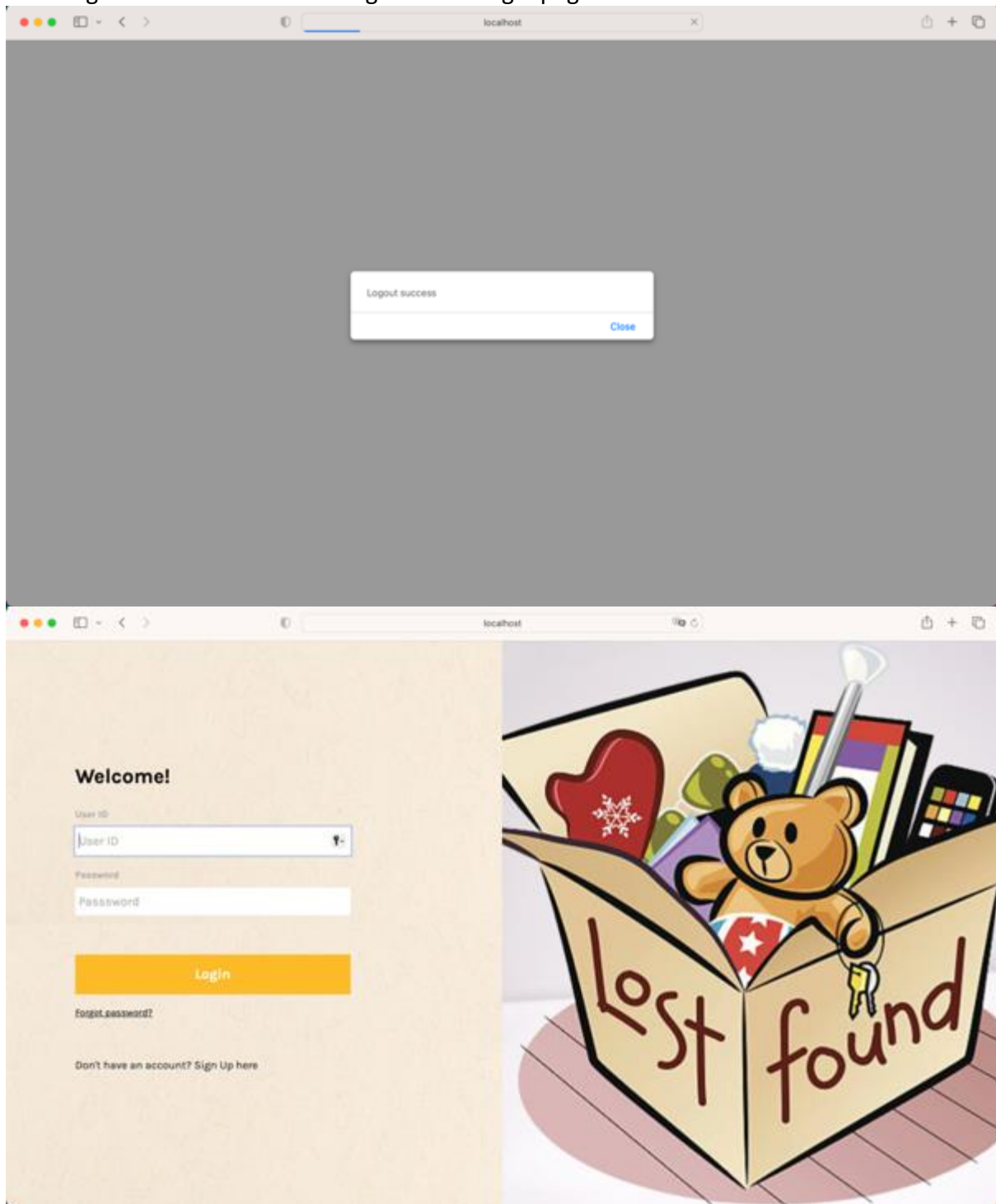
Click Close and it will automatically redirect to the login page. Fill in the User ID or Password correctly and click Login:



If the login request is made by a user, it will redirect to the User Homepage:

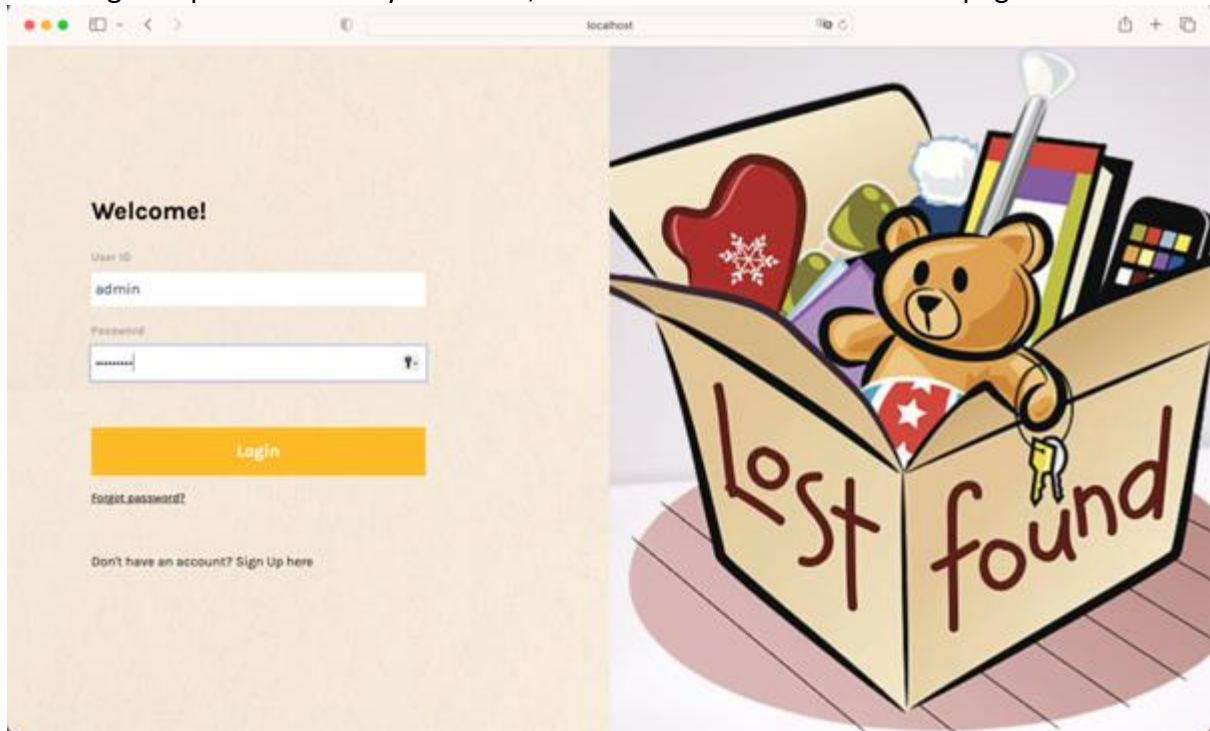


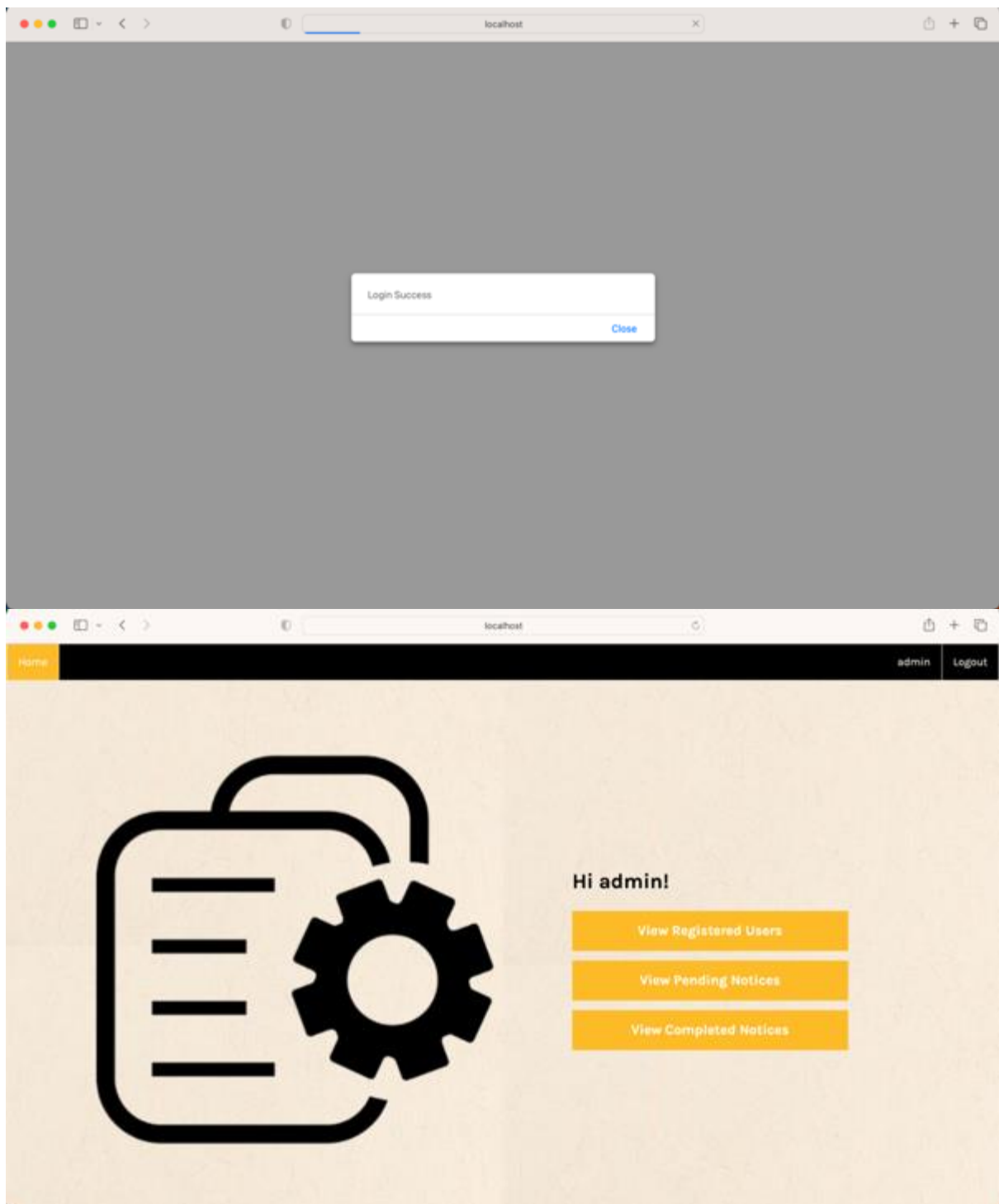
Click Logout to delete cookie and go back to login page:





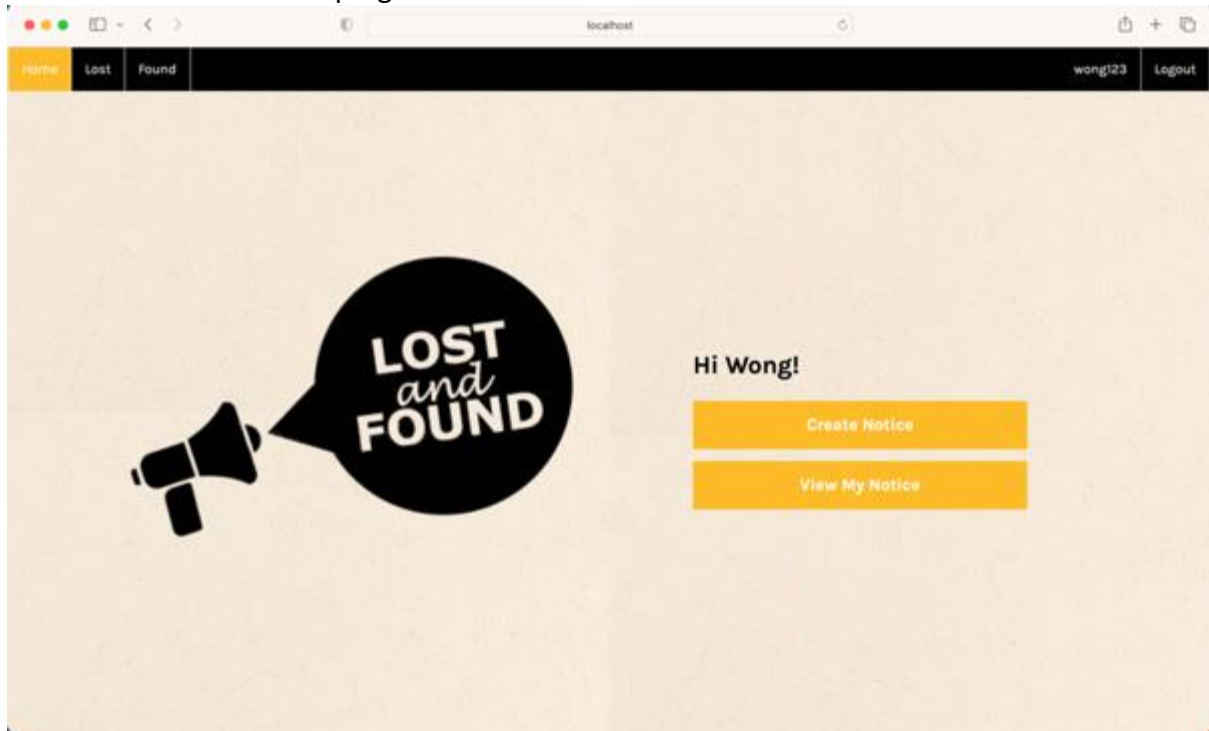
If the login request is made by an admin, it will redirect to the User Homepage

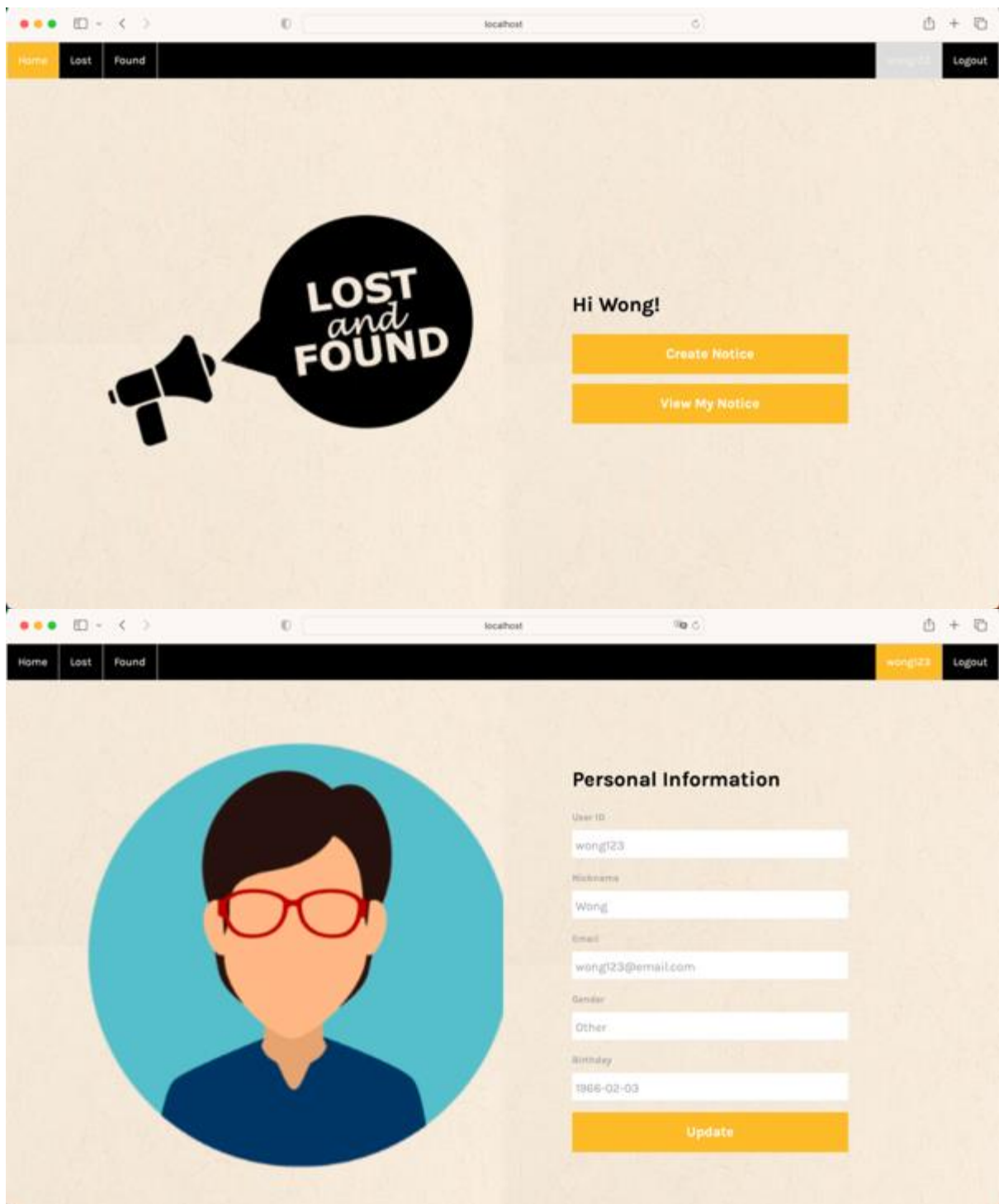




## Update personal information

Click the user ID at the top right hand corner:





Click Update button to update personal information:

The image displays two screenshots of a web application interface, likely for user profile management. The top screenshot shows the 'Personal Information' form, and the bottom screenshot shows the 'Update Information' form.

