

**Lab IV - Art Guardian User Manual**

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## 1. Introduction (*O: Roberts*)

Thank you for choosing Art Guardian to protect your art! Art Guardian was specifically designed to help detect theft and simplify the DMCA process in a way that is transparent and honest.

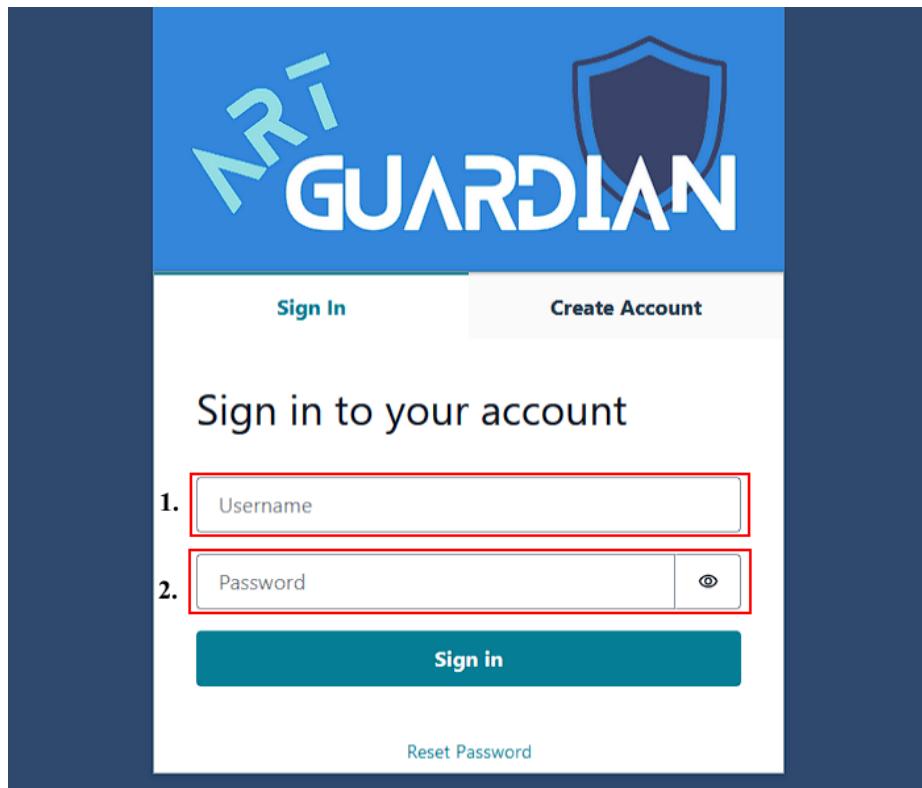
## 2. Accessing Art Guardian (*O: Roberts, M1: Zheng*)

Art Guardian is a web app, meaning that on desktop there is no download required. Simply navigate to this [URL](#) to begin protecting your art.

## 3. Getting Started (*O: Roberts, M1: Zheng*)

Navigate to the [URL](#) found above on any web browser.

### 3.1. Sign In Page (*O: Roberts, M1: Thompson*)



Sign in is open by default. If the user has an account, they will be required to enter these fields:

1. Username - the username selected upon account creation.
2. Password - the password selected upon account creation.

Upon entering account details, you can login by pressing the sign in button at the bottom.

Once you have signed in, you will be redirected to the landing page (4.1). If you wish to create an account, you can click on the Create Account tab at the top, which will redirect you to the Create Account (3.2) tab. If you forgot your password, you can click on the password reset button to access the password reset page (3.3).

[ *This space is intentionally left blank.* ]

**3.2. Create Account (*O: Roberts, M1: Thompson, M2: Zheng*)**

The screenshot shows the 'Create a new account' form. At the top, there is a 'Sign In' button on the left and a 'Create Account' button on the right. Below the buttons, the text 'Create a new account' is displayed. The form consists of seven input fields, each labeled with a number from 1 to 7. The first field (Username) has a red border around it. The second field (Password) and third field (Confirm Password) both have eye icon password visibility toggles. The fourth field (Email), fifth field (Given Name), and sixth field (Family Name) all have red borders around them. The seventh field (mm / dd / yyyy) also has a red border. A large teal 'Create Account' button is located at the bottom of the form. Below the button, a link 'Back to Sign In' is visible.

1. Username

2. Password

3. Confirm Password

4. Email

5. Given Name

6. Family Name

7. mm / dd / yyyy

Create Account

Back to Sign In

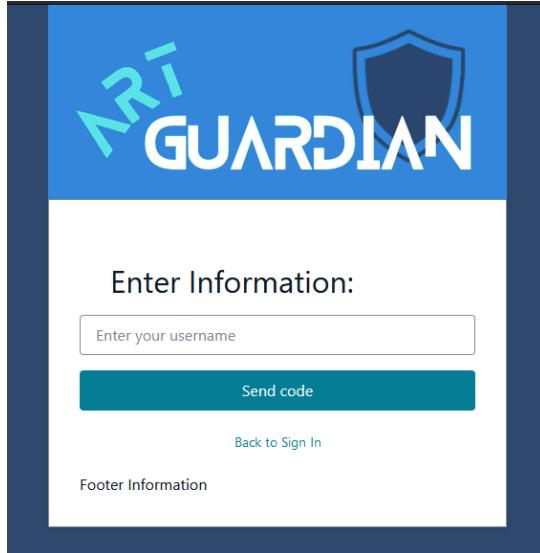
Account creation for the Art Guardian web application requires you to fill out the following fields:

1. Username - Desired username to login with
2. Password - Password must be at least 8 characters with at least one capital letter, number, and special character. Clicking on the button with the eye symbol on the right side of the field will display the password created in the field. Clicking the button again will hide the password.
3. Confirm Password - A confirmation for the password that was created in field 2. Clicking on the button with the eye symbol on the right side of the field will display the password created in the field. Clicking the button again will hide the password.
4. Email - Email used for account creation and as a contact.
5. First Name - Your legal given name
6. Last Name - Your legal family name
7. Date of birth - The day, month and year of birth

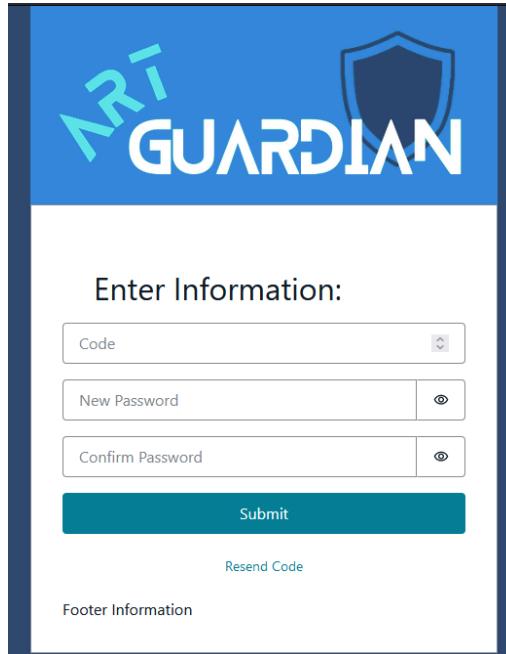
The Create account button will, once all information is entered, create your account and route you to the landing page (4.1). The sign in button on the bottom and the tab at the top will take you back to the sign in tab (3.1.2) when clicked.

[ *This space is intentionally left blank.* ]

### 3.3. Password Reset (*O: Roberts, M1: Thompson, M2: Zheng*)



In case you forget your password, you can select the reset password button to be navigated to the page displayed above. You can then enter your username to be emailed a code to enter, as displayed above, which then allows you to gain access to the reset password process.



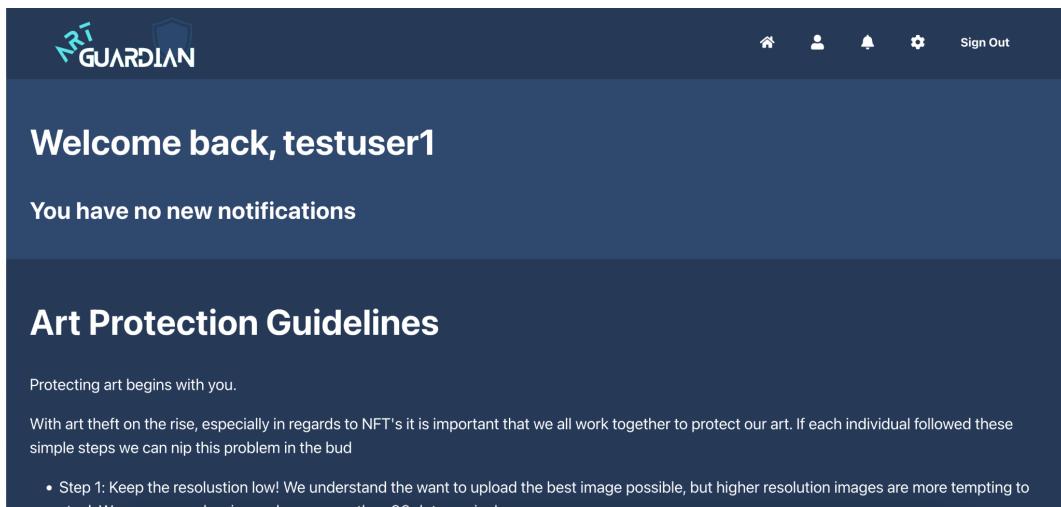
On the page displayed above, you can enter your desired new password and hit submit. In case the code expires or is not sent, you can click on the resend code button, which will resend the code to

your email. Both the new password and confirm password fields have the eye button which allows you to show or hide the new password.

## 4. Site Navigation

### 4.1. Landing Page (*O: Diaz, M1: Roberts, M2: Kidd*)

After creating your account or signing in, you will be redirected to the landing page. At the top of the screen, a navigation bar will appear (see section 4.2).



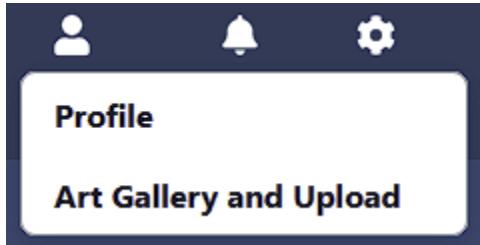
The landing page shall show the number of notifications you currently have. If you have any new notifications, you can click on the number to be redirected to the notifications page (see section 4.4). A section for general art protection guidelines will appear below the number of notifications.

