

Lab IV - Art Guardian User Manual

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1. Introduction (O: Roberts)	3
2. Accessing Art Guardian (O: Roberts)	3
3. Getting Started (O: Roberts)	3
3.1. Sign In Page(O: Roberts)	3
3.2. Create Account(O: Roberts)	4
3.3. Password Reset(O: Roberts)	5
4. Site Navigation	6
4.1. Landing Page (O: Diaz, M1: Roberts)	6
4.2. Navigation Bar (O: Diaz, M1: Roberts)	7
4.3. Art Protection	7
4.3.1. Art Upload (O: Ihde)	7
4.3.2. Art Gallery (O: Ihde)	8
4.4. Alerts	9
4.4.1. Art Notifications (O: Diaz)	9
4.4.2. Art Confirmation (O: Ihde)	10
4.4.3. DMCA Takedown Request Submission (O: Diaz)	11
4.4.4. Whitelisting	13
5. Account Management	14
5.1. User/Account Settings	14
6. Site Map	15
7. Glossary	16

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.

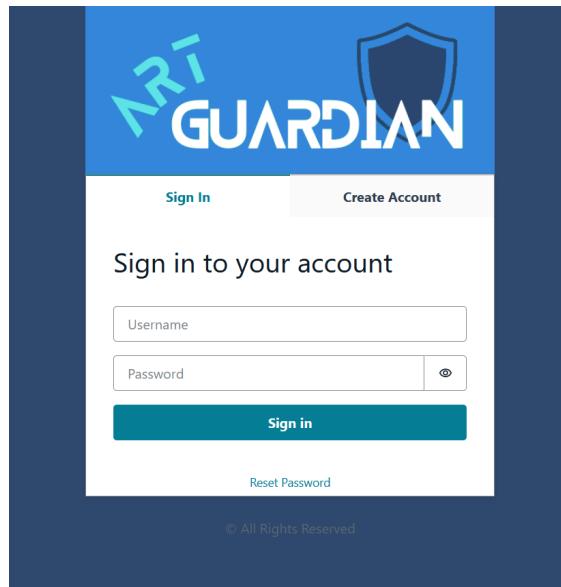
2. Accessing Art Guardian (*O: Roberts*)

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

3. Getting Started (*O: Roberts*)

Navigate to the URL found above on any web browser.

3.1. Sign In Page(*O: Roberts*)

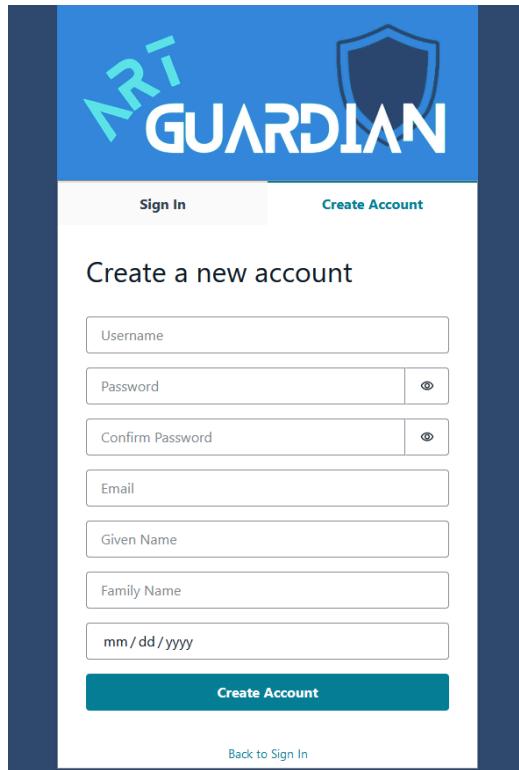


Sign in is open by default, if the user have an account they will be required to enter these fields:

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

Upon entering the account details the user can press the sign in button at the bottom in order to sign in order to be signed into the account and be redirected to the landing page (4.1). The Create Account tab at the top, when clicked, will take the user to the Create Account (3.2) tab. If the password is forgotten the user can utilize the password reset button to access the password reset page (3.3)