**Personal Information Form:**

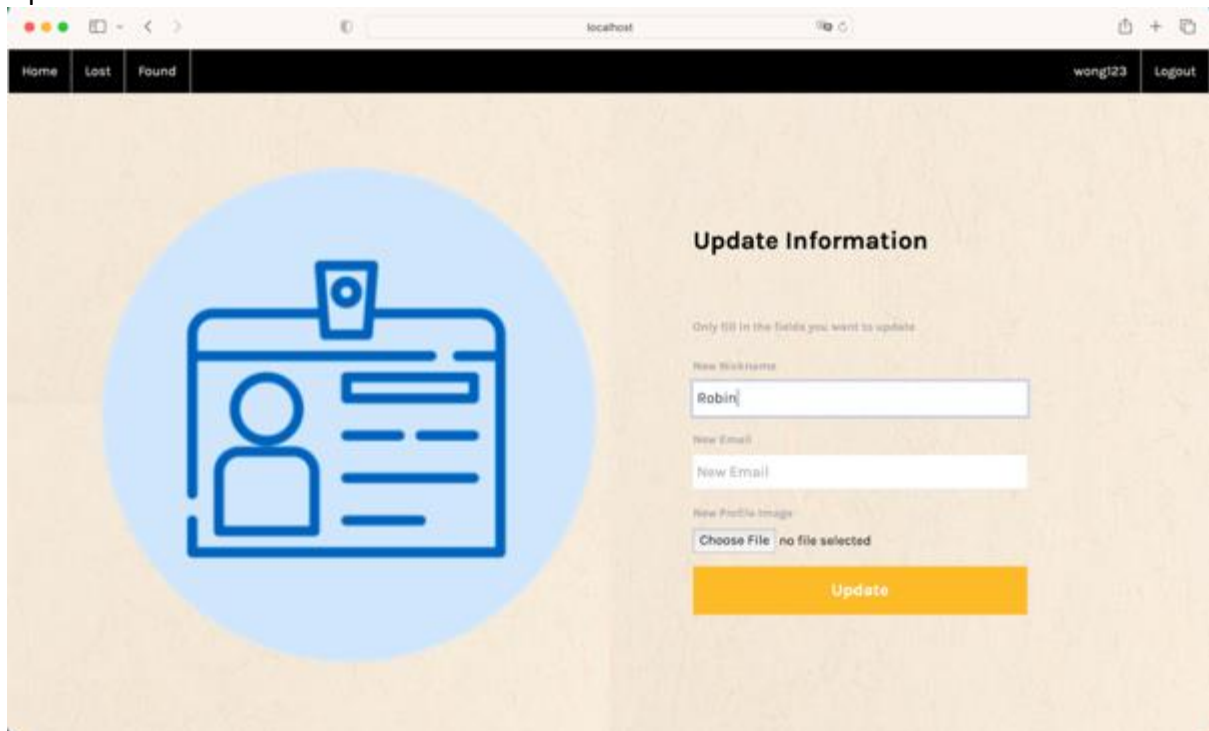
- User ID:** wong123
- Nickname:** Wong
- Email:** wong123@email.com
- Gender:** Other
- Birthday:** 1966-02-03
- Update Button:** A yellow button labeled 'Update'.

**Update Information Form:**

- Only fill in the fields you want to update:**
- New Nickname:** New Nickname
- New Email:** New Email
- New Profile Image:** Choose File no file selected
- Update Button:** A yellow button labeled 'Update'.



Update nickname:



The screenshot shows a web browser window with the address bar set to 'localhost'. The browser's navigation bar includes links for 'Home', 'Lost', and 'Found', and a user profile section with the name 'wong123' and a 'Logout' button. The main content area has a light beige background. On the left, there is a large blue circle containing a white icon of a clipboard with a person silhouette. To the right of this icon, the heading 'Update Information' is displayed. Below the heading, a small instruction reads 'Only fill in the fields you want to update'. There are three input fields: 'New Nickname' with the text 'Robin', 'New Email' with the placeholder 'New Email', and 'New Profile Image' with a 'Choose File' button and the text 'no file selected'. At the bottom of these fields is a large orange button labeled 'Update'.

Home Lost Found wong123 Logout

## Update Information

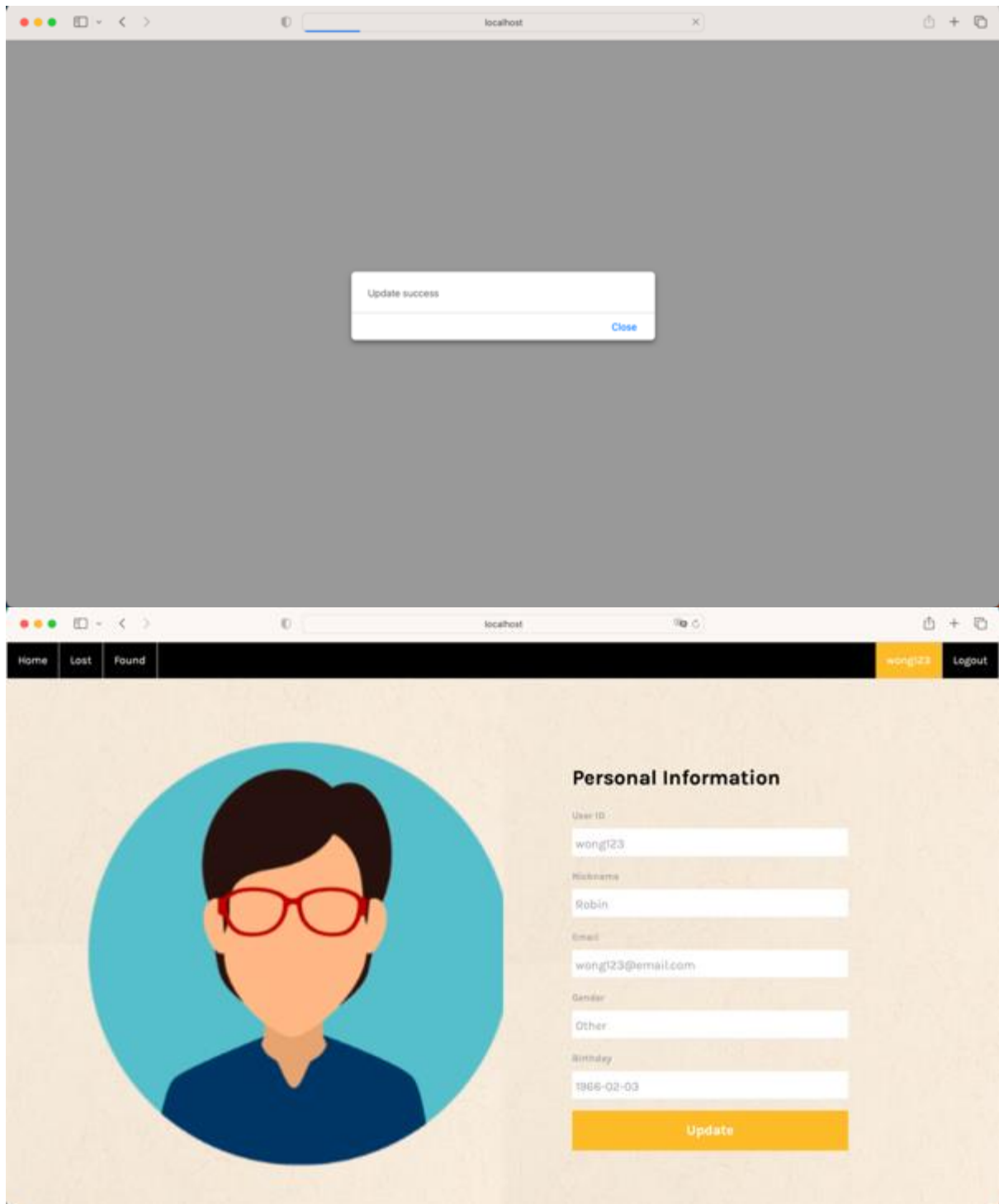
Only fill in the fields you want to update

New Nickname  
Robin

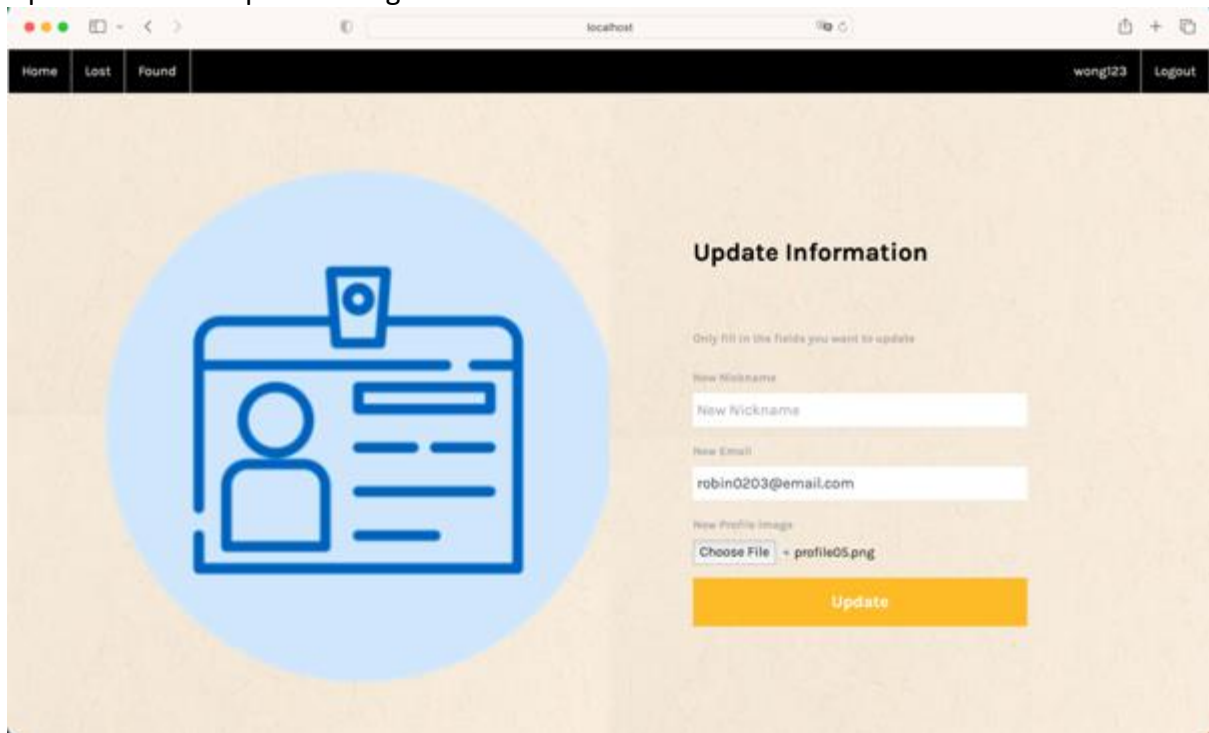
New Email  
New Email

New Profile Image  
Choose File no file selected

Update



Update email and profile image:



The screenshot shows a web browser window with the address bar set to 'localhost'. The page has a dark navigation bar with links for 'Home', 'Lost', and 'Found'. On the right side of the navigation bar, the user is logged in as 'wong123' with a 'Logout' link. The main content area has a light beige background. On the left, there is a large blue circle containing a white icon of a clipboard with a person silhouette and a document. To the right of this icon, the heading 'Update Information' is displayed. Below the heading, a note states 'Only fill in the fields you want to update'. There are three input fields: 'New Nickname' (empty), 'New Email' (containing 'robin0203@email.com'), and 'New Profile Image' (containing a 'Choose File' button and the filename 'profile05.png'). At the bottom right of the form is a large orange 'Update' button.

Home Lost Found wong123 Logout

## Update Information

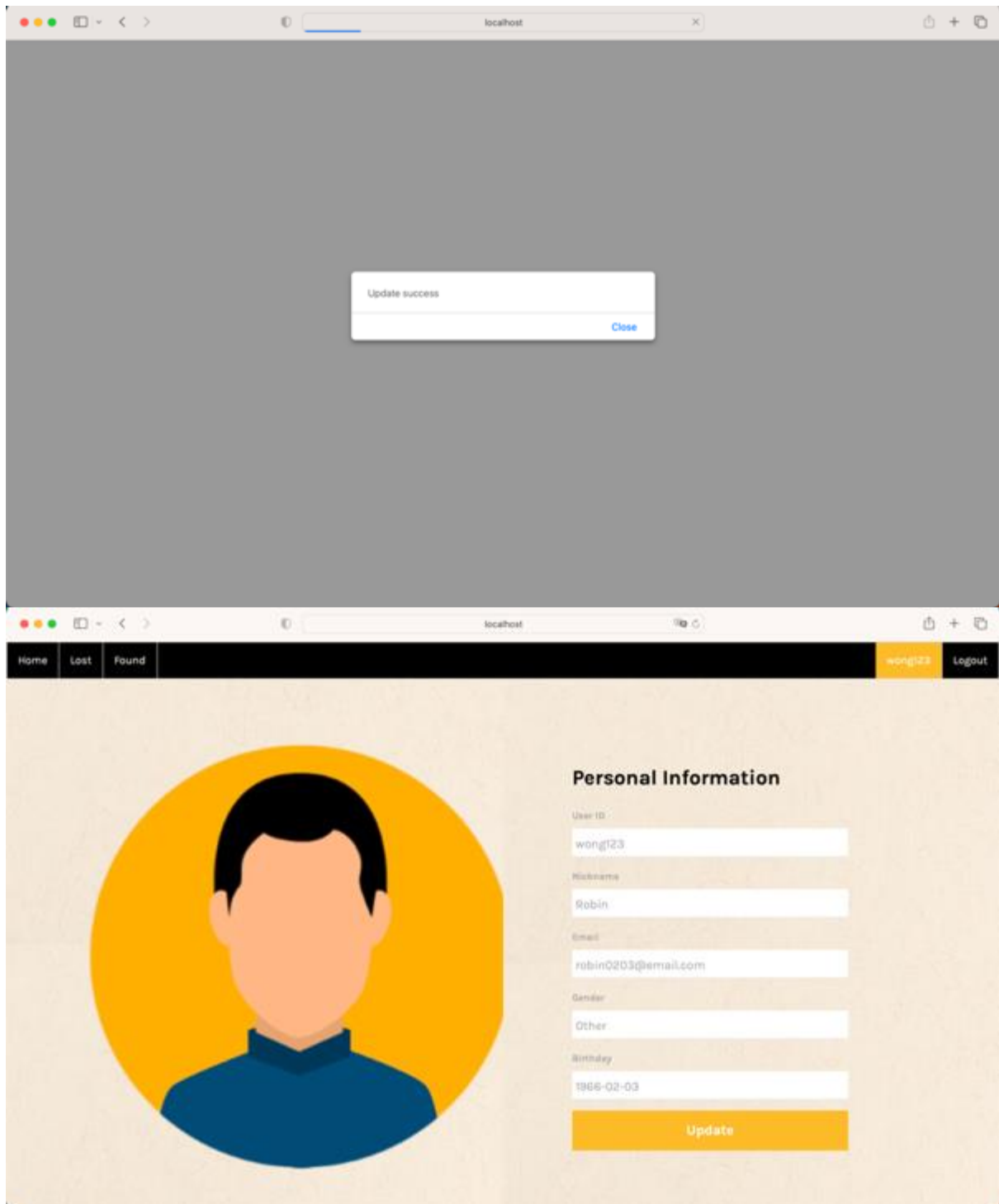
Only fill in the fields you want to update

New Nickname  
New Nickname

New Email  
robin0203@email.com

New Profile Image  
Choose File profile05.png

Update



## User operations

### Create notice

Click Create Notice button:

The image shows two screenshots of a web application running on localhost. The application has a dark navigation bar with 'Home', 'Lost', and 'Found' tabs. The user is logged in as 'wong123' and can click 'Logout'.