### 4.2. Navigation Bar (*O: Diaz, M1: Roberts, M2: Thompson, M3: Zheng*)



After you login or create your account, the top of the screen will display a navigation bar which will have the five main menu items:

1. Home button
2. User profile drop-down (see section 4.3)

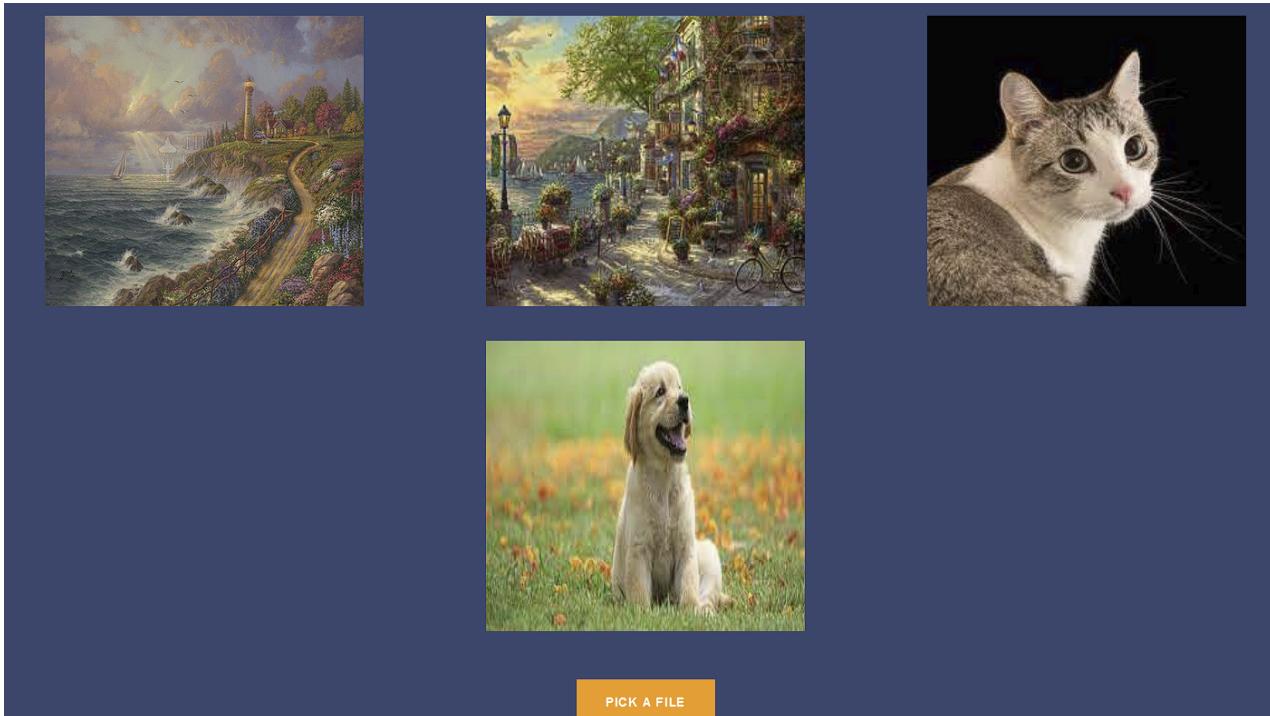


3. Notifications button (see section 4.4)
4. Settings button (see section 5)
5. Sign-out button

Each menu item will redirect you to the respective page. Clicking on the Art Guardian logo will redirect you to the landing page. Clicking the sign-out button will sign you out and redirect you back to the authentication page.

### 4.3. Art Protection

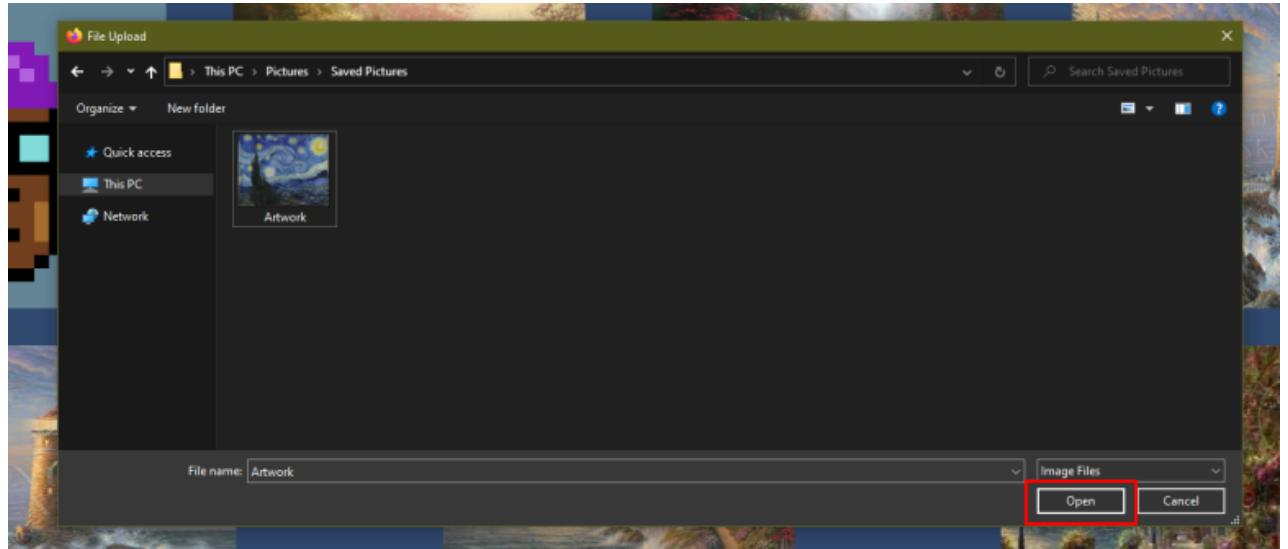
#### 4.3.1. Art Upload (*O: Ihde, M1: Thompson, M2: Zheng*)