3.2. Create Account(*O: Roberts*)

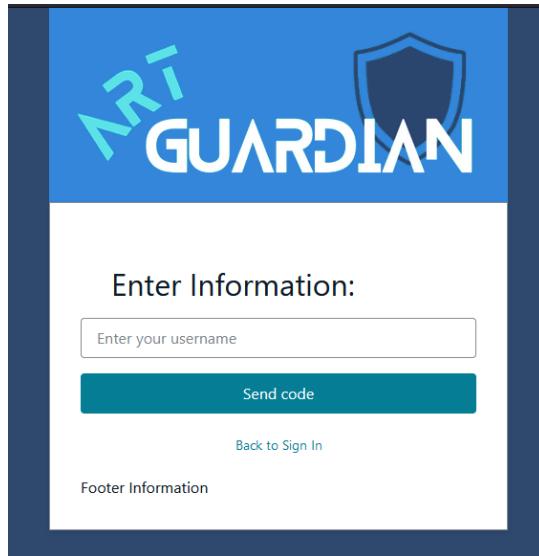


Account creation for the Art Guardian app requires you to fill out these fields:

- 1) Account Fields:
 - a) Username- desired username to login
 - b) Password- password must be at least 8 characters with at least one capital letter, number, and special character.
 - c) Email- email used for account creation and as a contact.
 - d) First Name- your legal given name
 - e) Last Name- your legal family name
 - f) 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.

3.3. Password Reset(*O: Roberts*)



In the case of forgetting a password, after selecting reset password you will be navigated to this page. Here you can enter their username to be emailed a code to enter and gain access to the reset password process.

[This space is left intentionally blank]

The screenshot shows a mobile-style interface for changing a password. At the top, the "ART GUARDIAN" logo is displayed. Below it, the heading "Enter Information:" is centered. There are three input fields: "Code" (with a dropdown arrow icon), "New Password" (with an eye icon for visibility), and "Confirm Password" (also with an eye icon). A large teal "Submit" button is positioned below the password fields. At the bottom of the form, there are two links: "Resend Code" and "Footer Information".

Here you can enter your desired new password and submit, the the code expires or does not send clicking the Resend Code button will resend the code.

4. Site Navigation

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

After account creation or sign 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 screenshot shows the "Welcome back, testuser1" page. At the top right, there is a navigation bar with icons for home, profile, notifications, settings, and sign out. The main content area features a dark blue header with the text "Welcome back, testuser1" and "You have no new notifications". Below this, a section titled "Art Protection Guidelines" contains the following text:
Protecting art begins with you.
With art theft on the rise, especially in regards to NFT's it is important that we all work together to protect our art. If each individual followed these simple steps we can nip this problem in the bud
• Step 1: Keep the resolution low! We understand the want to upload the best image possible, but higher resolution images are more tempting to steal. We recommend an image be no more than 96 dots per inch.

[This page left intentionally blank]

The landing page shall show the number of notifications you currently have. If you have notifications, you may click the number shown and it will redirect you 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*)