**Top Screenshot:** The main content area features a large black megaphone icon with a speech bubble containing the text 'LOST and FOUND'. To the right, a greeting 'Hi Robin!' is displayed above two buttons: 'Create Notice' (yellow) and 'View My Notice' (orange).

**Bottom Screenshot:** The 'Create Notice' form is shown. It includes a dropdown menu for 'Type' (set to 'lost'), a 'Date' field (06/13/2022), and input fields for 'Venue', 'Contact', and 'Description'. There is also an 'Image' section with a 'Choose File' button and the text 'no file selected'. A large orange 'Create Notice' button is at the bottom right of the form.

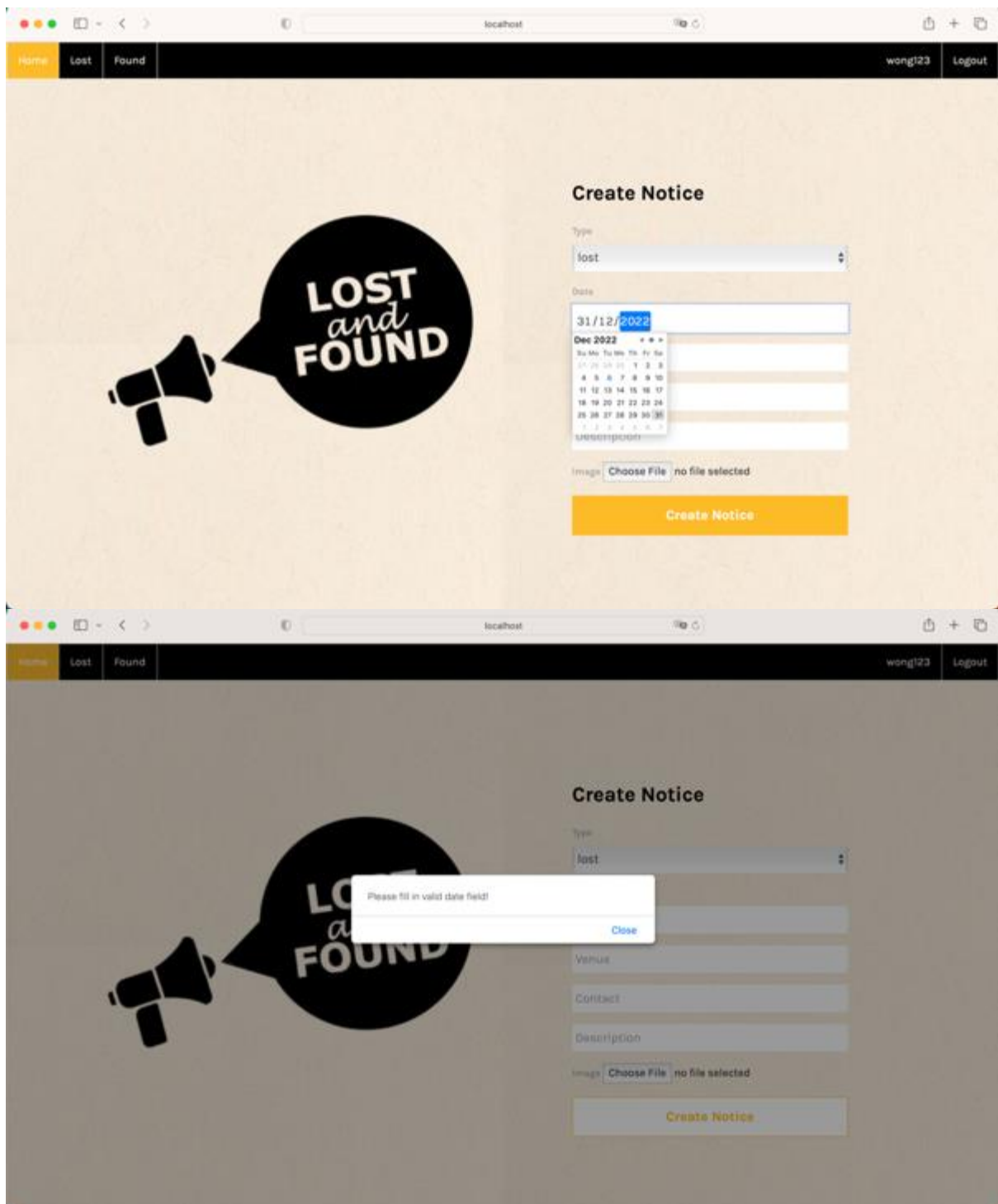


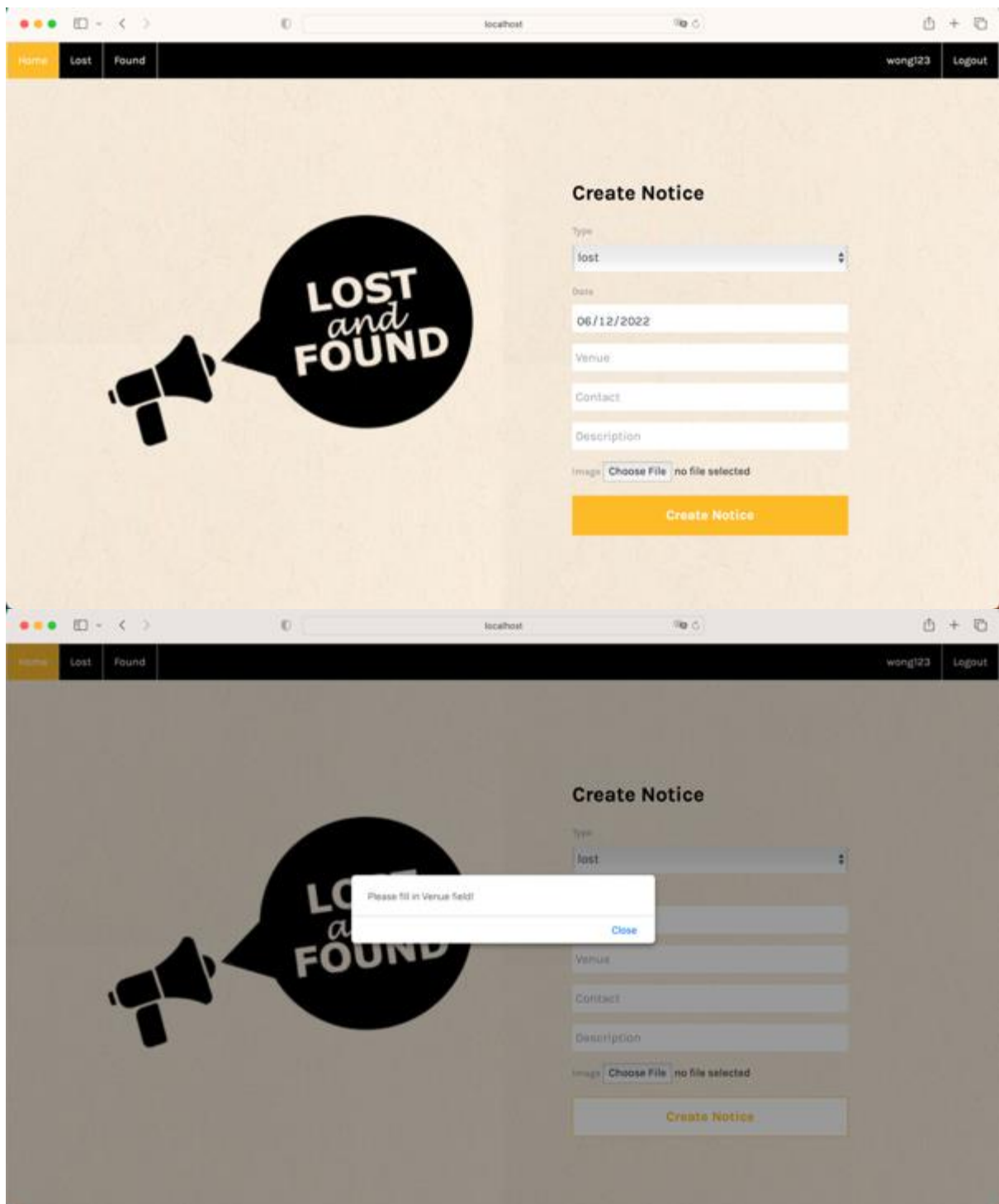
Validation check:

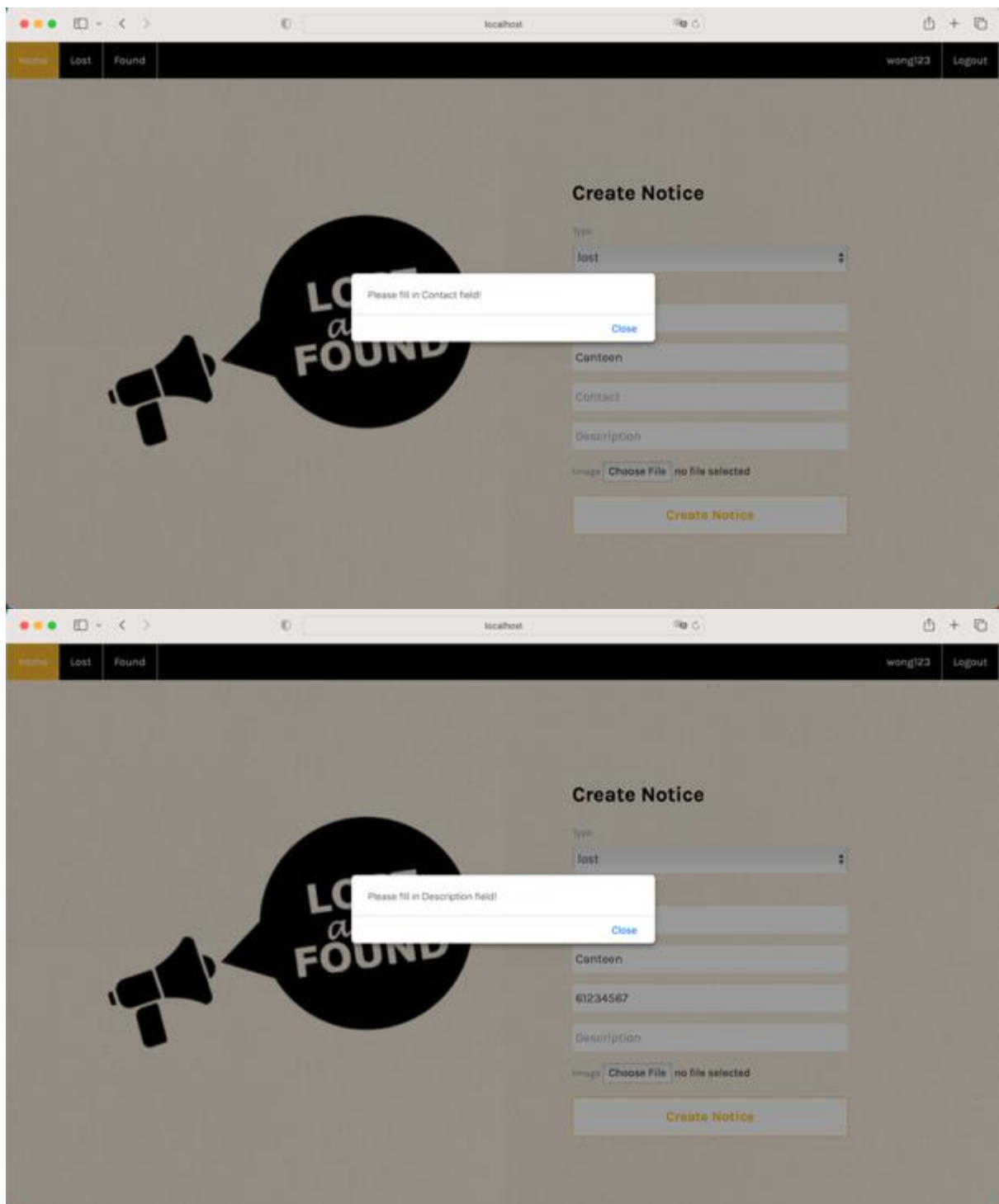
The image displays two screenshots of a web application interface, likely for a 'Lost and Found' system, showing a validation error during the 'Create Notice' process.

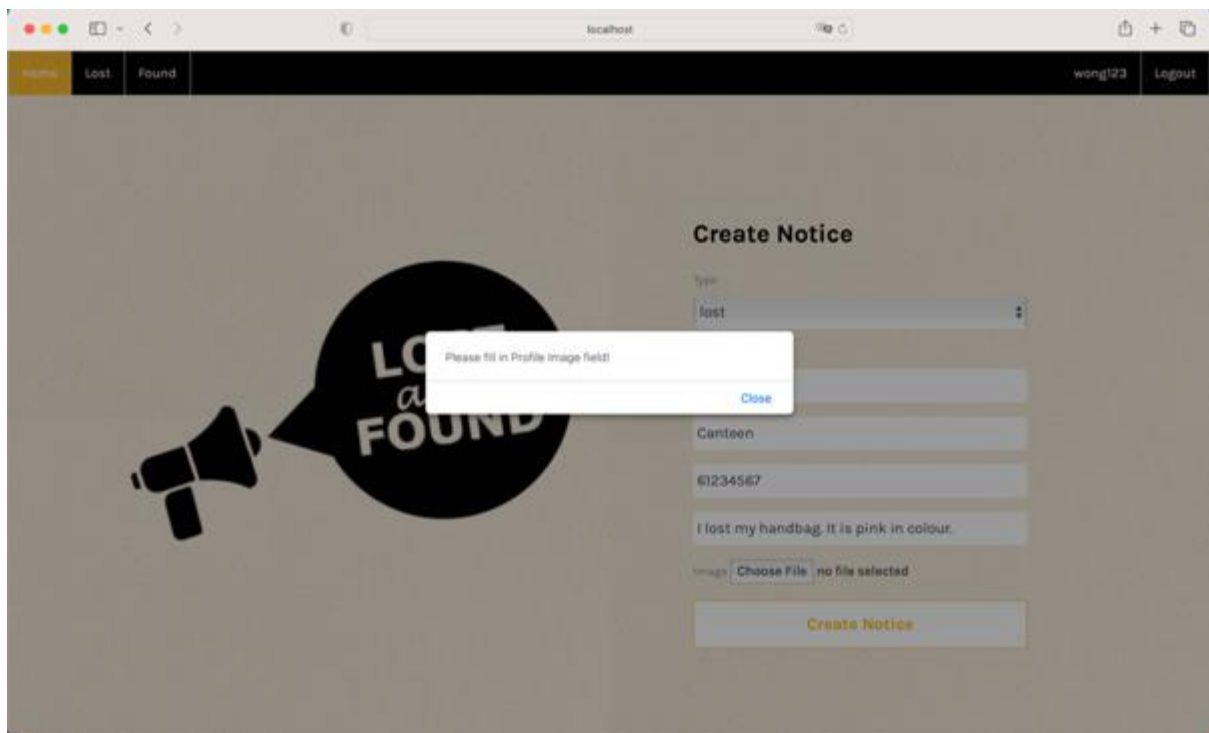
**Top Screenshot:** The 'Create Notice' form is active. The 'Type' dropdown is set to 'lost'. The 'Date' field contains '06/18/2022'. The 'Venue', 'Contact', and 'Description' fields are empty. The 'Image' field shows 'Choose File' and 'no file selected'. The 'Create Notice' button is highlighted in orange.

**Bottom Screenshot:** The same form is shown, but with a validation error. A modal dialog box is displayed in the center, stating 'Please fill in valid date field!'. The 'Date' field is highlighted in red. The 'Create Notice' button is now greyed out.