On the Art Gallery page, there will be a “pick a file” button, which you can click on to upload art from your computer into your art gallery.

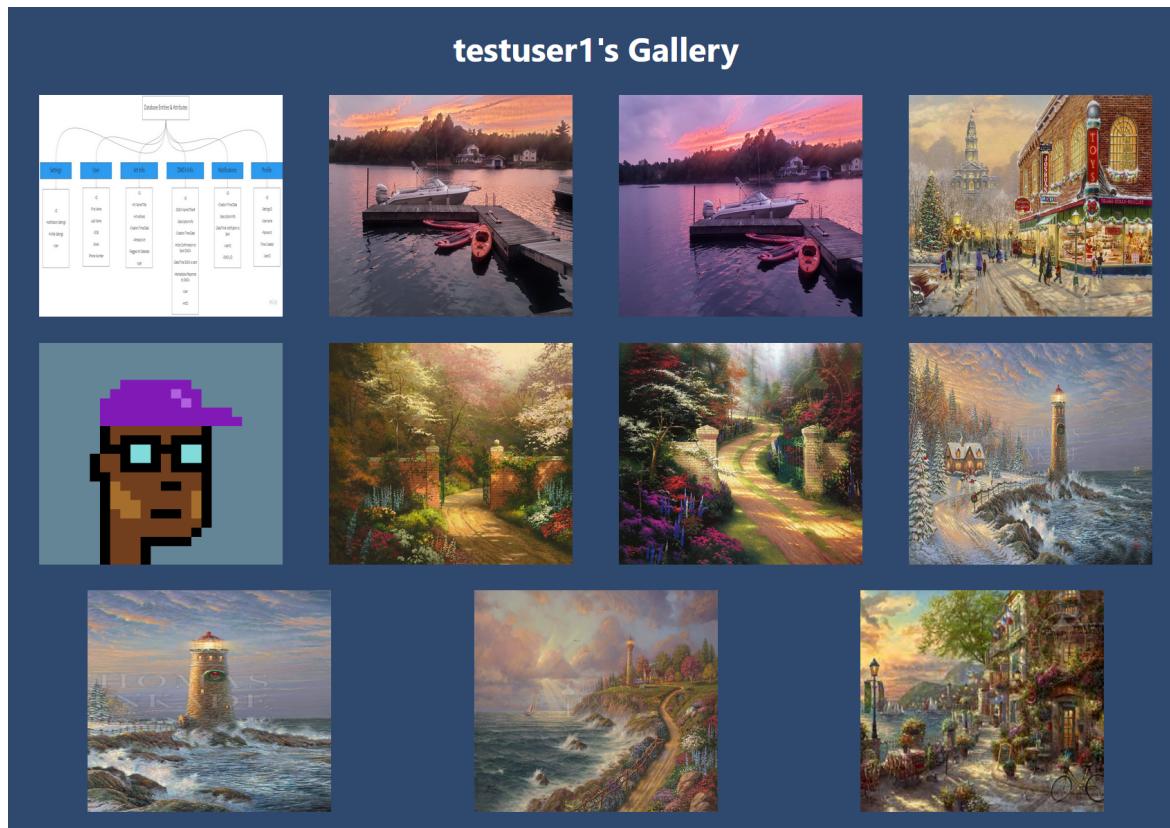


Clicking on this button will open up your file browser, in which you can navigate to your image. Once you select your image in the file browser, click “open” to upload the image to your art gallery.



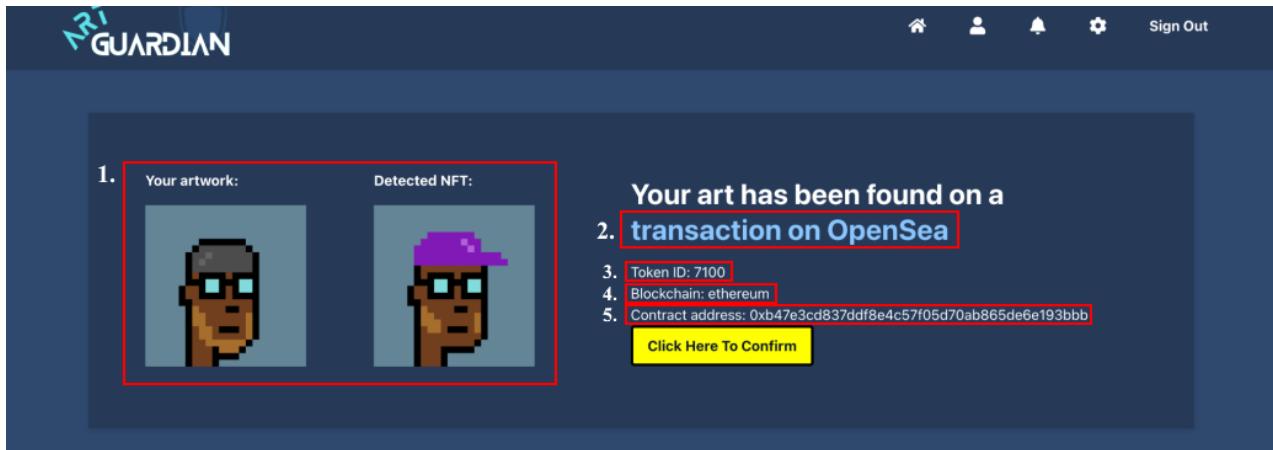
#### 4.3.2. Art Gallery (*O: Ihde, M1: Kidd*)

The art gallery page is where you can view your uploaded art. To get to this page, click the profile icon in the navigation bar then select “Art Gallery and Upload”.



#### 4.4. Alerts

##### 4.4.1. Art Notifications (*O: Diaz, M1: Thompson*)



The notification page shall display the list of NFTs that the application has detected to be, or be similar to, a piece of artwork on the user's gallery. Each notification lists the following information of the NFT:

1. Image User Artwork and NFT
2. Marketplace used
3. Token ID
4. Blockchain
5. Contract address

Each notification will also display the artist's original artwork to compare it to the detected NFT. The user can click the link to see the NFT on the marketplace it was detected on, in which they will be redirected to the URL of the NFT in a new tab.

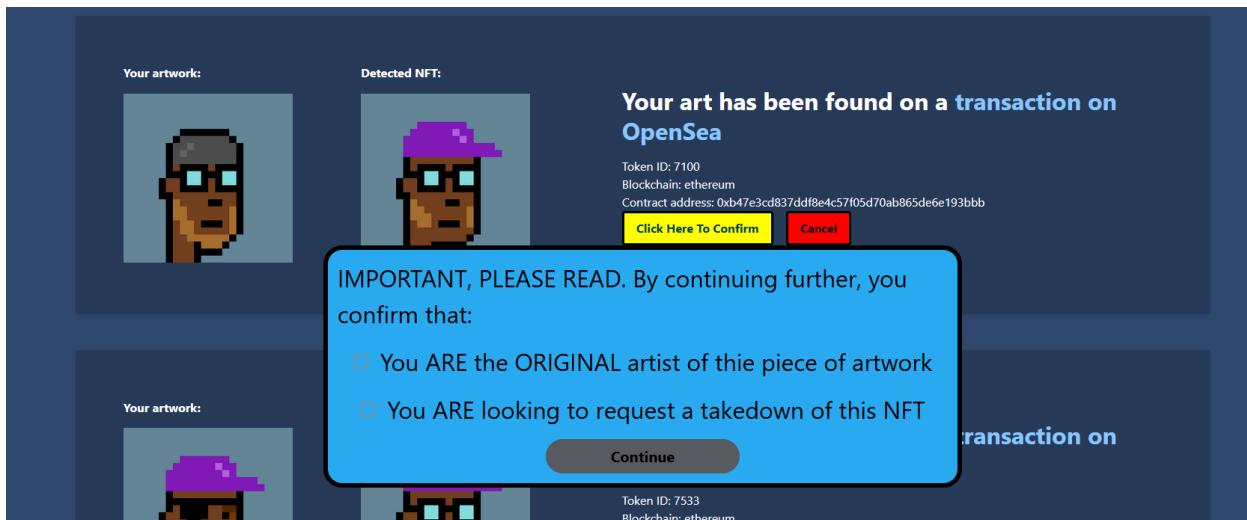
There will be a button that loads a pop-up regarding the next step of confirming the artwork (see section 4.4.2).

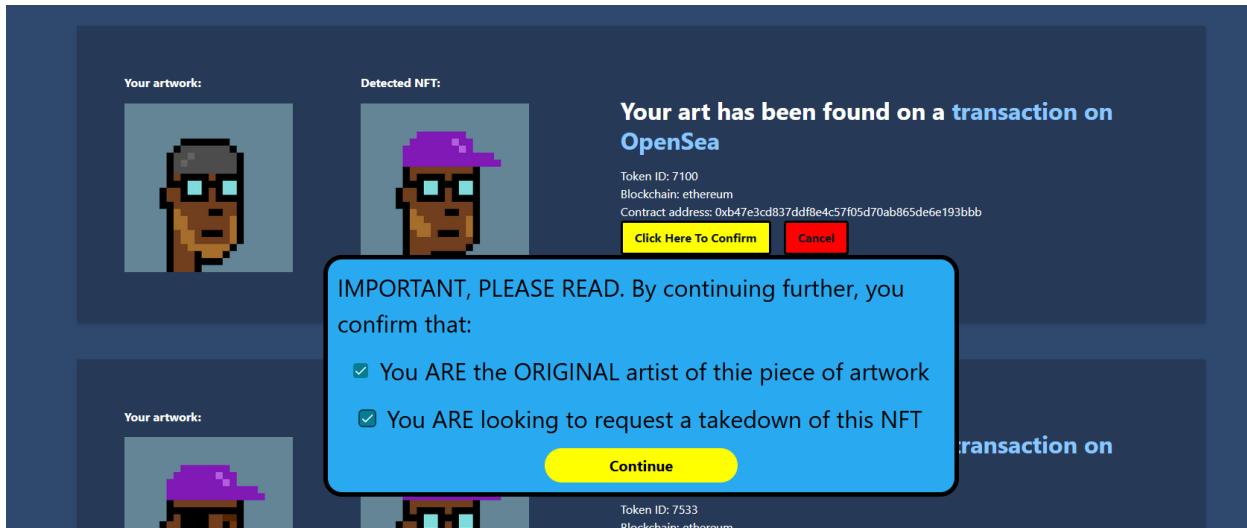
#### 4.4.2. Art Confirmation (*O: Ihde, M1: Kidd*)

Each notification will have an art confirmation button, which launches a pop up asking for the artist to confirm that the art is yours and that you want to send a DMCA takedown request. If both checkboxes are selected then you will be allowed to continue to the DMCA takedown requisition submission page, otherwise the continue button will be disabled. You can hit the cancel button to exit out of the confirmation process.

##### Unchecked Confirmation:

[ *This space is intentionally left blank.* ]



**Checked Confirmation:****4.4.3. DMCA Takedown Request Submission (*O: Diaz, M1: Zheng*)**

After you confirm your artwork has been correctly detected, you will be redirected to the DMCA takedown request submission page. The generated DMCA takedown request will be displayed as a preview, which you can then scroll up or down to view more of. The request has a fixed format, where certain information of the NFT or the user is filled in respectively. By default, the submit button will be disabled. To submit the request, you must provide a drawn e-signature in the space provided below the DMCA request preview. You may clear the e-signature space if you wish to restart, which will disable the submit button until a drawn e-signature is provided again.

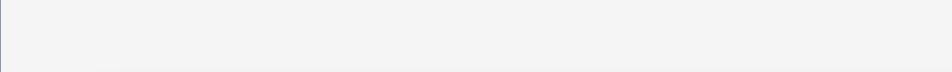
**E-signature NOT provided:**

To OpenSea, Art Guardian is acting on behalf of the copyright owner of the art "Triangle". [link and token ID would go here] This letter is official notification under the provisions of Section 512(c) of the Digital Millennium Copyright Act ("DMCA") for removal of the above-referenced copyright infringement(s). Art Guardian hereby requests that you immediately issue a cancellation message as specified in RFC 1036 for the specified postings and prevent the infringer, who is identified by its Web address, from posting the infringing art to your servers in the future. The law requires you to "expeditiously remove or disable access to" the infringing works of art upon receiving this notice. As a service provider, noncompliance may result in a loss of immunity for liability under the DMCA as cited above.

I have a good faith belief that use of the material in the manner complained of herein is not authorized by the copyright holder, or the law. The information provided is true and accurate to the best of my knowledge. I swear under penalty of perjury that I am the copyright owner or have the authority to act on behalf of the copyright owner.

Sincerely,  
Art Guardian  
Email  
Address  
Phone Number

\*Required



**Clear** **Submit**

**E-signature provided:**

To OpenSea, Art Guardian is acting on behalf of the copyright owner of the art "Triangle". [link and token ID would go here] This letter is official notification under the provisions of Section 512(c) of the Digital Millennium Copyright Act ("DMCA") for removal of the above-referenced copyright infringement(s). Art Guardian hereby requests that you immediately issue a cancellation message as specified in RFC 1036 for the specified postings and prevent the infringer, who is identified by its Web address, from posting the infringing art to your servers in the future. The law requires you to "expeditiously remove or disable access to" the infringing works of art upon receiving this notice. As a service provider, noncompliance may result in a loss of immunity for liability under the DMCA as cited above.

I have a good faith belief that use of the material in the manner complained of herein is not authorized by the copyright holder, or the law. The information provided is true and accurate to the best of my knowledge. I swear under penalty of perjury that I am the copyright owner or have the authority to act on behalf of the copyright owner.

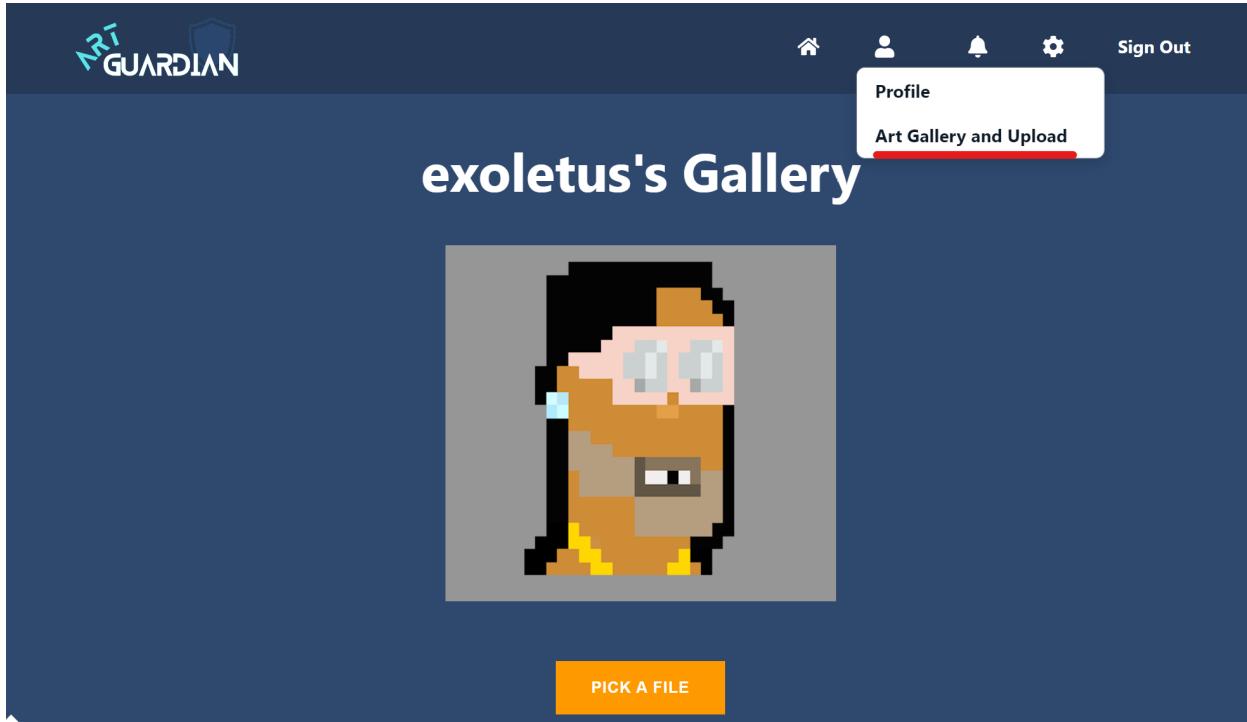
Sincerely,  
Art Guardian  
Email  
Address  
Phone Number

\*Required



**Clear** **Submit**

#### 4.4.4. Whitelisting (*O: Diaz, M1: Hite*)



To whitelist a specific piece of your artwork, you will first need to navigate to the ‘Art Gallery and Upload’ section of your account and click on it. From there, you will either need to upload the artwork you plan on whitelisting or choose from the already uploaded art. Simply click on the respective artwork and a drop-down entry will appear.

The third entry down will give you the option of either whitelisting your art entry or not whitelisting your art entry. Once you’ve answered this entry, you can click the “Create an Art Entry” button at the bottom of the drop down selections to have these changes made to your artwork.

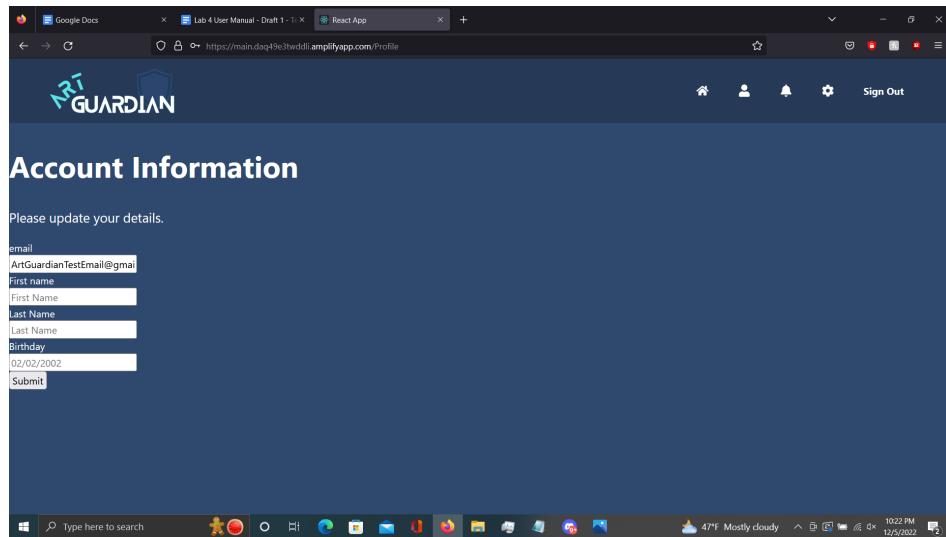
**Add a new Art entry:**

---

exoletus
Type a fileName...
Whitelist: Yes I would like to whitelist
Type a TokenId...
<b>Create an Art Entry</b>

## 5. Account Management

### 5.1. User/Account Settings (*O: Diaz, M1: Hite*)

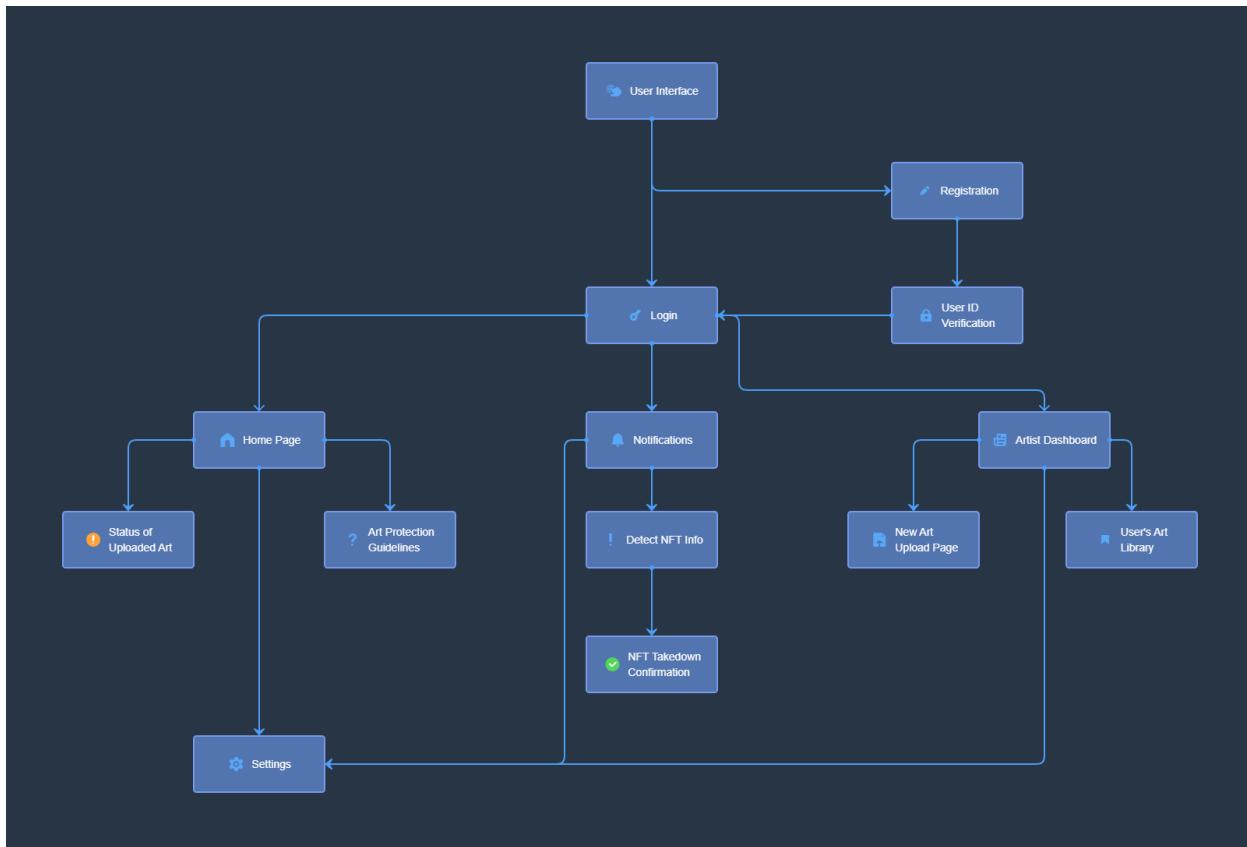


After navigating to the account page, here is where you can change your user information.

Simply enter the information you wish to change such as email, your name, and birthday and click on the submit button below the form to update your account information.

[ *This space is intentionally left blank.* ]

## 6. Site Map (*O: Hite, M1: Ihde*)



## 7. Glossary

**Amazon DynamoDB:** cloud-based database service which can work with other AWS services

**Amazon RDS ( Relational Database Service):** cloud-based database service which can work with other AWS services

**Art Platform:** A site that artists use to publish their art

**AWS (Amazon Web Services):** Largest provider of various cloud computing services

**AWS Amplify:** an AWS service for building full-stack web applications

**Blockchain:** A decentralized, immutable, public ledger that is split among multiple computers

**CSS:** style sheet language that specifies the style and layout of how documents are displayed in a web browser

**DMCA (Digital Millennium Copyright Act) takedown:** act of taking down a copyrighted work from a website on behalf of the owner of that work

**Git:** version control system for tracking software changes

**GitHub:** online hosting of the git version control system

**Gmail API:** a programming interface for the creation and sending of emails

**HTML:** markup language for displaying documents in the web browser

**JavaScript:** a general purpose programming language often used for web development

**Minting:** Using a piece of data, such as an image, to create a unique NFT

**MySQL:** a relational database management system

**NFT:** A sellable, tradeable, non-fungible token that exists on the blockchain and represents some form of data

**NFT Marketplace:** website where NFTs are sold

**NFTport API:** interface for working with popular NFT blockchains and markets

**OpenCV:** open-source computer vision library for Python

**React:** open-source, front-end JavaScript library for creating websites with modern user interfaces

**Stripe API:** programming interface for verifying a user's identity

**Whitelisting:** An optional mechanism that explicitly allows the user to identify the images in their art library in which they are okay with being widely-distributed.