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

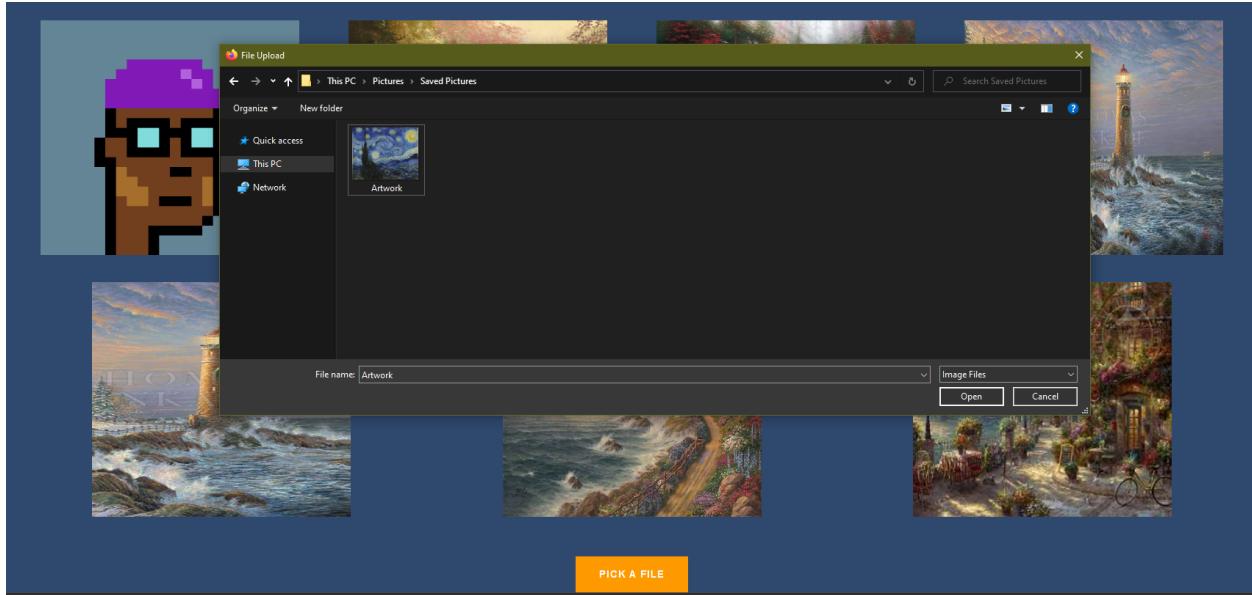
- Home button
- User profile drop-down (see section 4.3)
- Notifications button (see section 4.4)
- Settings button (see section 5)
- Sign-out button

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

4.3. Art Protection

4.3.1. Art Upload (*O: Ihde*)

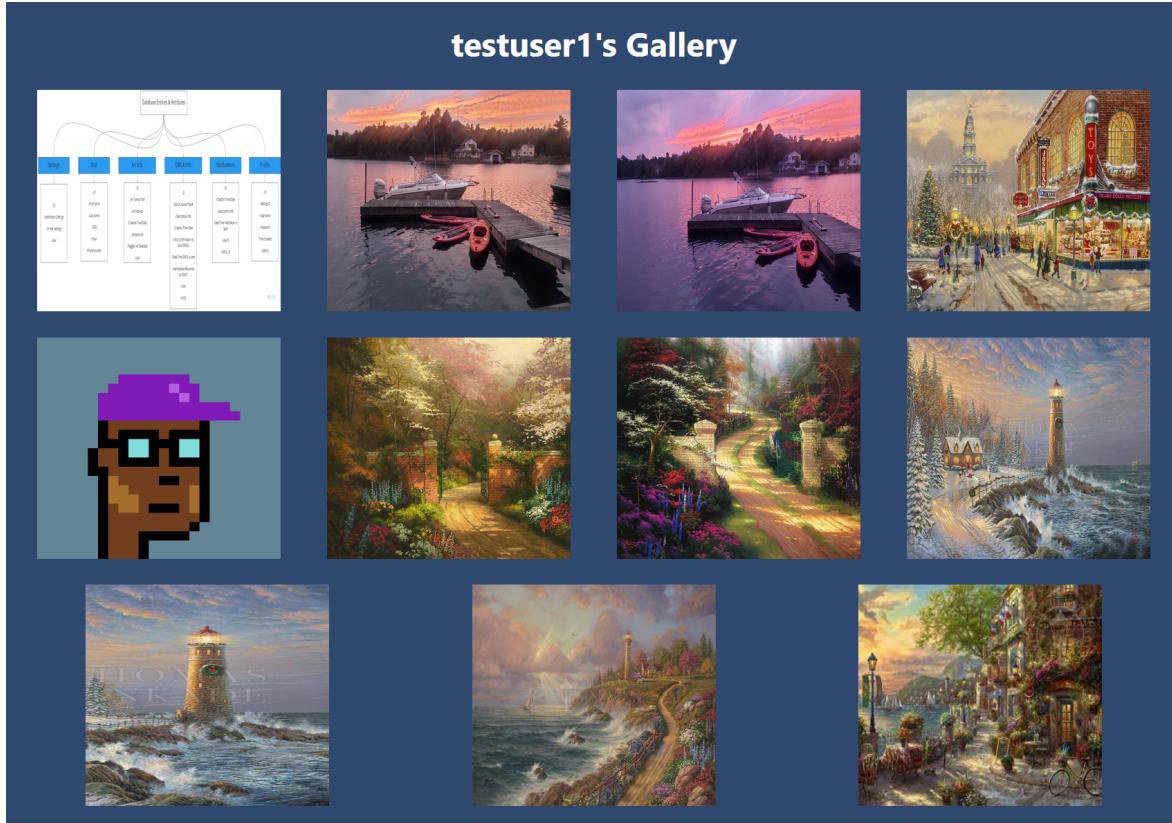
On the Art Gallery page, there will be a “pick a file” button, which you can click on to upload art from their computer into their art gallery. Clicking on this button will open up your file browser, in which you can navigate to your image. Once you select your image in the file browser, click “open” to upload the image to your art gallery.



4.3.2. Art Gallery (*O: Ihde*)

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”

[Space left intentionally blank]



4.4. Alerts

4.4.1. Art Notifications (*O: Diaz*)

Your artwork:



Detected NFT:



Your art has been found on a transaction on OpenSea

Token ID: 7100
Blockchain: ethereum
Contract address: 0xb47e3cd837ddf8e4c57f05d70ab865de6e193bbb

[Click Here To Confirm](#)

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:

- Image of NFT
- Marketplace used
- Token ID
- Blockchain
- 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.

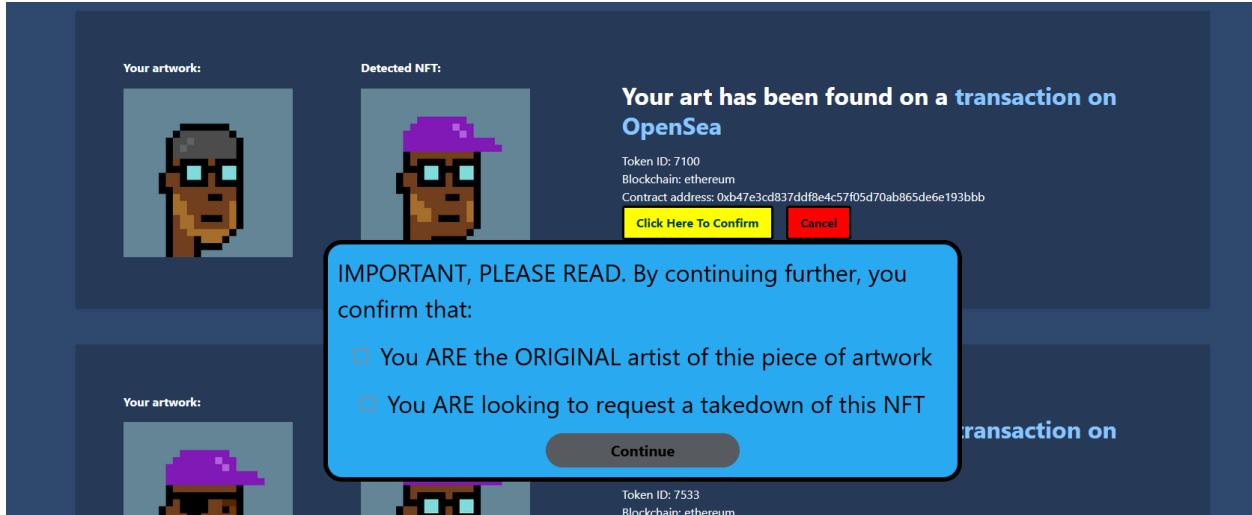
There will be a button that loads a pop-up regarding the next step of confirming the artwork (see section 4.4.2).

4.4.2. Art Confirmation (*O: Ihde*)

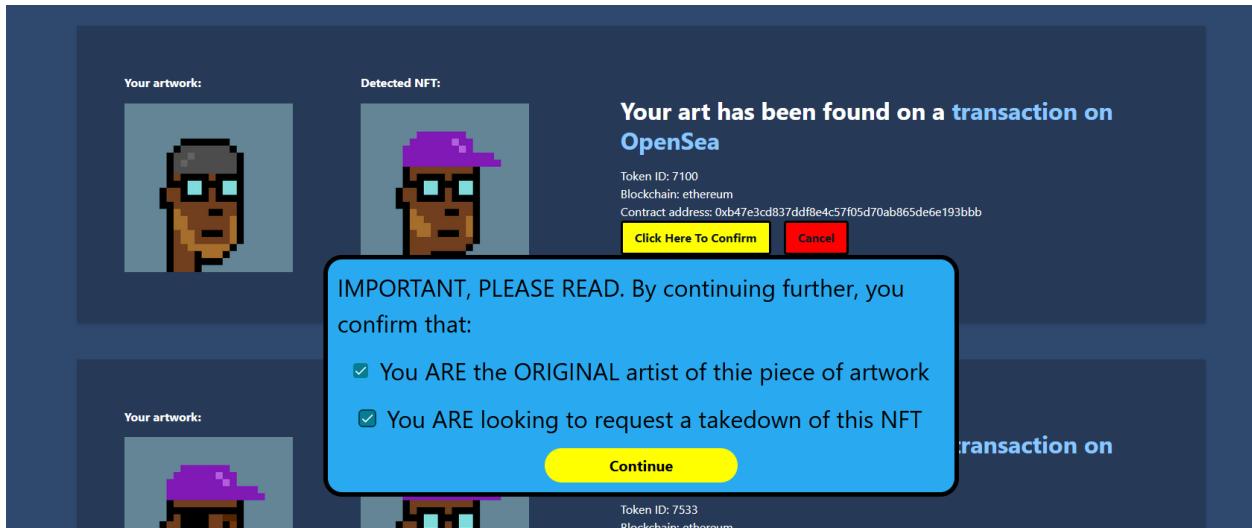
Each notification will have an art confirmation button, which launches a pop up asking for the artist to confirm that the art is yours and that you want to send a DMCA takedown request. If both checkboxes are selected then the you will be allowed to continue to the DMCA takedown requisition submission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

Unchecked Confirmation:

[Space left intentionally blank]



Checked Confirmation:



4.4.3. DMCA Takedown Request Submission (*O: Diaz*)

After the user confirms their artwork has been correctly detected, they will be redirected to the DMCA takedown request submission page. In a scroll view, the generated DMCA takedown request will display for the user to preview. 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. In order to submit the request, the user must provide a drawn e-signature in the space provided below the DMCA request preview. The user may clear the e-signature if they please, in which the submit button will be disabled 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.

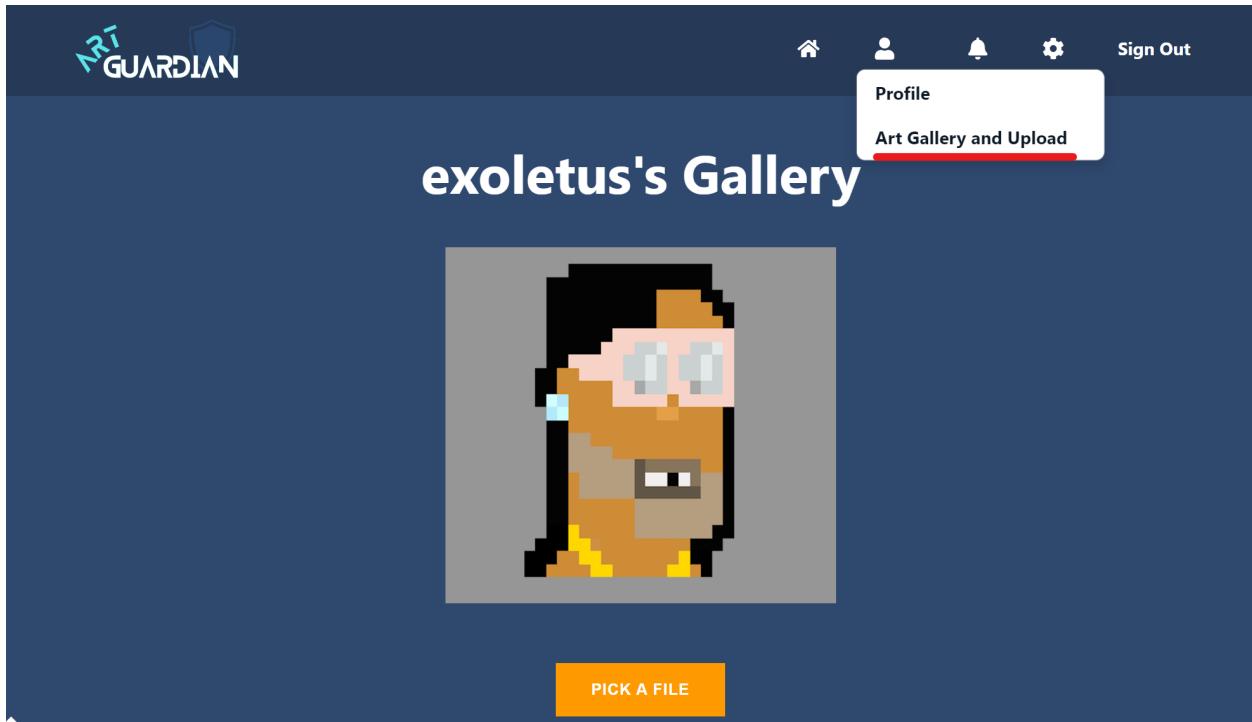
I have a good faith belief that use of the material in the manner complained of herein is not authorized by the copyright holder, or the law. The information provided is true and accurate to the best of my knowledge. I swear under penalty of perjury that I am the copyright owner or have the authority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

Sincerely,
Art Guardian
Email
Address
Phone Number

*Required

Clear Submit

4.4.4. Whitelisting



To whitelist a specific piece of your artwork, first you will 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

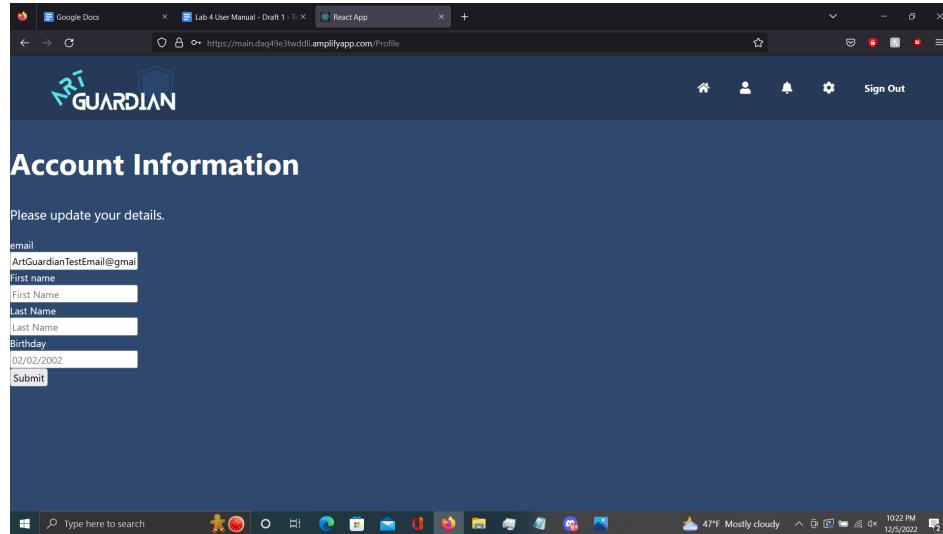
Type a TokenId...

Create an Art Entry

A screenshot of a modal window titled "Add a new Art entry:". It contains four input fields: a text field with "exoletus", a placeholder field "Type a fileName...", a dropdown menu set to "Yes I would like to whitelist", and a placeholder field "Type a TokenId...". At the bottom is a blue button labeled "Create an Art Entry".

5. Account Management

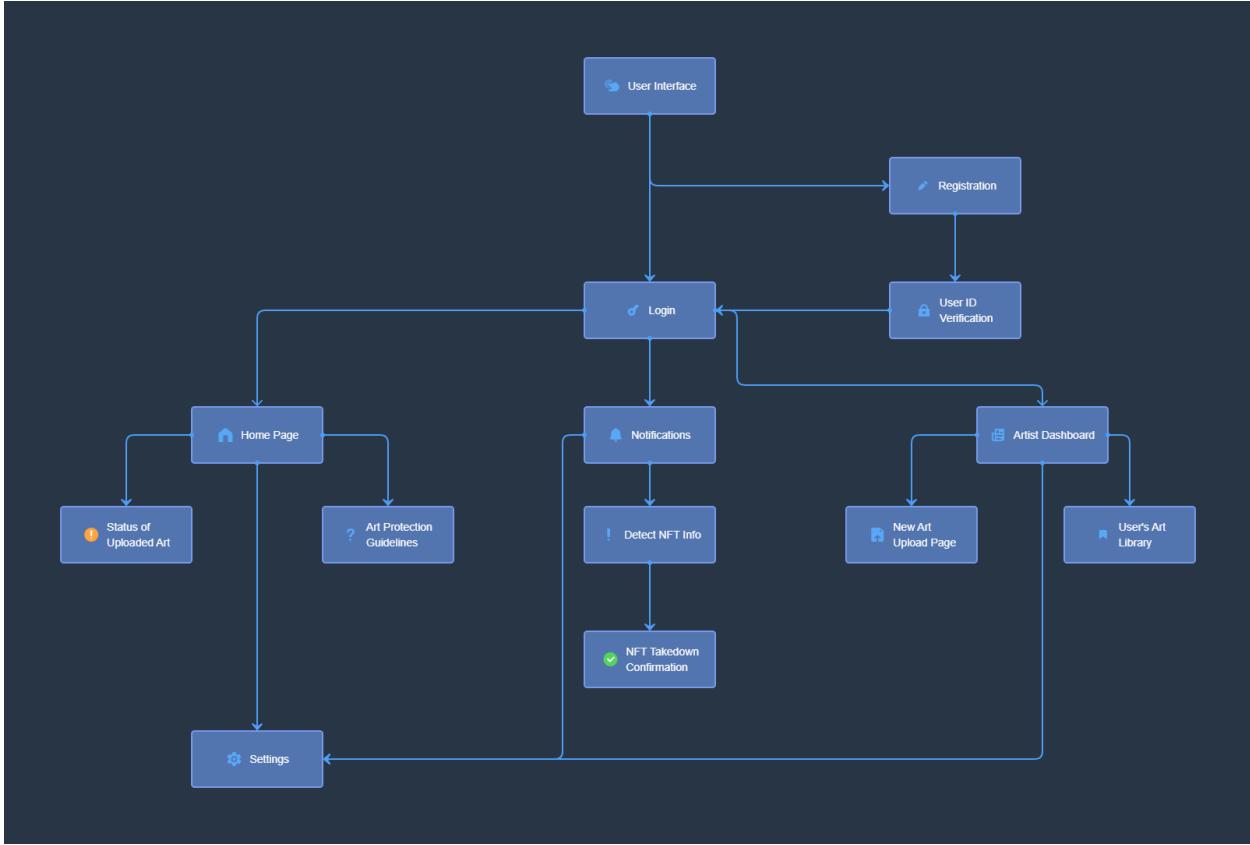
5.1. User/Account Settings



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 page left intentionally blank]

6. Site Map



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.