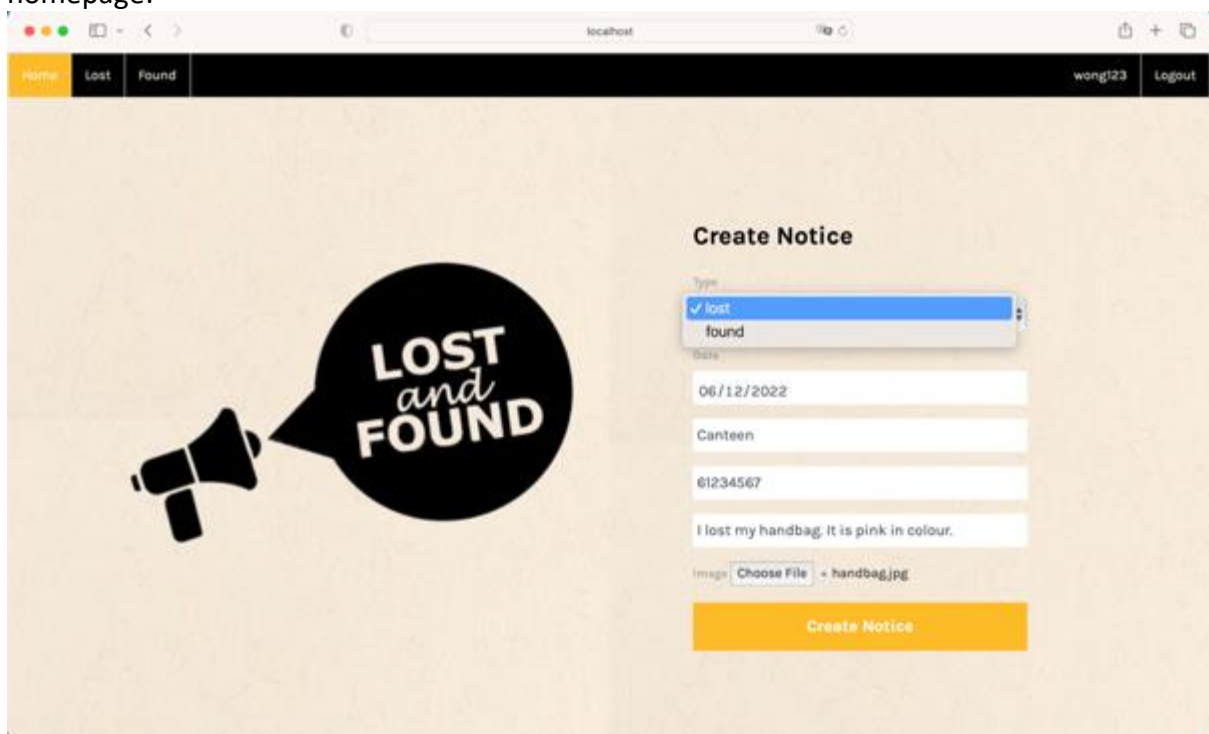




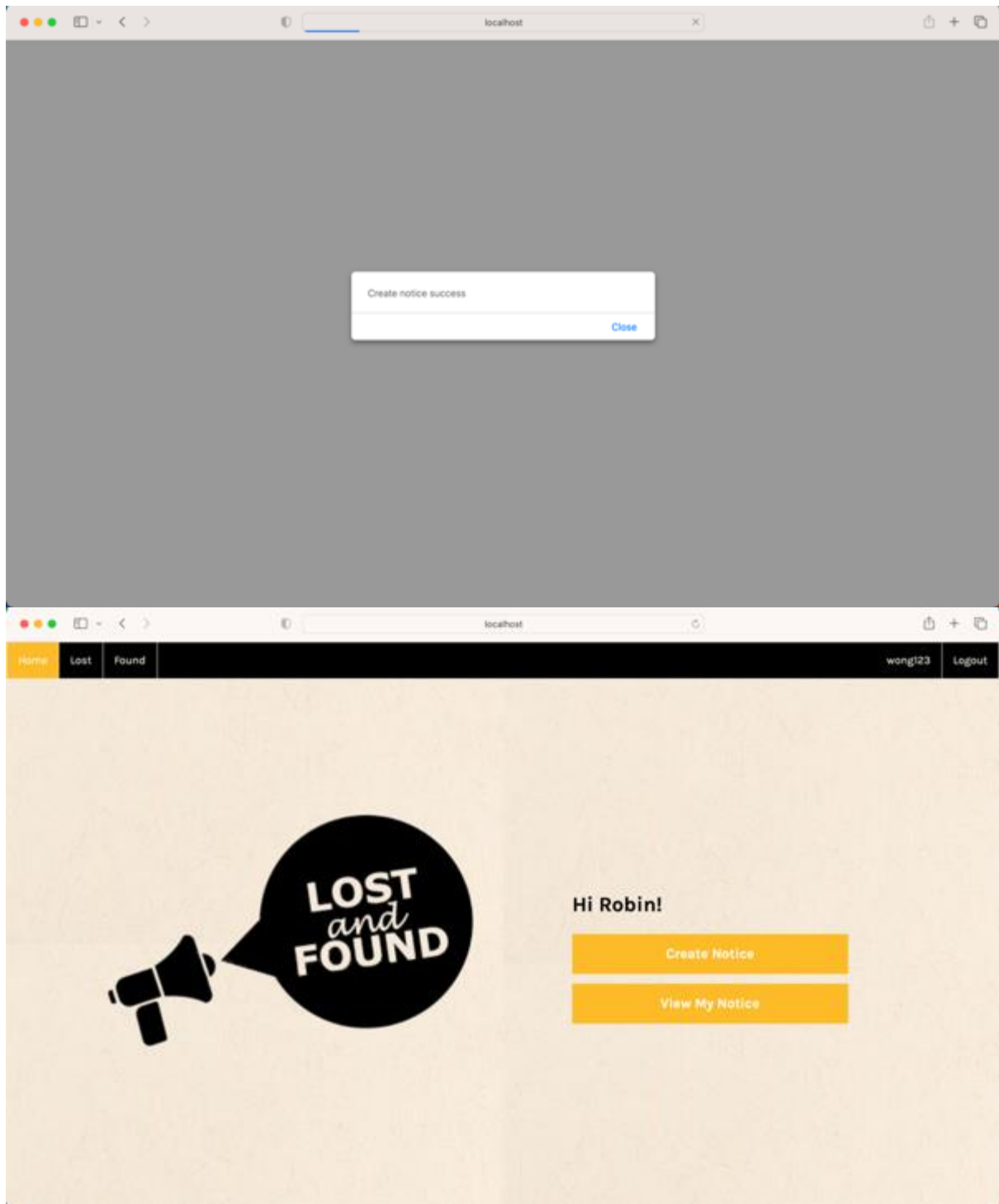




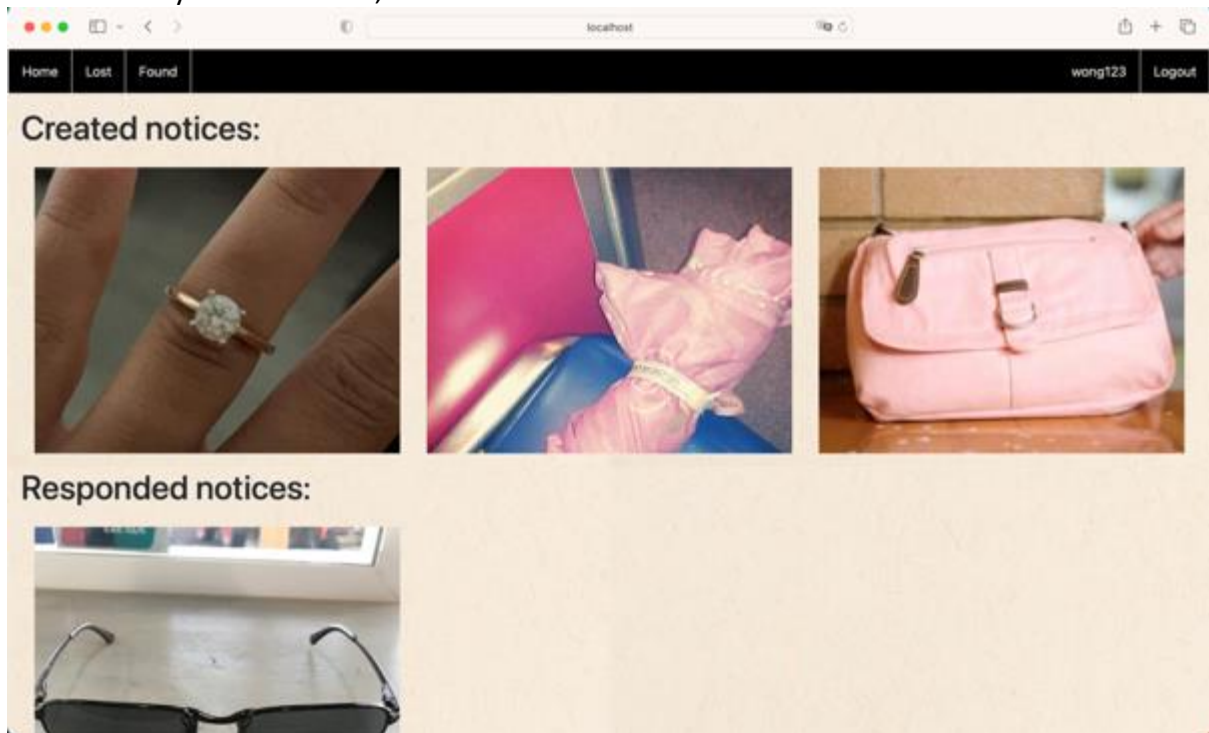
Select notice type, fill in all fields and click Create Notice button. It will then return to user homepage:



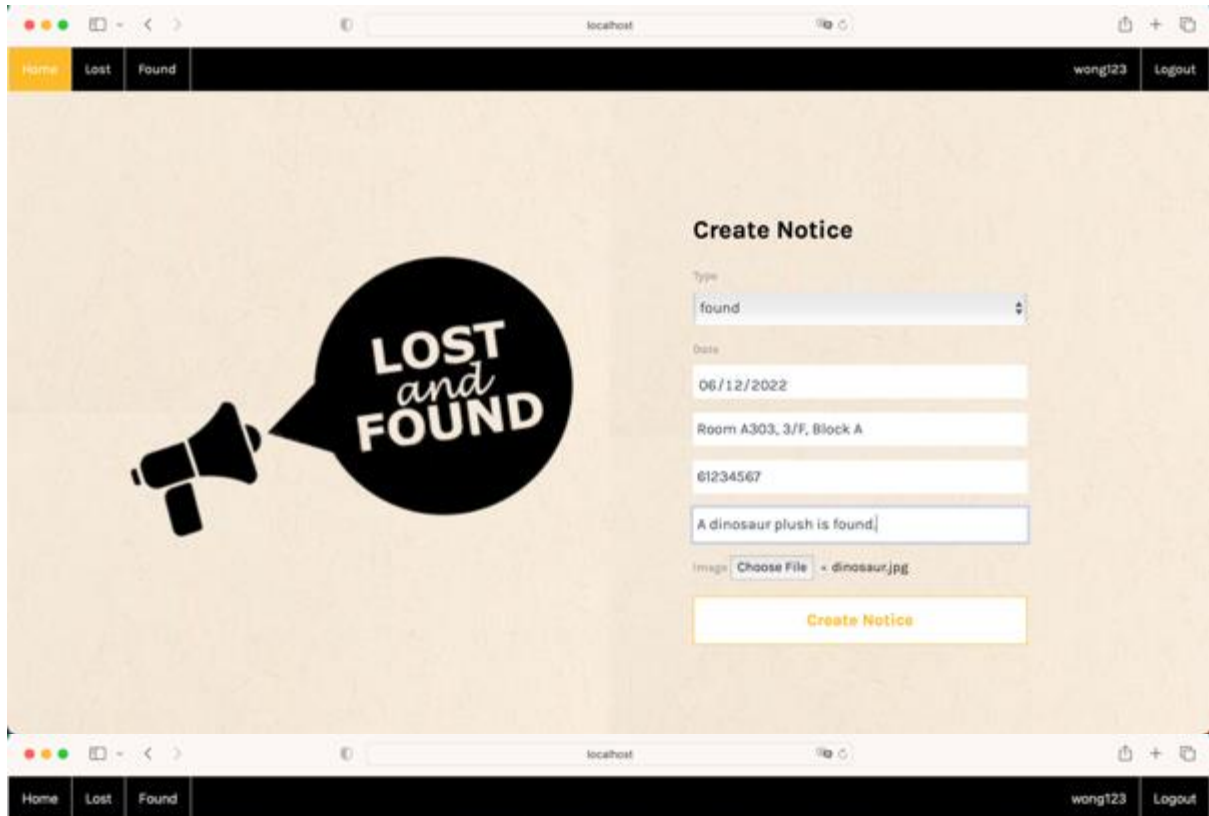




Click View My Notice button, new notice has been created:



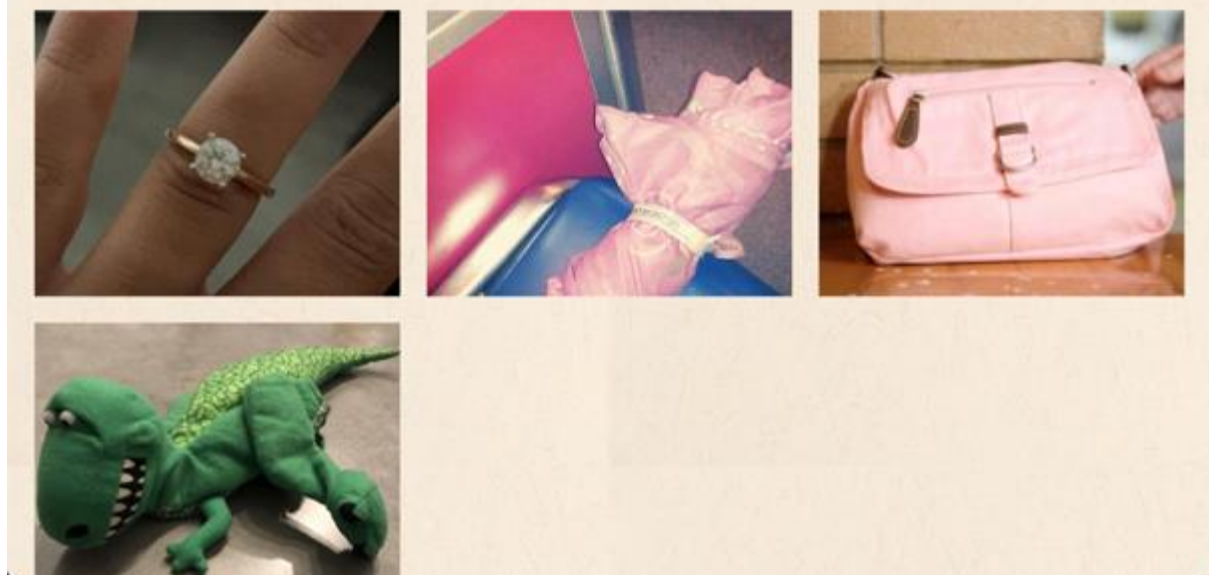
Create a found notice:



The screenshot shows a web browser window with a URL bar displaying 'localhost'. The page has a navigation bar with 'Home', 'Lost', and 'Found' tabs, and a user profile section with 'wong123' and a 'Logout' link. The main content area features a large graphic on the left with a megaphone and the text 'LOST and FOUND'. On the right, there is a 'Create Notice' form. The form fields are as follows:

- Type: dropdown menu with 'found' selected
- Date: text input with '06/12/2022'
- Room: text input with 'Room A303, 3/F, Block A'
- ID: text input with '61234567'
- Description: text input with 'A dinosaur plush is found'
- Image: 'Choose File' button and 'dinosaur.jpg' text
- Submit: 'Create Notice' button

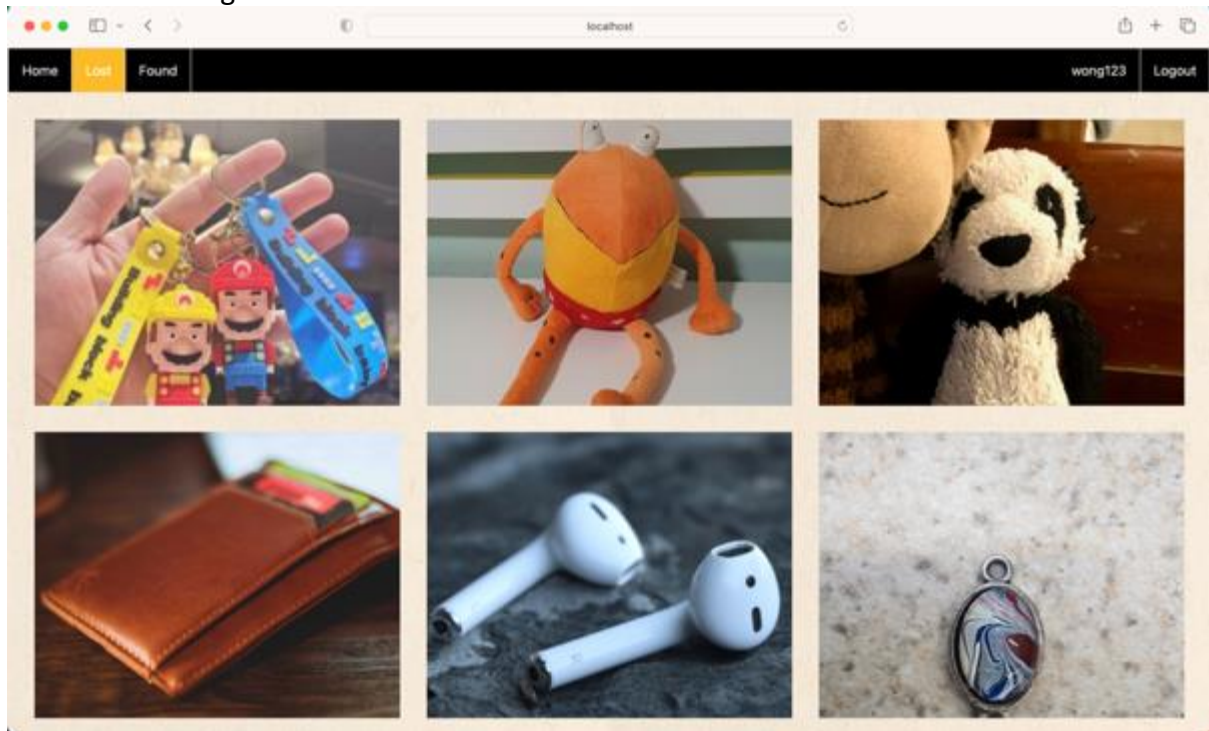
Created notices:



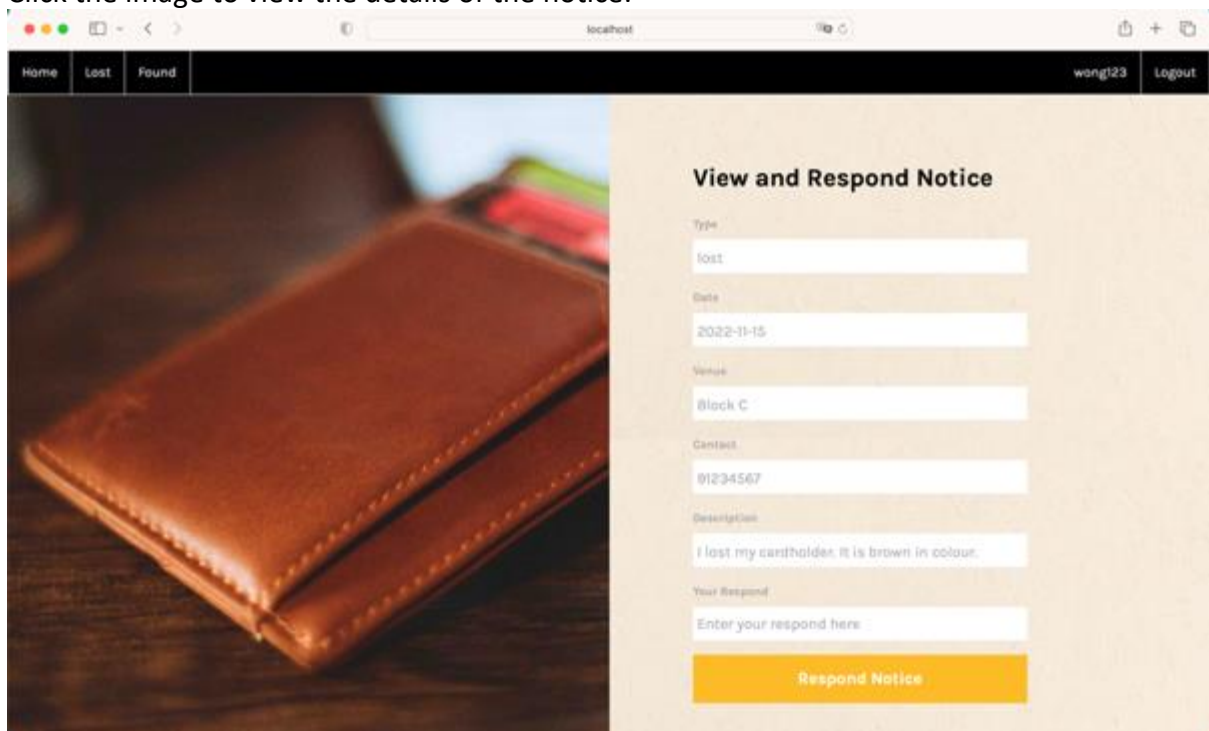
## View and respond to notice:

### Lost Notice:

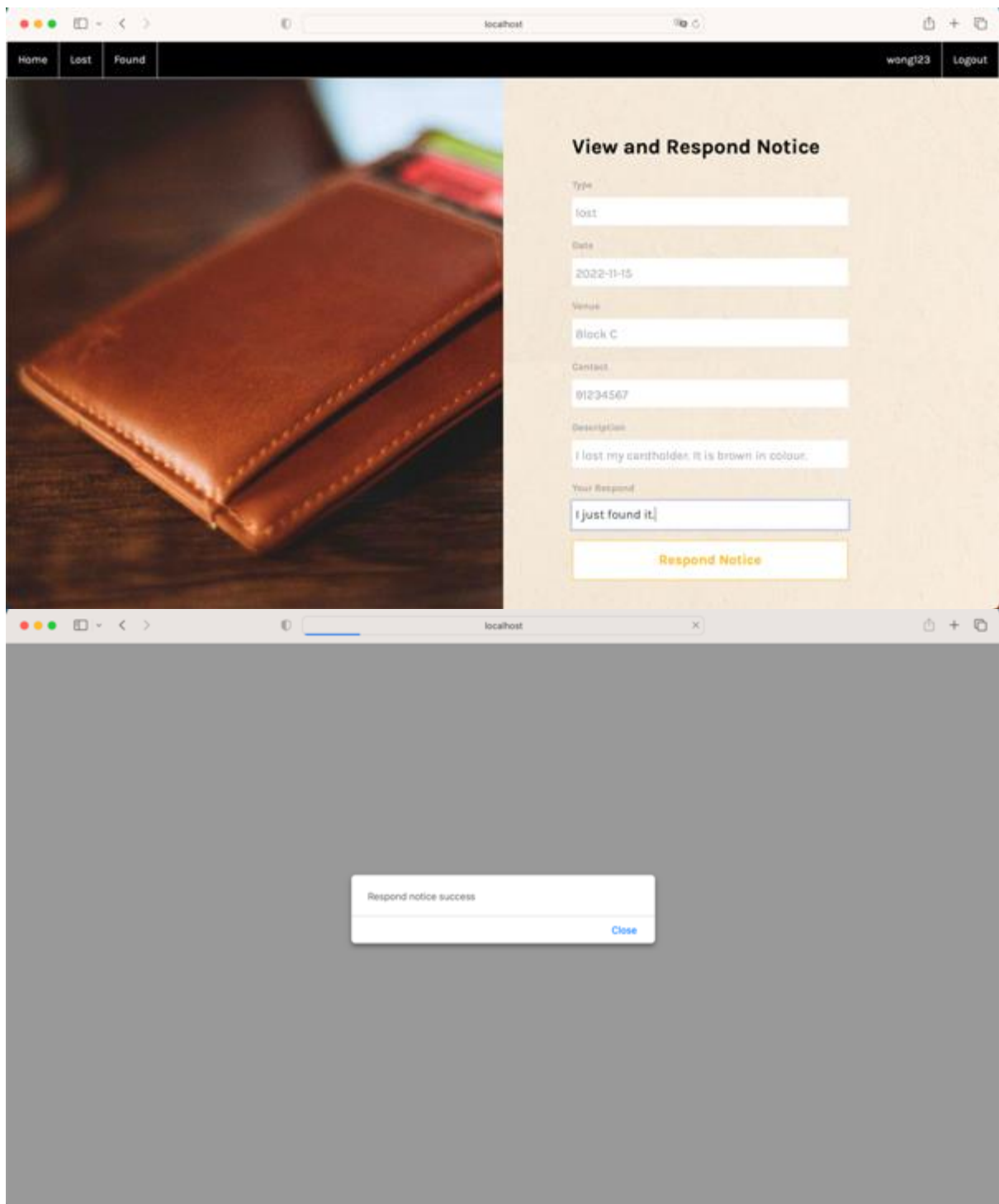
Click Lost in navigation bar:



Click the image to view the details of the notice:

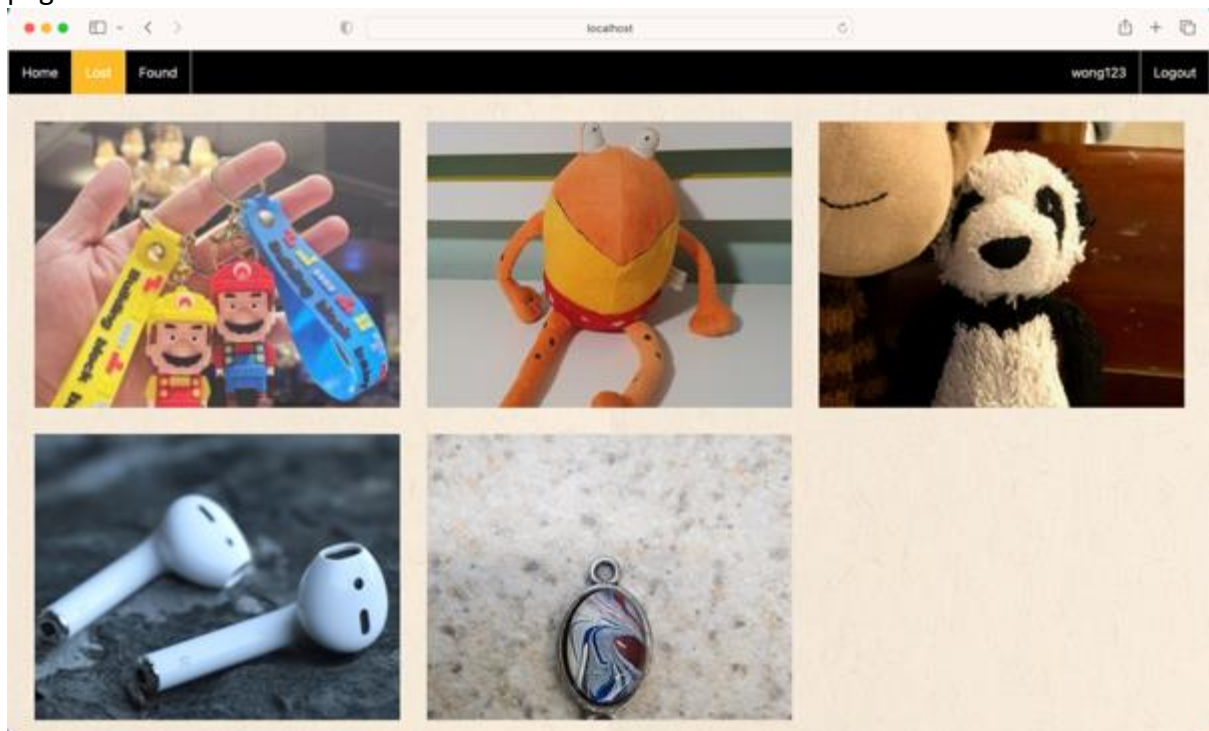


If you would like to respond to this notice, enter your response and click the Respond Notice button:



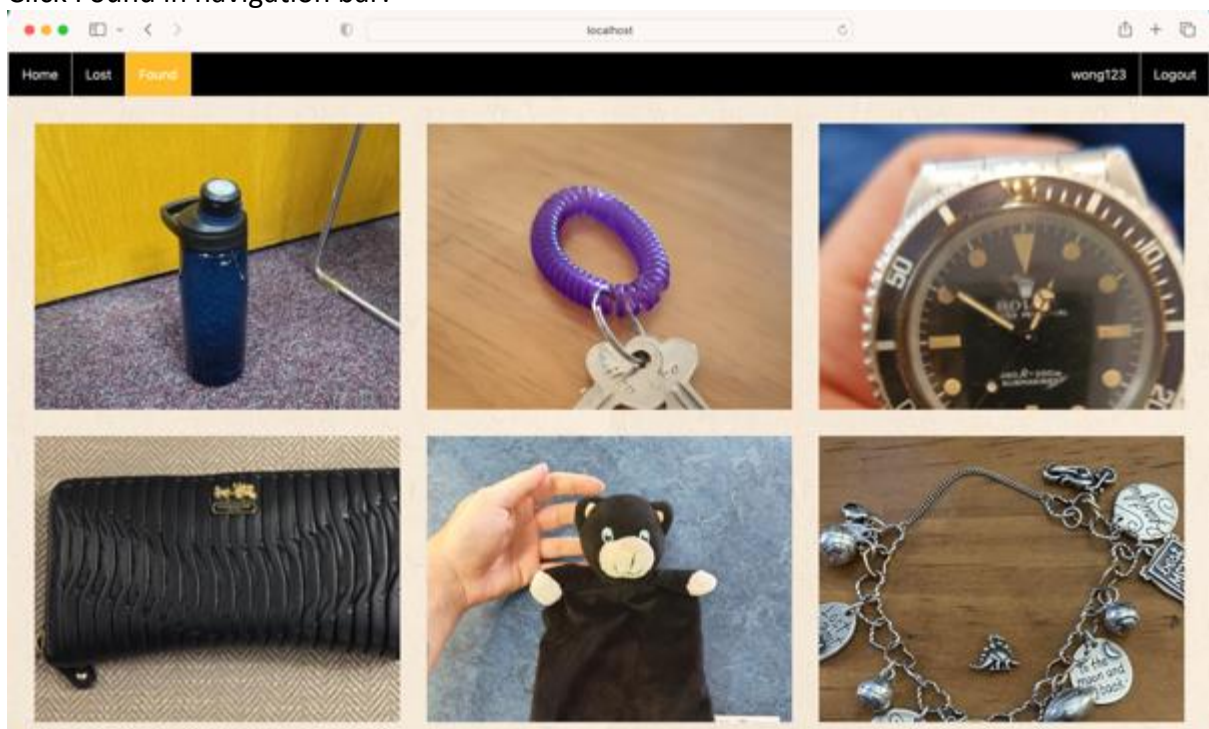


Since this notice has become a completed notice, it would no longer be displayed in Lost page:

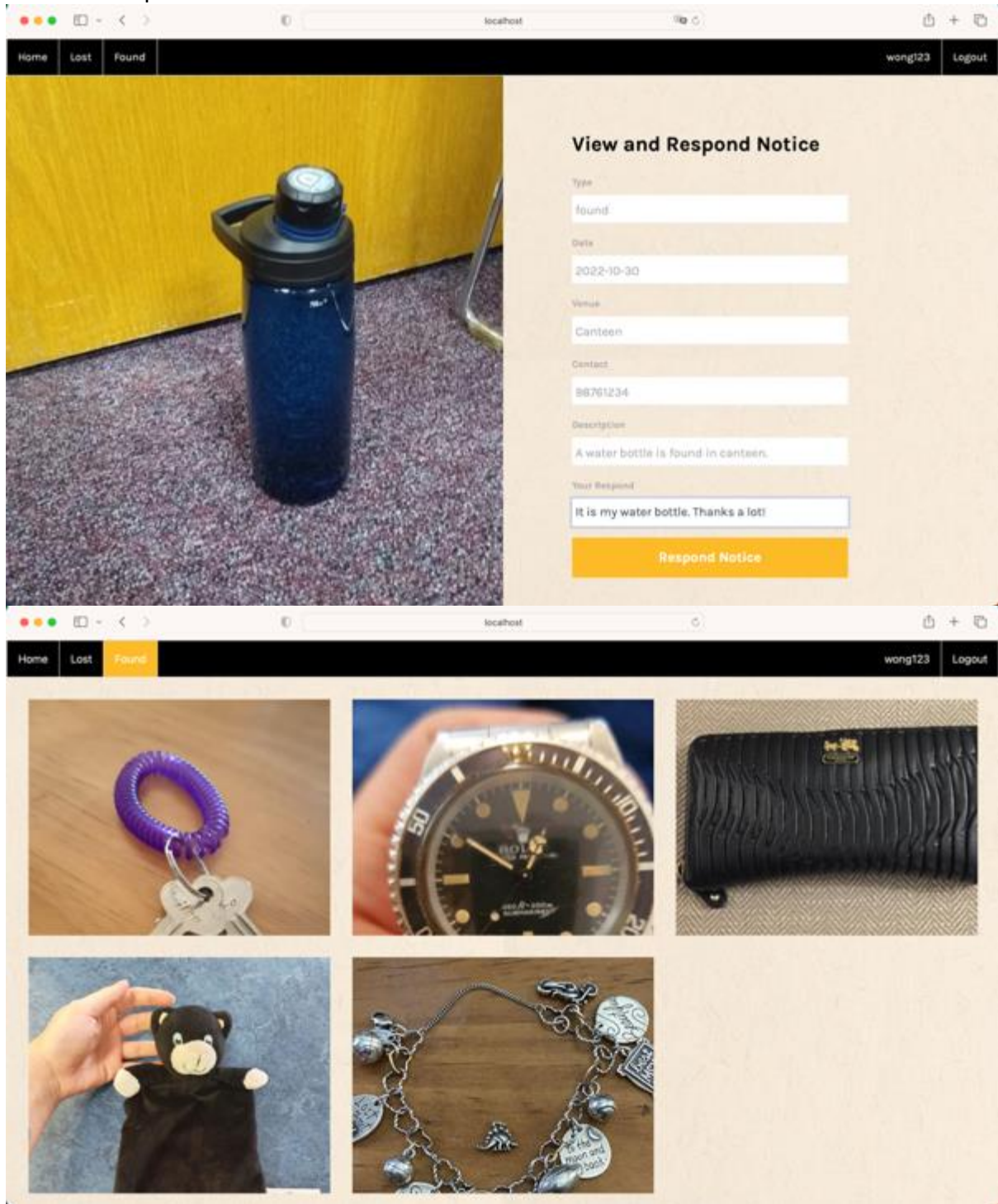


### **Found Notice**

Click Found in navigation bar:



View and respond to a found notice:



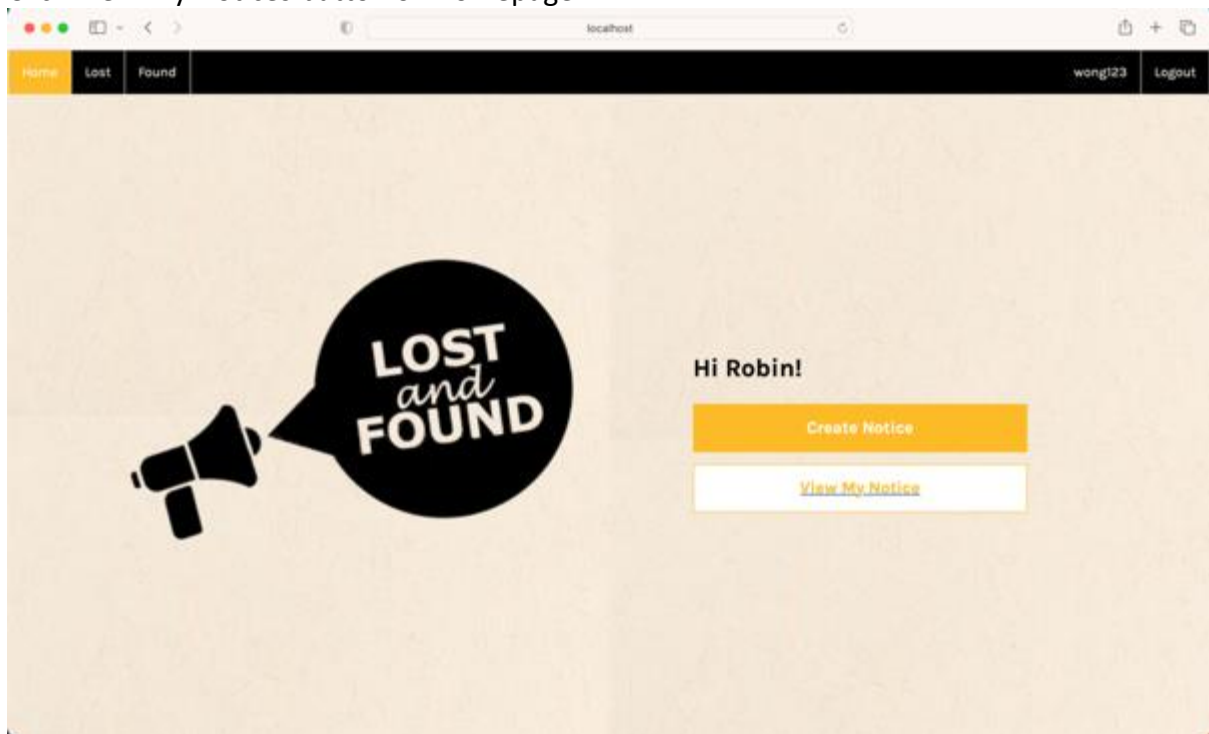
The screenshot displays a web application interface for managing found items. The top navigation bar includes links for Home, Lost, and Found, with the 'Found' link highlighted. The user is logged in as 'wong123' and can click 'Logout'. The main content area is titled 'View and Respond Notice' and features a large image of a blue water bottle on the left. To the right of the image is a form with the following fields:

- Type: found
- Date: 2022-10-30
- Venue: Canteen
- Contact: 88761234
- Description: A water bottle is found in canteen.
- Your Respond: It is my water bottle. Thanks a lot!

A yellow 'Respond Notice' button is located at the bottom of the form. Below the main content area, there is a grid of six smaller images showing various lost items: a purple coiled cable, a Rolex watch, a black leather wallet, a black teddy bear, and a silver chain necklace with a tag that reads 'for the dragon and his bank'.

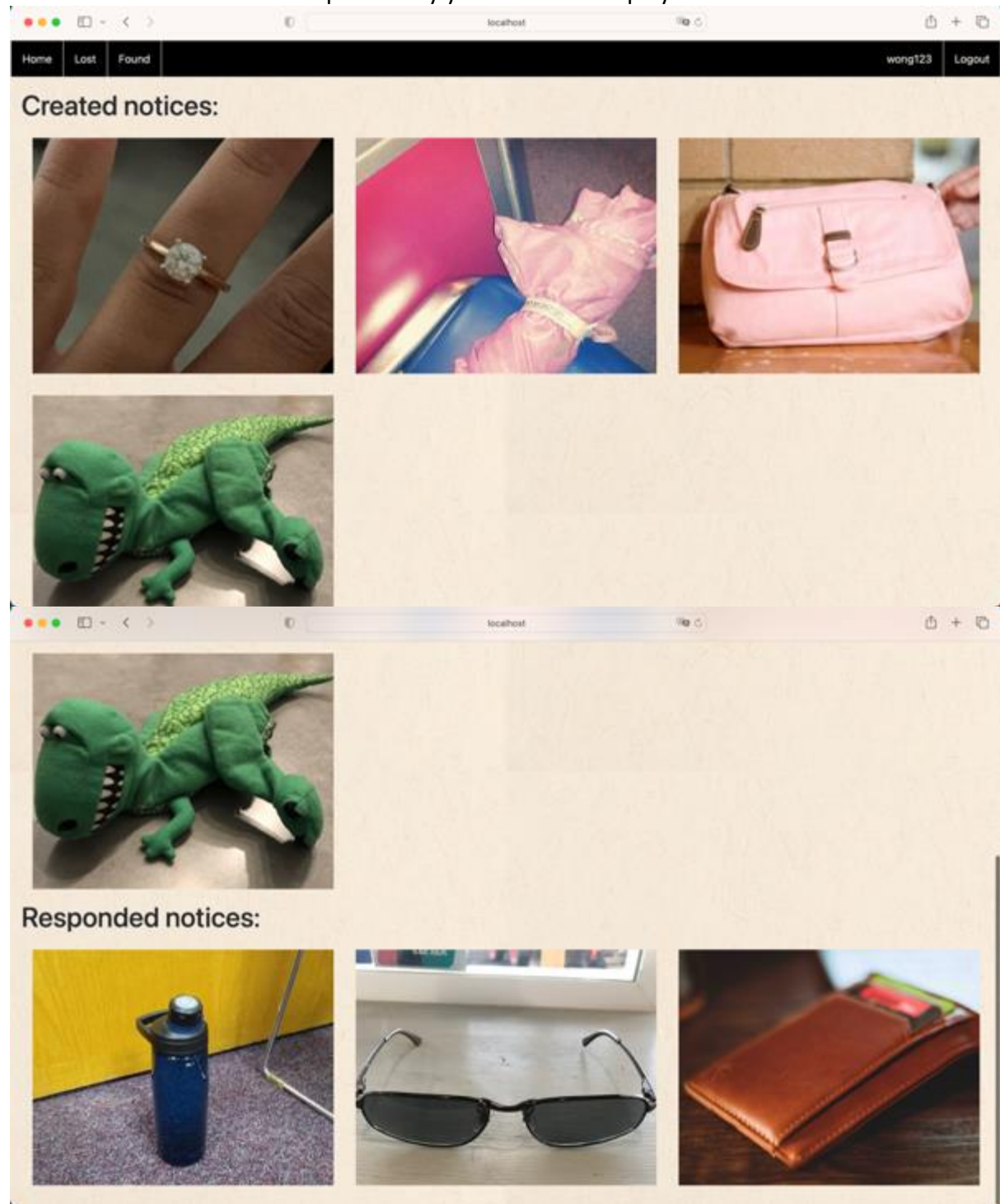
## View my notices

Click View My Notices button on homepage:

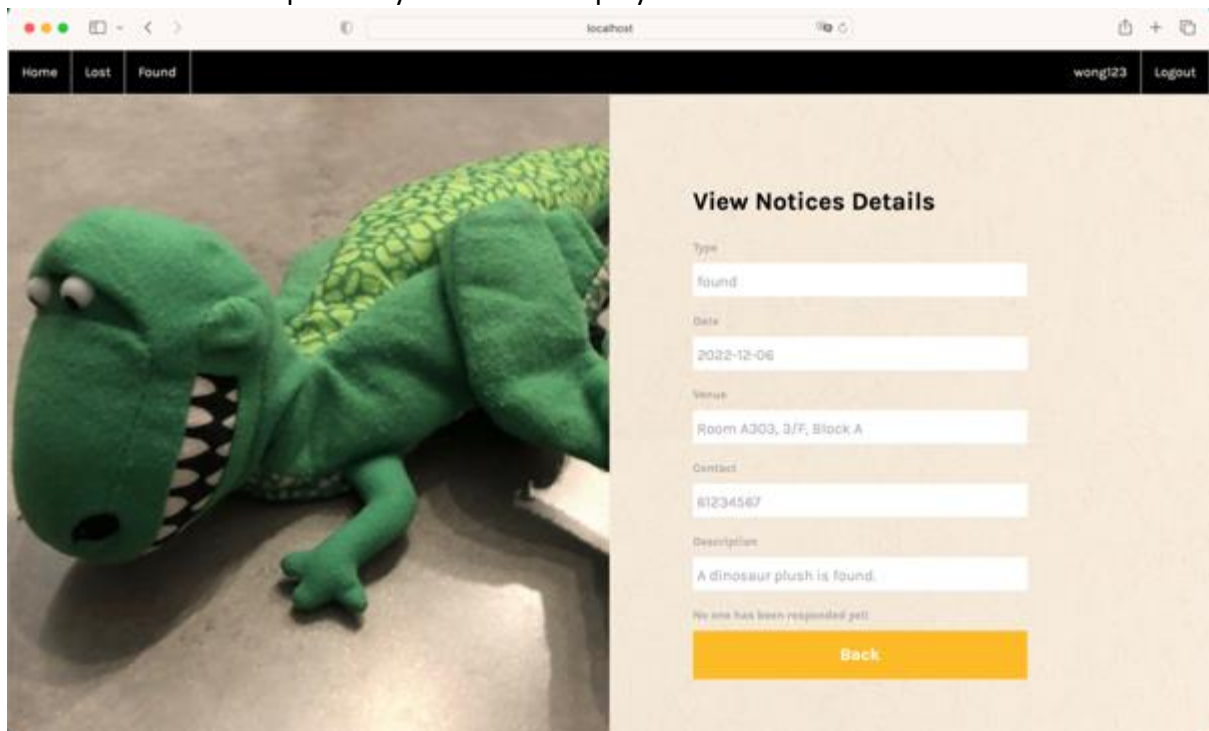




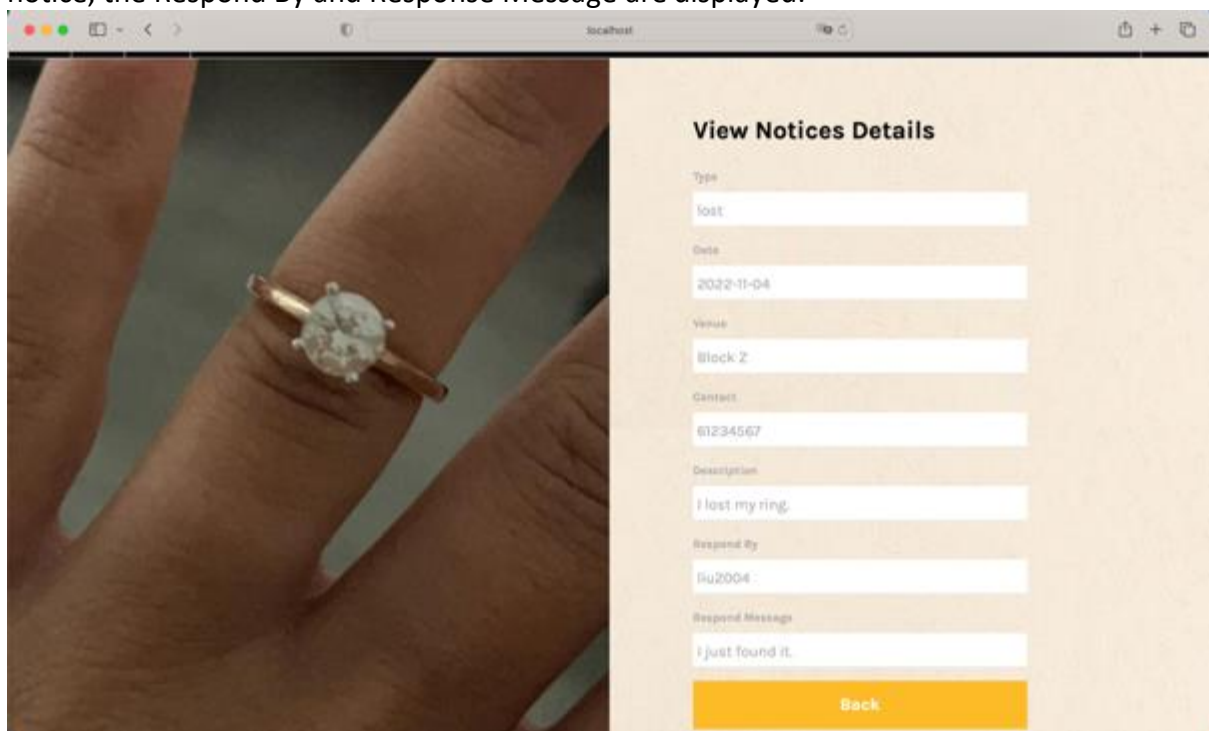
All notices that created or responded by you would be displayed:



Click the image to view details of notice. If there is no response to this notice, a message “No one has been responded yet!” will be displayed above the back button :



Click the Back button and select another notice. Since someone has responded to this notice, the Respond By and Response Message are displayed:

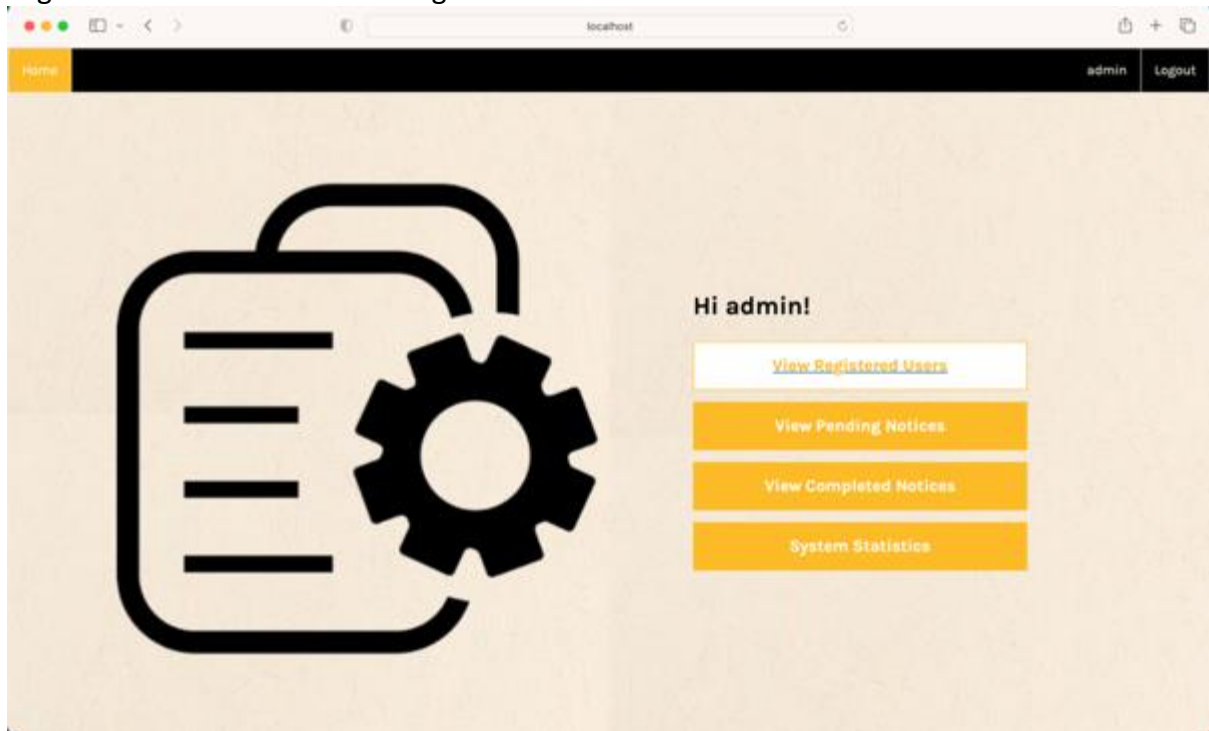




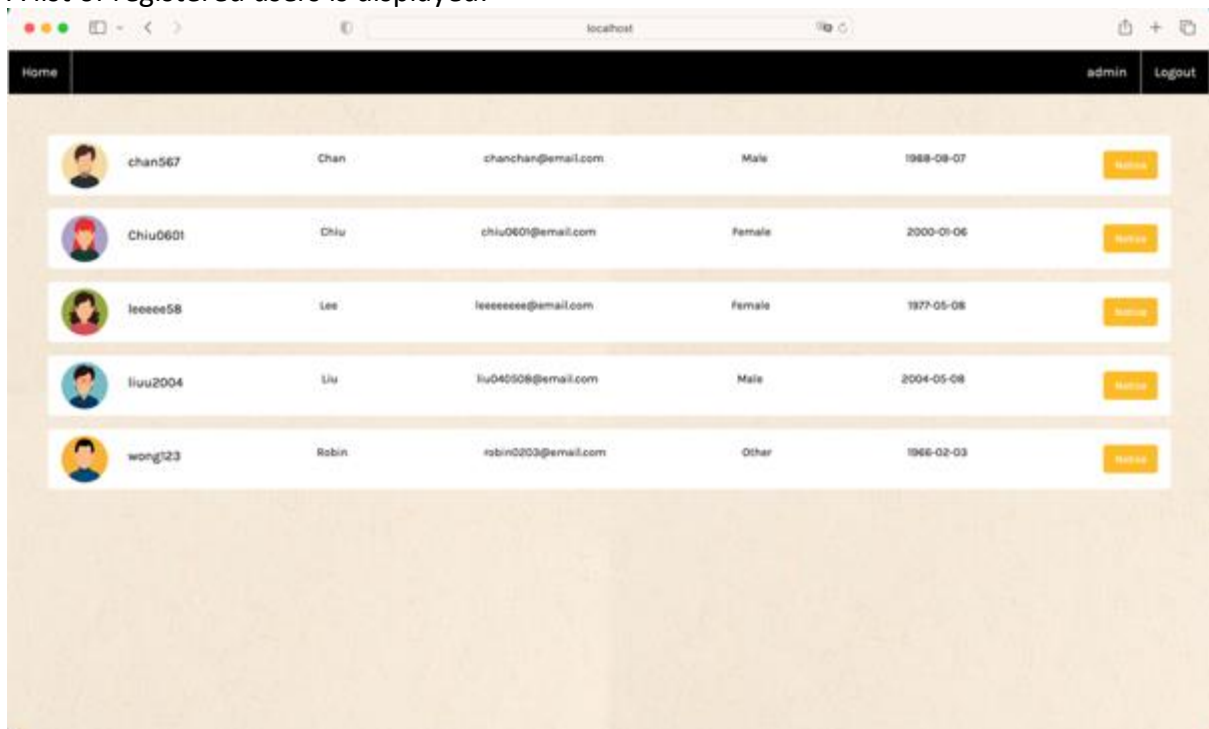
## Admin operations

### View list of registered users:

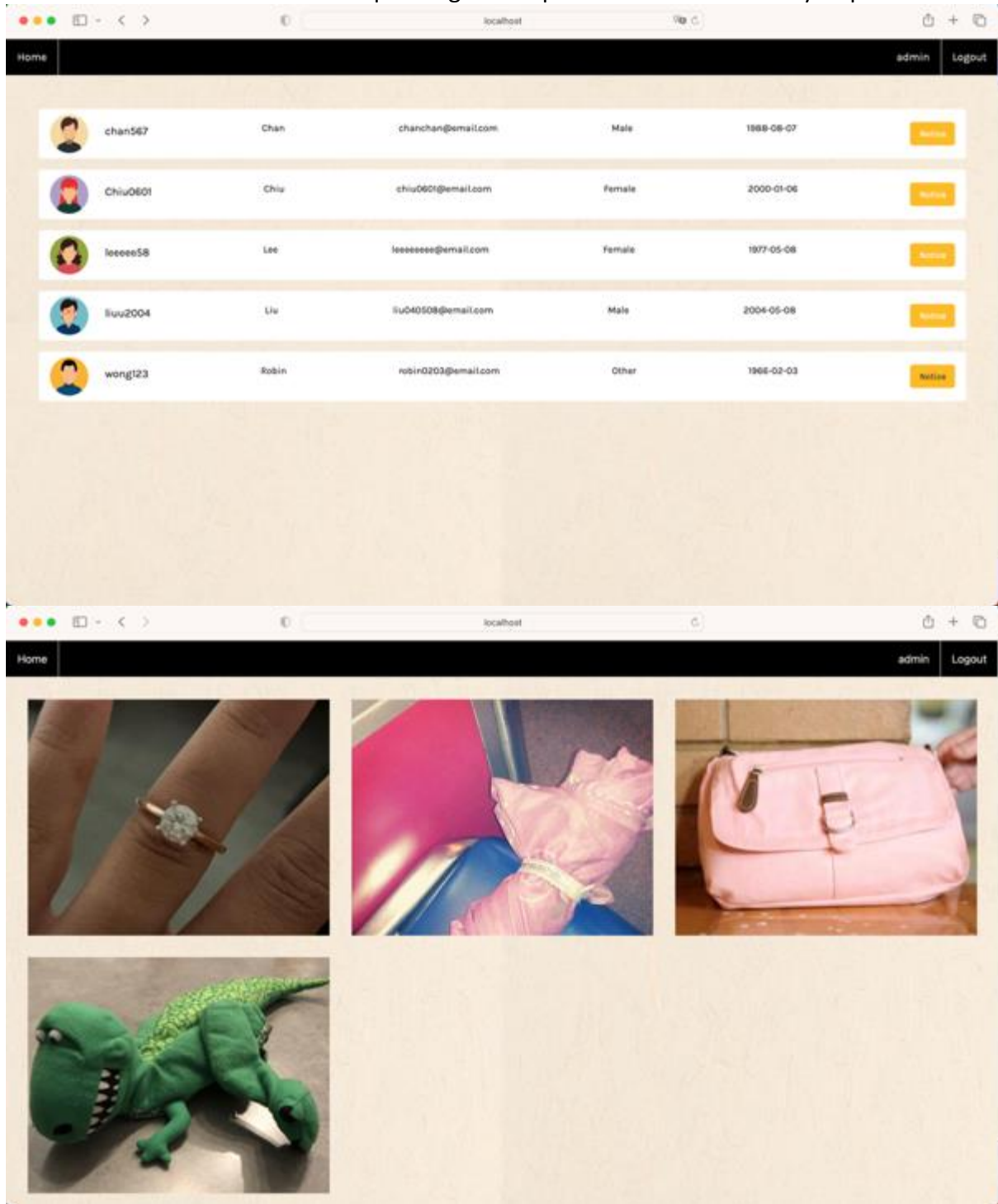
Login as admin and click View Registered Users button:



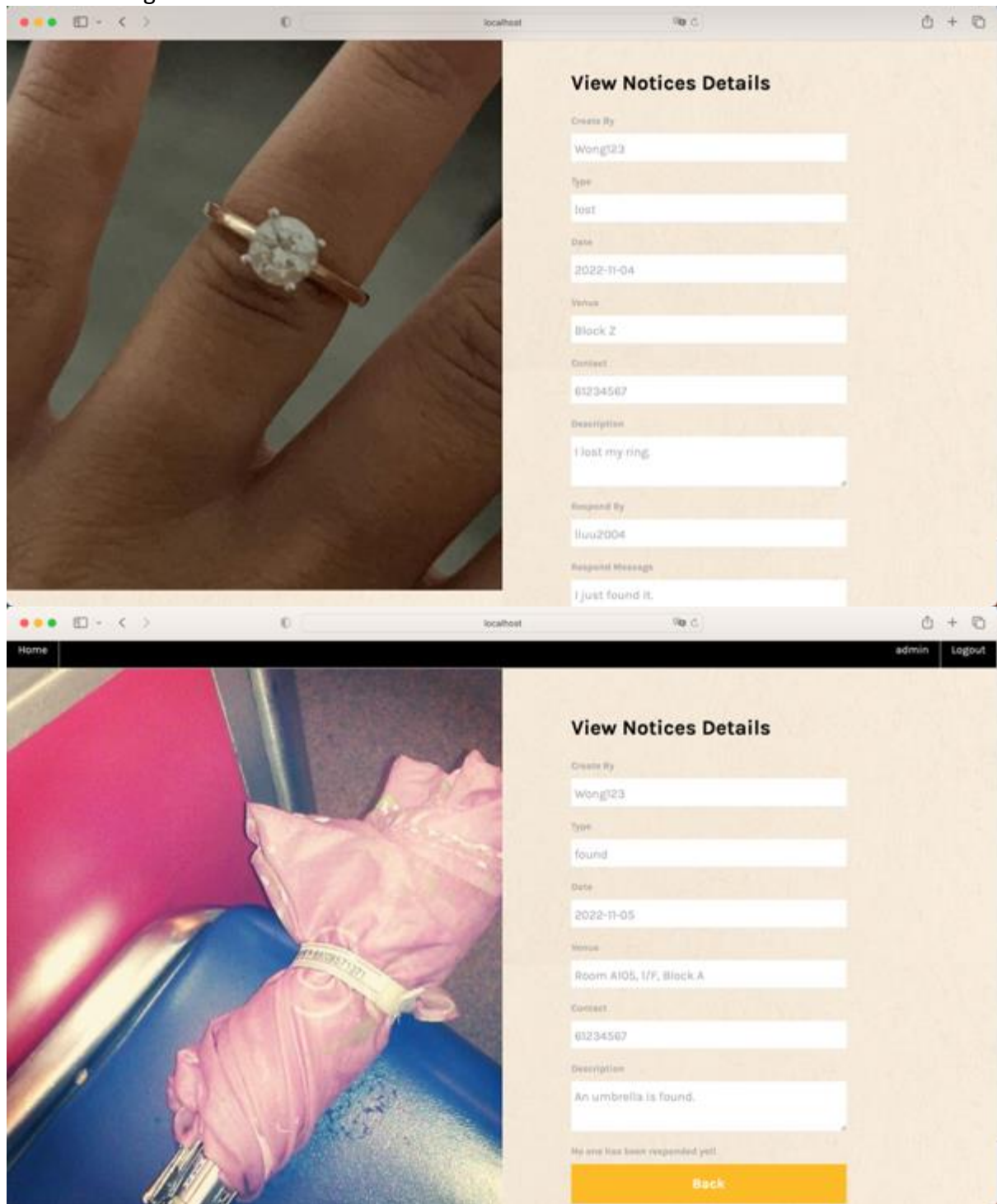
A list of registered users is displayed:



Click the Notice button to view all pending or completed notices created by a specific user:



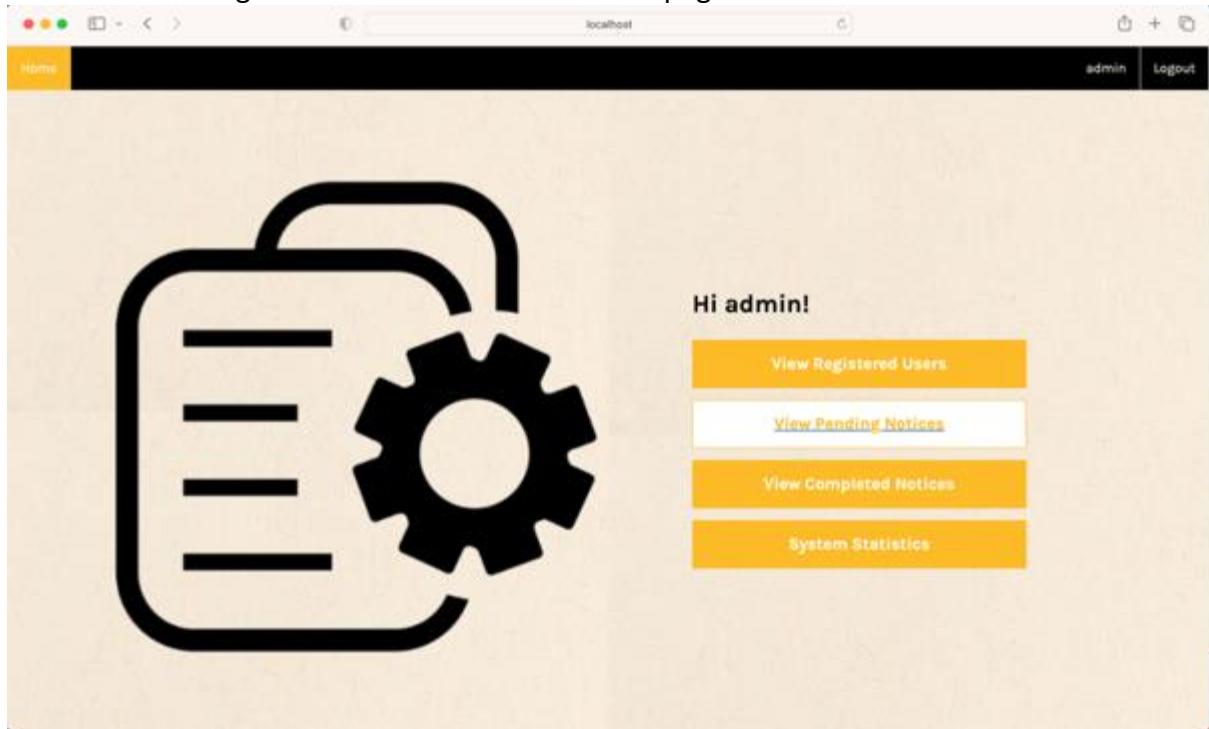
Click the image to view the details of the notice:



## View list of pending/completed notices

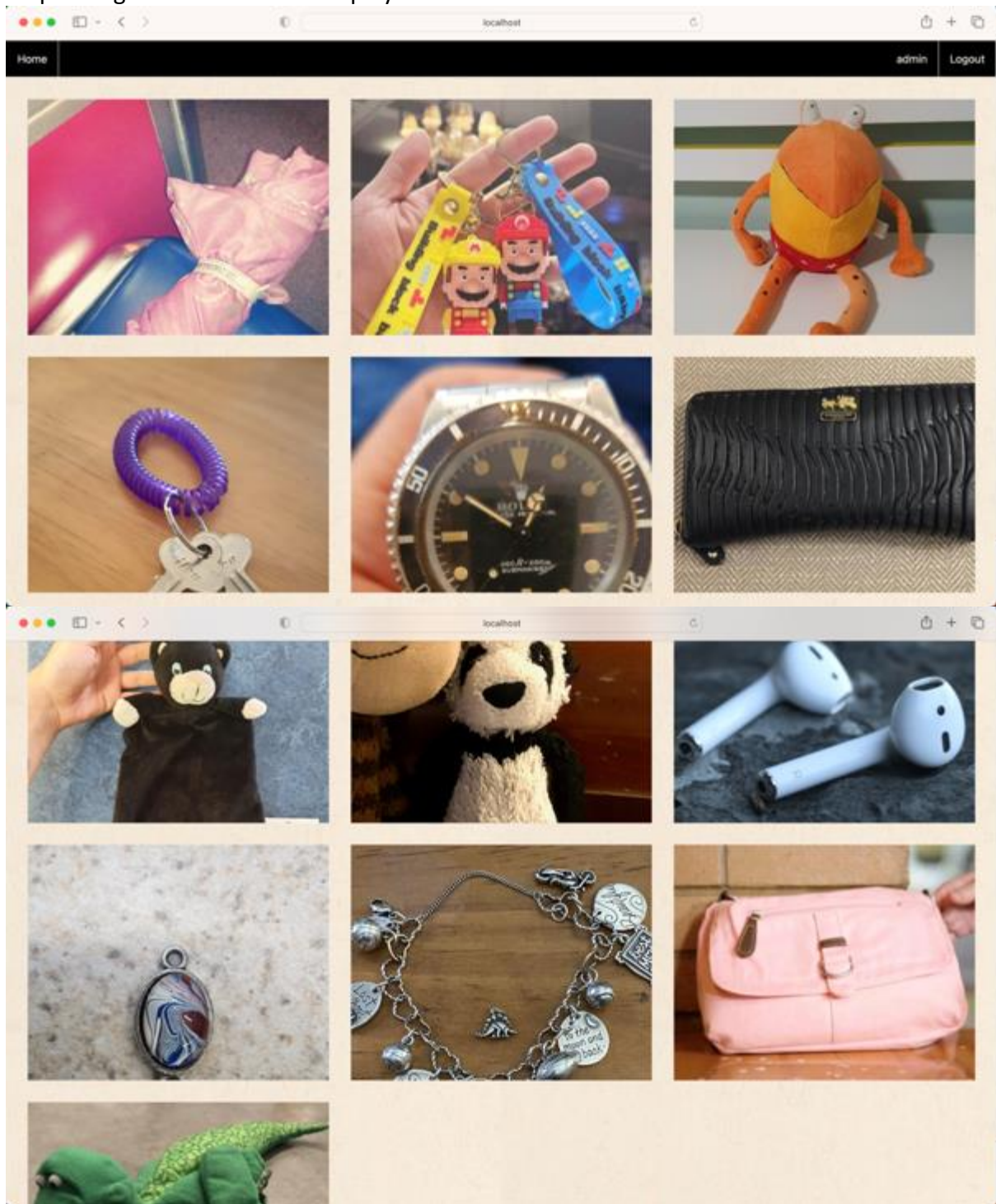
### View pending notices

Click View Pending Notices button on admin homepage:

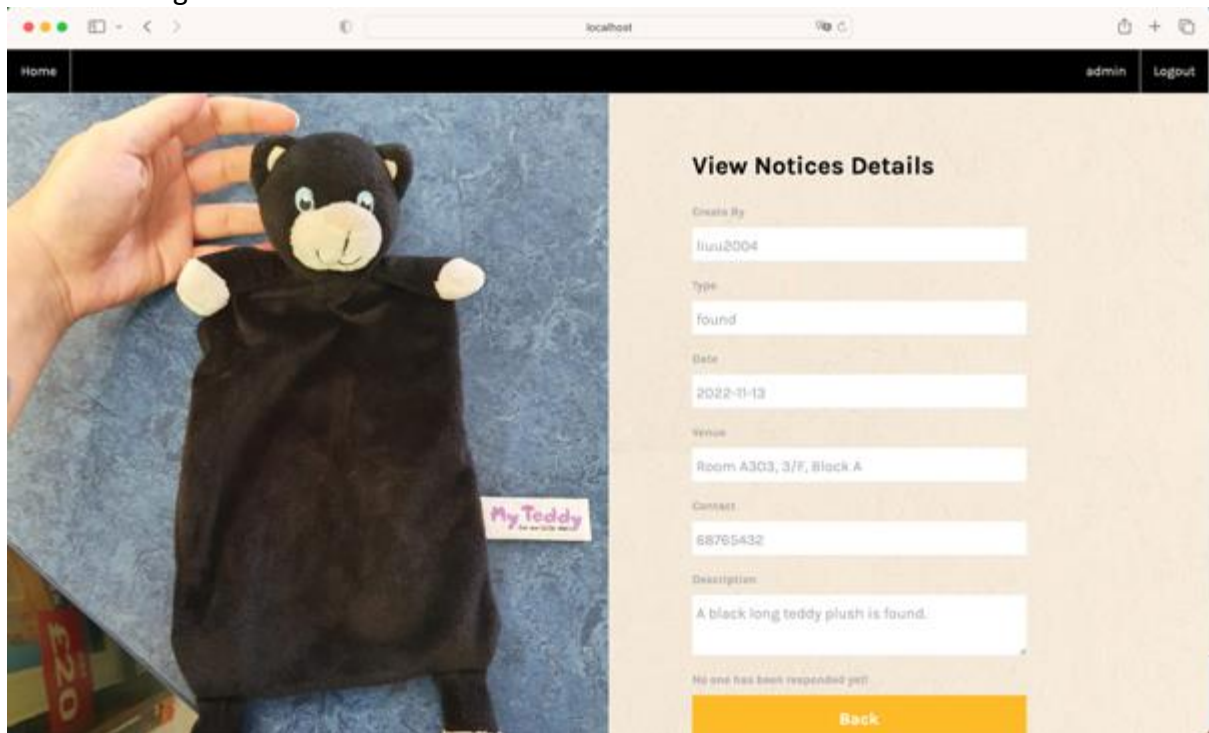




All pending notices would be displayed:

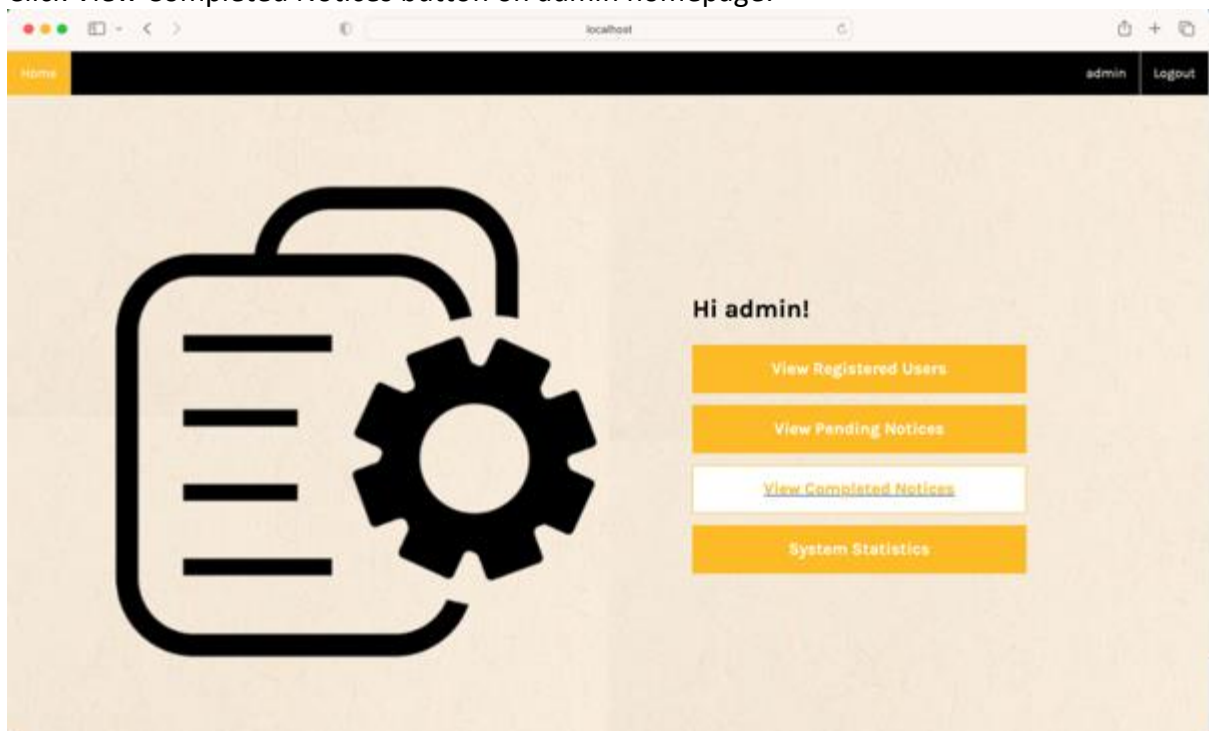


Click the image to view the details of the notices:



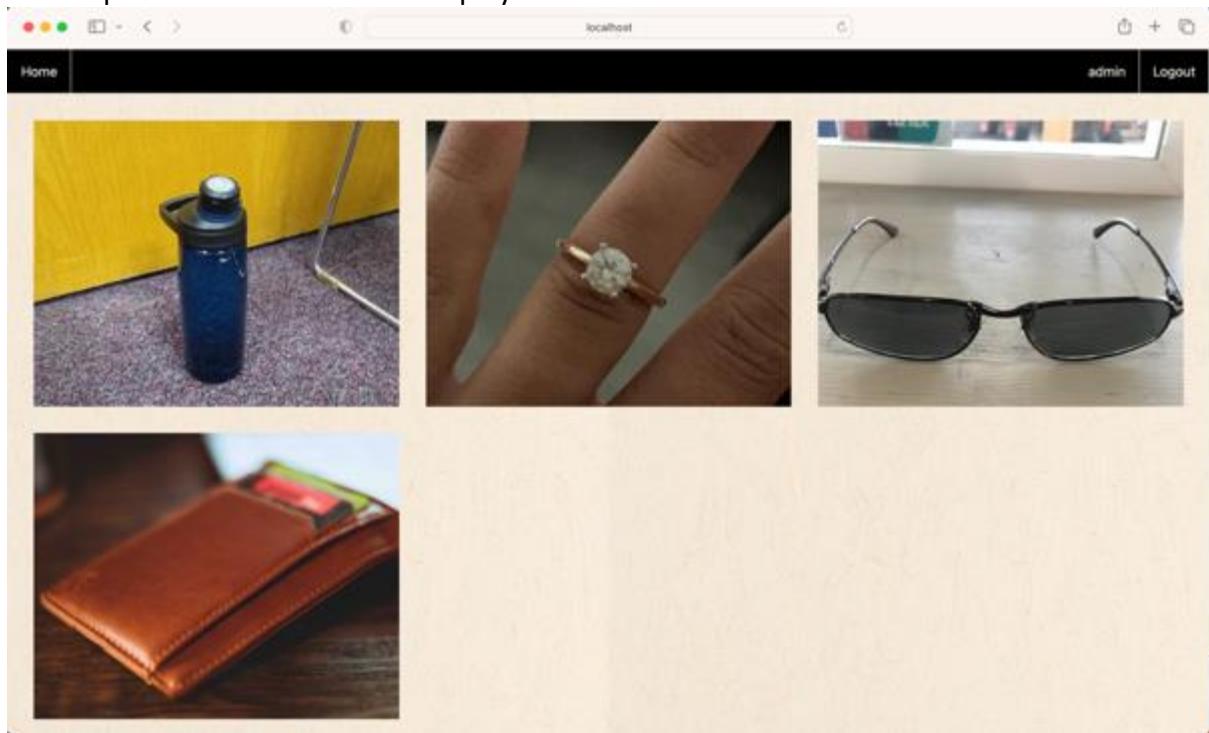
### View completed notices

Click View Completed Notices button on admin homepage:

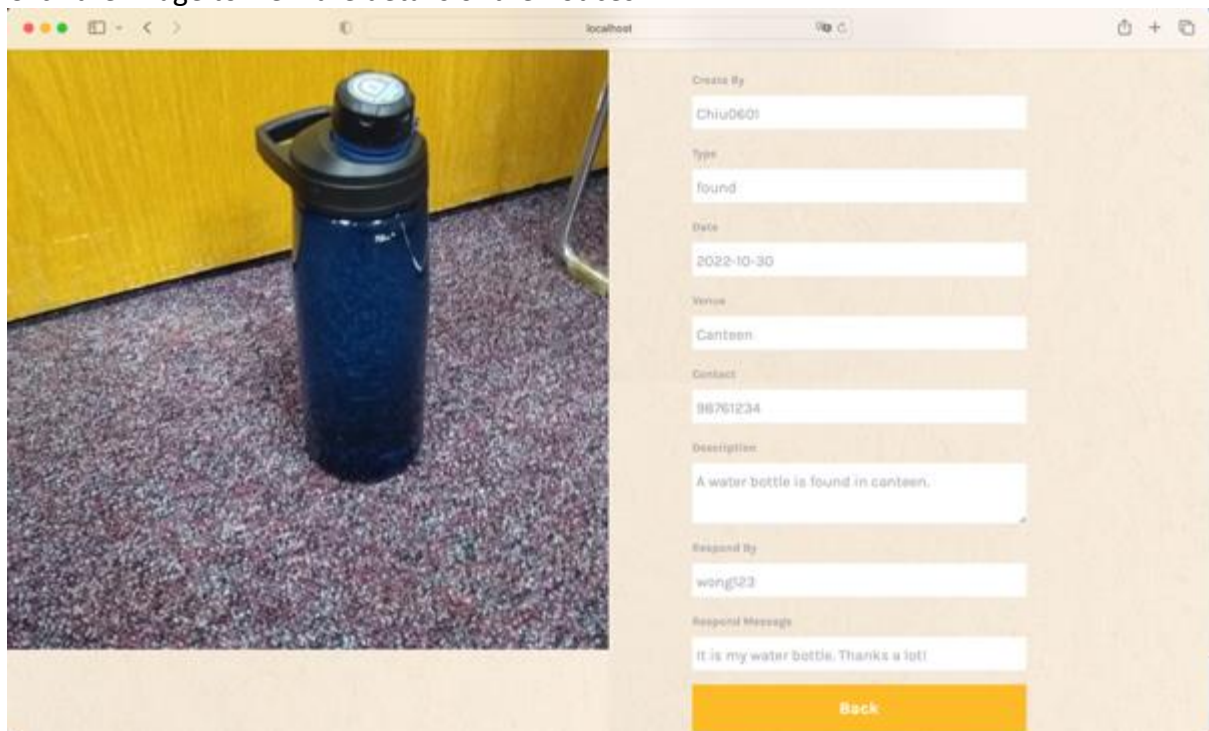




All completed notices would be displayed:

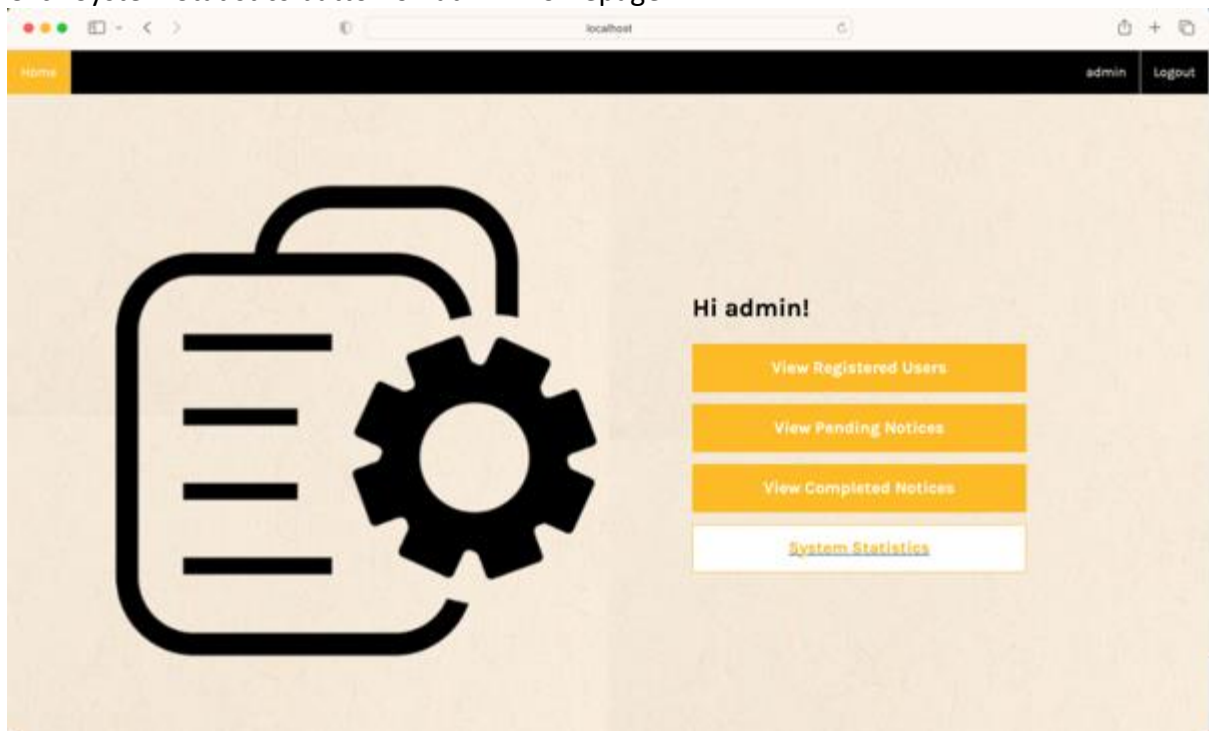


Click the image to view the details of the notices:



## System statistics

Click System Statistics button on admin homepage:



A chart is displayed to show the statistics if the number of notices in different age ranges:

