

Smart Gallery

Create a unique Smart Gallery with our great community!

DON'T HESITATE TO MAKE YOUR SPIRITUAL CHILD BE ACKNOWLEDGED BY MORE PEERS.

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1. About

Hello, my name is Dang Quynh Trang, and I am a developer, designer, and manager of the Smart Gallery project. I have been working on this project for 3 weeks for the final exam of Special Subject 1 (actually 1.5 week for planning, 0.5 week for fixing Virtual Box errors and 1 weeks for coding...). The whole idea and code of the project is mine, and, yeah, it can be seen that I am also the customer and stakeholder of the project, taking on the roles of developer, designer, and manager to satisfy my own requirements.

Mr. Tran Thanh Nam, as a potential stakeholder, provided me with some core requirements for the project. Firstly, the technologies involved are Symfony, Twig, MySQL, phpMyAdmin, easyAdmin, and everything taught throughout his course. Secondly, security must be ensured. Thirdly, proper documentation is required. And lastly, work hard! :v

So let's see what I did in my project.

2. Objectives

The core content of the website is "**Smart Gallery**".

What is "**Gallery**"? Gallery is an area of a building that is usually long, narrow, and has a specific function. You might visit an art gallery to check out a row of paintings hung on its walls. In this context, it is defined as one room of a larger place, a series of rooms, or a whole building devoted to art.

Why is it "**Smart**"? Because the gallery is digital, it serves an unlimited and ever-expanding network of users, dynamically improving the user experience and ensuring that anyone can freely open a gallery and share it with others.

Well, those are the criteria I set forth. My guess is that this project is more responsive than that, but that depends on the individual user's experience. And thanks to that, the project will develop and enhance the user experience even more.

3. Architecture

This section covers all the main structures of the website.

1. Home

1.1.Header

- 1.1.1. Logo
- 1.1.2. Identical Name
- 1.1.3. Navigation Bar
- 1.1.4. Heading
- 1.1.5. Sub-Heading

1.2.Body

- 1.2.1. Category Filter
 - 1.2.1.1. According To Category
 - 1.2.1.2. According To Total Views (auto)
- 1.2.2. Artworks Display (only approved artwork)
 - 1.2.2.1. Illustration
 - 1.2.2.2. Artwork Name
 - 1.2.2.3. Artist Name
 - 1.2.2.4. Link To Artwork Field
- 1.2.3. Navigation Button
 - 1.2.3.1. Previous Artworks (9)
 - 1.2.3.2. Next Artworks (9)

1.3.Footer

- 1.3.1. Contact Information
- 1.3.2. Copyright
- 1.3.3. Reference

2. Search

2.1.Search Engine

- 2.1.1. Search Options
 - 2.1.1.1. Search By Name
 - 2.1.1.2. Search By Artist
 - 2.1.1.3. Search By Categories
 - 2.1.1.4. Search By Name + Artist
 - 2.1.1.5. Search By Name + Categories
 - 2.1.1.6. Search By Artist + Categories
 - 2.1.1.7. Search By All
 - 2.1.1.8. Search By Nothing
- 2.1.2. Search Button

2.2.Search Results (only approved artwork)

- 2.2.1. Found (similar to Home structure)
- 2.2.2. Not Found
 - 2.2.2.1. Error Header

2.2.2.2. Error Detail

3. Login

3.1.Login

- 3.1.1. Username
- 3.1.2. Password
- 3.1.3. Validation
- 3.1.4. Login Button

3.2.Register

- 3.2.1. Email
- 3.2.2. Username
- 3.2.3. Name (to display)
- 3.2.4. Password
- 3.2.5. Validation
- 3.2.6. Register Button

4. My Gallery (accessed by users only)

4.1.View My Gallery

- 4.1.1. Found (similar to **Home** structure)
- 4.1.2. Not found

4.2.Manage My Gallery (default)

- 4.2.1. Add New Artworks
 - 4.2.1.1. Name
 - 4.2.1.2. Completion Date
 - 4.2.1.3. Category
 - 4.2.1.4. Artwork File (illustration by file)
 - 4.2.1.5. Artwork URL (illustration by URL)
 - 4.2.1.6. Description
 - 4.2.1.7. Add Button
- 4.2.2. Edit Artwork
 - 4.2.2.1. Belong To My Gallery (similar to **Add New Artwork** structure, Edit Button)
 - 4.2.2.2. Belong To Another User: Access Denied (similar to **Not Found** structure)
- 4.2.3. Delete Artwork
 - 4.2.3.1. Belong To My Gallery
 - 4.2.3.1.1. Confirmation Triggered (yes/no)
 - 4.2.3.2. Belong To Another User: Access Denied (similar to **Not Found** structure)

4.3.Add New Artwork (similar to **Add New Artwork** structure)

4.4.View Manual

- 4.4.1. In **View My Gallery** Page
- 4.4.2. In **Manage My Gallery** Page
- 4.4.3. In **Add New Artwork** Page

5. Administer (accessed by admin & mod only)

5.1.Header

5.1.1. Icon

5.1.2. Heading

5.2.Manage Area

5.2.1. For admin

5.2.1.1. Manage Artworks

5.2.1.2. Manage Categories

5.2.1.3. Manage Comments

5.2.1.4. Manage Likes

5.2.1.5. Manage Users

5.2.2. For mod

5.2.2.1. Manage Artworks

5.2.2.2. Manage Categories

5.2.2.3. Manage Comments

5.2.2.4. Manage Likes

6. Logout (accessed by users only)

7. View Artwork (only **approved** artwork or only **current user's artwork**, else **Not Found** structure)

7.1.Heading

7.2.Sub-heading

7.2.1. Completion Date

7.2.2. Total Views

7.2.3. Total Likes

7.2.4. Total Comments

7.3.Like Button

7.3.1. Like State

7.3.2. Liked State (accessed by user only)

7.4.Illustration

7.5.Description

7.6.Categories

7.7.Comment Room

7.7.1. Comments Flow (in recent order)

7.7.2. No comment

7.7.2.1. For User: Cute Encouragement To Comment

7.7.2.2. For Viewer: Cute Encouragement To Login And Comment

7.7.3. Comment Form (**accessed by user only**)

7.7.3.1. Content Area

7.7.3.2. Comment Button

4. User Hierarchy

1. **Admin:** User who is fully granted all the privileges of the website
2. **Mod (Moderator):** User who is granted some privileges of the website
3. **User:** who logged in successfully, can be Artist or common User
4. **Viewer:** who can view the web

5. Detail Of Each Functions

This section contains information for each part in Architecture section. To make things easier to follow, let's assume Admin(A), Mod(M), User(U), and Viewer(V) are using this website. Using A, M, U, V in the same time means that I mention one of them being the current user.

1. Home

1.1. Header

- Here is what Viewers can see



SMART GALLERY

[Home](#) [Search](#) [Login](#)

- Here is what Users can see after login



SMART GALLERY

[Home](#) [Search](#) [My gallery](#) [Logout](#)

- Here is what Admin and Mod can see after login



SMART GALLERY

[Home](#) [Search](#) [My gallery](#) [Administer](#) [Logout](#)

- A, U, M, V can see the heading and sub-heading like below

Create a unique Smart Gallery with our great community!

Don't hesitate to make your spiritual child be acknowledged by more peers.

- Clicking **logo** will direct A, U, M, V to **Home** page (/gallery)
- Clicking **Smart Gallery** will direct A, U, M, V to **Home** page (/gallery)
- Clicking **Home** will direct A, U, M, V to **Home** page (/gallery)
- Clicking **Search** will direct A, U, M, V to **Search** page (/search)
- Clicking **Login** will direct A, U, M, V to **Login** page (/login)
- Clicking **My Gallery** will direct A, U, M to their **My Gallery** page (/my_gallery/manage)
- Clicking **Administer** will direct A, M to **Administer** page (/admin)
- Clicking **Logout** will log A, U, M out and direct them to **Home** page (/logout → /gallery)

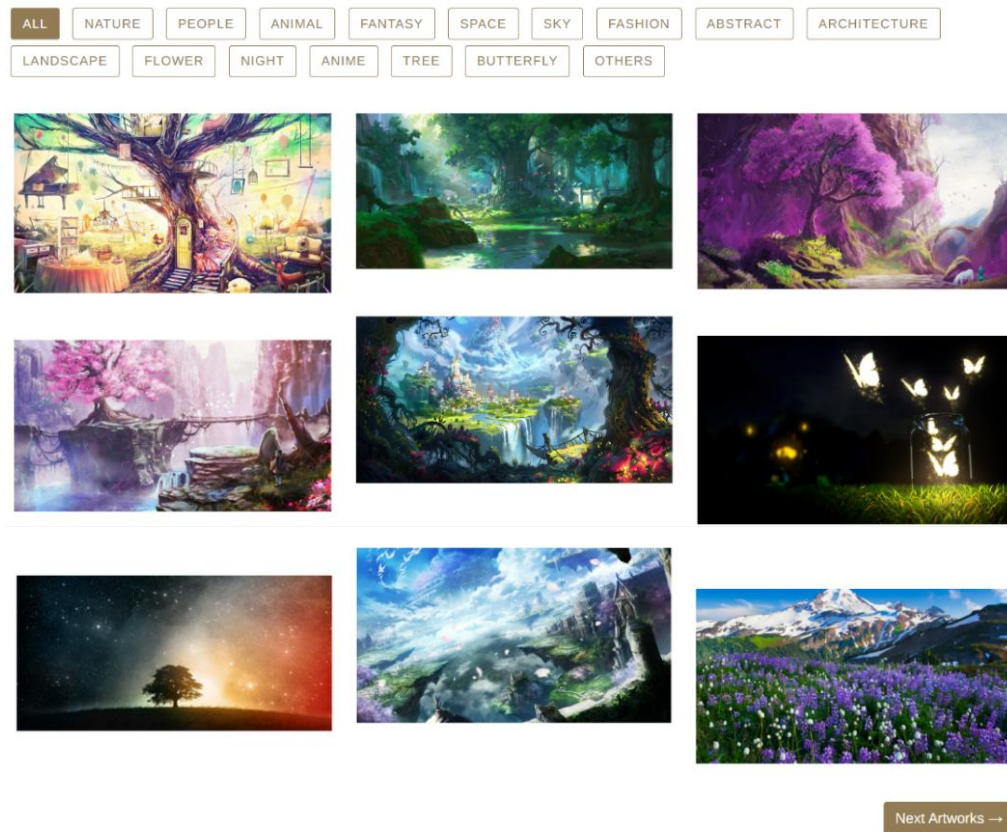
NOTE:

- ❖ The navigation title will be **bold** based on user's current position

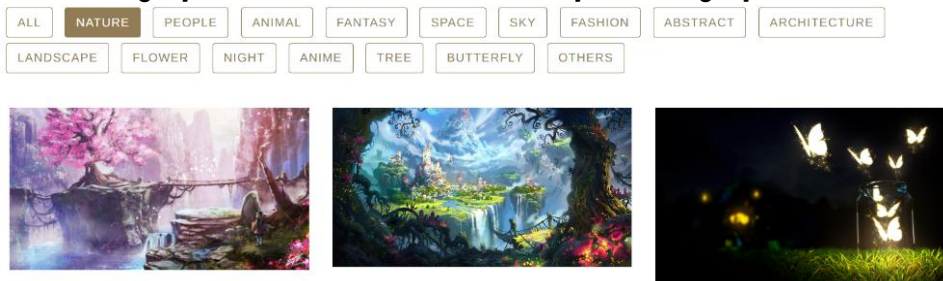
[Home](#) [Search](#) [Login](#)

- ❖ Viewers' access to **My Gallery** page and **Administer** page will require **Login** first
- ❖ Users' access to **Administer** page will be denied

1.2. Body



- The artworks are always ordered by their total views. The hottest the first.
- Only **approved** artworks (artworks that are approved by admin and mod) are displayed.
- Each page will display 9 artworks. The number can be changed.
- Category Filter makes use of bootstrap function (data-groups + data-filter). When A, M, U, V click a category, the artworks will be filtered by that category.



- Move between the page by Next or Previous buttons



- Clicking the **artwork** will direct A, M, U, V to **Artwork field** page (e.g. /artwork/1)

- When A, M, U, V move the mouse to one artwork, it will change like this: (grow bigger, and display name and artist of the artwork)



1.3.Footer

- A, M, U, V can click at each icon to contact me :3

2. Search

2.1.Search Engine

Search Engine

Artwork Name

Artist Name

-- Select the name of artist --

Artwork Categories

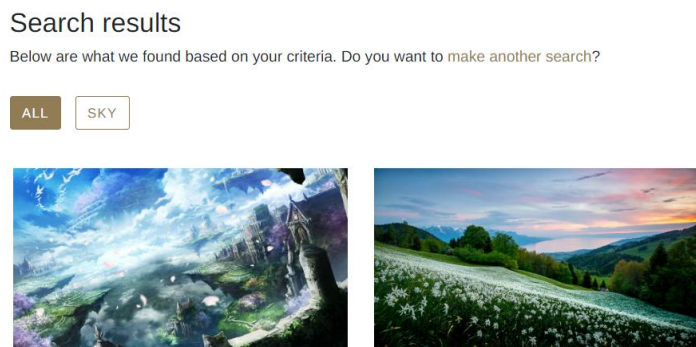
☒ Nature
 ☐ People
 ☐ Animal
 ☐ Fantasy
 ☐ Space
 ☐ Sky
 ☐ Abstract
 ☐ Architecture
 ☐ Landscape
 ☐ Flower
 ☐ Night
 ☐ Anime
 ☐ Tree
 ☐ Butterfly
 ☐ City
 ☐ Others

Search

- A, M, U, V can fill in this engine and click Search to find artworks with criteria they want.
- The interesting thing here is that they do not need to fill in all the form, just the field they think it is necessary.

2.2.Search Results (only approved artwork)

- In case we found the artworks meet criteria, we will direct user to result page, for example:



- In case we cannot, the not-found page appears:

Searching results: Artwork(s) not found

We can not find the artwork(s) that match the keys given. Please try again.

- In case A, M, U, V do not type anything, the result page will display ALL the artworks approved in the gallery.

3. Login

3.1.Login

- A, M, U, V fill in the form and click **Login** button to login
- In case they type the right data, they will successfully login and be directed to **Home** page
- Else they will receive message, for example:

Login Form

Username

Password

**Invalid account. Please try again!*

If you haven't had an account, sign up here!

Login

- Clicking **here** will direct A, M, U, V to the **Register** page

3.2.Register

- A, M, U, V fill in the form and click **Register** button to login
- In case they type the right data, they will successfully login and be directed to **Login** page
- Else they will receive some messages, for example:

Registration Form

Email

**There is already an account with this email*

Username

**There is already an account with this username*

Fullname

Password

You must agree to our Services Terms and Conditions ☒

Register

4. My Gallery (accessed by users only)

4.1.View My Gallery

- If A, M, U haven't added any artworks to his/her gallery, not-found page appears. Clicking **Wanna try it?** will direct A, M, U to the **Add New Artwork** page

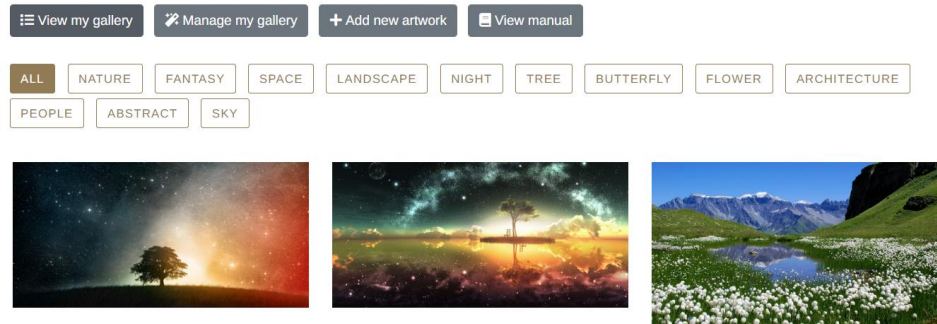
GALLERY NOT FOUND

You haven't upload any artwork in your gallery... Wanna try it?

- If A, M, U added any artworks to his/her gallery, he/she will be able to view them right away
- Only categories related will be shown
- Click **View manual** will trigger unique manual for this page

Đăng Quỳnh Trang's Gallery

Feel free to wander and enjoy your own Smart Gallery~



4.2. Manage My Gallery (default)

Đăng Quỳnh Trang's Manager

We provide structural functions to manage your gallery.

Order	Artwork Name	Completion Date	Views	Likes	Comments	State	Preview	Actions
11	Autumn	Dec 04, 2022	0	0	0	Published		<button>Edit</button> <button>Delete</button>
12	a	Jan 07, 2023	0	0	0	Approving	Error	<button>Edit</button> <button>Delete</button>

← Previous Page

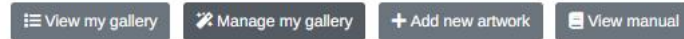
- Click **View my gallery** will direct A, M, U to **View My Gallery** page (/my_gallery)
- Click **Manage my gallery** will direct A, M, U to **Manage My Gallery** page (/my_gallery/manage)
- Click **Add new artwork** will direct A, M, U to **Add New Artwork** page (/my_gallery/artwork/add)
- Click **View manual** will trigger unique manual for this page
- **Order** is used to count the total of artworks
- Artworks is automatically ordered by its total views, with 10 artworks each page. This number can be changed in the future.
- The state of the artwork is "**Approving**" by default, as it is waiting to be approved by Admin or Mod. After receiving approval from Admin or Mod, its state will change to "**Published**"
- When **Add New Artwork**,
 - ❖ If A, M, U provide URL of illustration, **Preview** section will display it
 - ❖ If A, M, U provide image file, **Preview** section will display it
 - ❖ If A, M, U provide both, we appreciate the **file**
 - ❖ If A, M, U provide nothing, or the URL or file provided are corrupted, or the file provided is not Mime image extension, **Preview** section will show **Error**, notifying A, M, U to recheck or artwork is highly unlikely to be approved
- Clicking **Edit** button will direct A, M, U to **Edit** page of editing artwork with its available data
- Clicking **Delete** button will *confirm* A, M, U to delete the artwork.

4.2.1. Add New Artworks (will be mentioned later)

4.2.2. Edit Artwork

Đăng Quỳnh Trang's Manager

We provide structural functions to manage your gallery.




Artwork's Name:




































Completion Date:

Category:

<input checked="" type="checkbox"/> Nature	<input type="checkbox"/> People	<input type="checkbox"/> Animal	<input type="checkbox"/> Fantasy	<input type="checkbox"/> Space	<input type="checkbox"/> Sky
<input type="checkbox"/> Abstract	<input type="checkbox"/> Architecture	<input checked="" type="checkbox"/> Landscape	<input type="checkbox"/> Flower	<input type="checkbox"/> Night	<input type="checkbox"/> Anime
<input checked="" type="checkbox"/> Tree	<input type="checkbox"/> Butterfly	<input type="checkbox"/> City	<input type="checkbox"/> Others		

Artwork File:  No file chosen

Artwork URL:


Paragraph ▼ **B** *I*                                   

4.2.3. Delete Artwork

127.0.0.1:2001 says

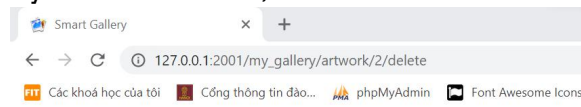
Are you sure want to delete the artwork "a"?

OK Cancel

Order	Artwork Name	Completion Date	Views	Likes	Comments	State	Preview	Actions
11	Autumn	Dec 04, 2022	0	0	0	Published		Edit Delete
12	a	Jan 07, 2023	0	0	0	Approving	Error	Edit Delete

[← Previous Page](#)

- Only the artist of this artwork can delete it (/my_gallery/artwork/id/delete). If he/she choose **Cancel**, nothing happens. If he/she choose **OK**, the artwork will be deleted right away and the page *where user is in* (for example /my_gallery/manage/3) will be "reload". When recheck, we cannot find it anymore.
- If other people try to delete the artwork that does not belongs to them, their access will be denied. For example, artwork with id=2 belong to Free Artist, not me. When I try to access the link, this result will be shown:



ACCESS DENIED

You have no permission to access this page!

- A, M can only edit member's artwork in **Administer** page, so they are denied too

4.3. Add New Artwork

Đăng Quỳnh Trang's Manager

We provide structural functions to manage your gallery.

[View my gallery](#)[Manage my gallery](#)[+ Add new artwork](#)[View manual](#)

Artwork's Name:

Completion Date:

Category:

☐ Nature☐ People☐ Animal☐ Fantasy☐ Space☐ Sky

☐ Abstract☐ Architecture☐ Landscape☐ Flower☐ Night☐ Anime

☐ Tree☐ Butterfly☐ City☐ Others

Artwork File:

Choose File

No file chosen

Artwork URL:

Paragraph

B *I*

Describe somethings about your artwork (e.g. inspiration, ponderation, experience, etc)

Add new artwork

- A, M, U now can fill in the form and click **Add new artwork** to add new artwork to his/her gallery. If the artwork is added, he/she will be direct to **Manage My Gallery** page.
- Only Name and Date are required to be filled. If these field are not filled in, bubble message will trigger to remind current user.
- If Category is left blank, the artwork will have no category
- If Artwork File or Artwork URL is left blank, the artwork will highly unlikely to be **approved**
- If Description is left blank, it's will automatically be filled with "*The artist left nothing...*" in the description part of **Artwork field** page

4.4. View Manual

4.4.1. In **View My Gallery** Page

127.0.0.1:2001 says

1. In your gallery view page, you can wander all of your artworks, including ones that haven't been approved. Other artists can view your approved artworks only.
2. In your gallery manager, feel free to manage all of your artworks, including "add", "edit" or "delete" them.

OK

4.4.2. In **Manage My Gallery** Page

127.0.0.1:2001 says

1. Click "Add new artwork" to add new artwork to your gallery.
We appreciate providing file over URL.
2. Click the artwork's name to view the specified artwork.
3. Click "Edit" button to edit the specified artwork.
4. Click "Delete" button to delete the specified artwork.
Be careful, this action cannot be redone.

OK

4.4.3. In **Add New Artwork** Page

127.0.0.1:2001 says

Keep your creativity~ ❤

OK

5. Administer (accessed by admin & mod only)

5.1. Header



SMART GALLERY

- Clicking to logo or heading will lead to **Home** page

5.2. Manage Area

5.2.1. For admin

- Manage artworks
- Manage categories
- Manage comments
- Manage likes
- Manage users

- Common Functions: Add, Edit, Delete, whatever easyAdmin provides

5.2.2.1. Manage Artworks (default - dashboard)

Artwork										Add Artwork	
<input type="checkbox"/>	Name	Artist	Completion Date	Category	Description	Artwork Url	Artwork File	Approved	Total Views		
<input type="checkbox"/>	Wonderland	Free Artists	Jan 1, 2022	6	View content	img1.goodfon.com/wallpaper/nbig...	Null	<input checked="" type="checkbox"/>	292	...	
<input type="checkbox"/>	Cherry Blossom	Free Artists	Nov 30, 2022	5	View content	images.hdqwalls.com/download/la...	Null	<input checked="" type="checkbox"/>	3	...	
<input type="checkbox"/>	Yggdrasil	Free Artists	Nov 30, 2022	3	View content	i.pining.com/originals/14/bf/85...	Null	<input checked="" type="checkbox"/>	15	...	
<input type="checkbox"/>	Fairyland	Free Artists	Nov 30, 2022	5	View content	wallup.net/wp-content/uploads/2...	Null	<input checked="" type="checkbox"/>	5	...	
<input type="checkbox"/>	Night of Neon	Free Artists	Nov 30, 2022	4	View content	wallpaperforu.com/wp-content/up...	Null	<input checked="" type="checkbox"/>	1	...	
<input type="checkbox"/>	Paradise	Free Artists	Nov 30, 2022	4	View content	wallpaperaccess.com/full/29816...	Null	<input checked="" type="checkbox"/>	5	...	
<input type="checkbox"/>	Tree And Space	Đăng Quỳnh Trang	Dec 2, 2022	6	View content			<input checked="" type="checkbox"/>	19	...	

- Artwork **approved** by Admin or Mod can be normally display in public view (access many people)
- **Category** can be multiple, as a result of ManyToMany relationship
- **Description** can be edited by editor tool
- **Artwork File** can display
- **Total View, Artist, Artwork File** cannot be edited, for Admin and Mod ethics

5.2.2.2. Manage Categories

<input type="text"/> Search		Đăng Quỳnh Trang
Category		Add Category
<input type="checkbox"/>	Name	
<input type="checkbox"/>	Nature	...
<input type="checkbox"/>	People	...
<input type="checkbox"/>	Animal	...
<input type="checkbox"/>	Fantasy	...
<input type="checkbox"/>	Space	...
<input type="checkbox"/>	Sky	...
<input type="checkbox"/>	Abstract	...
<input type="checkbox"/>	Architecture	...
<input type="checkbox"/>	Landscape	...
<input type="checkbox"/>	Flower	...
<input type="checkbox"/>	Night	...

5.2.2.3. Manage Comments

Search

Đăng Quỳnh Trang

Comment

Add Comment

<input type="checkbox"/>	User	Artwork	Content	Comment Time	
<input type="checkbox"/>	Đăng Quỳnh Trang	Sakura Site by Sakura Kinomoto	View content	Dec 2, 2022, 11:43:27 AM	...
<input type="checkbox"/>	Đăng Quỳnh Trang	Sakura Site by Sakura Kinomoto	View content	Dec 2, 2022, 6:50:23 PM	...
<input type="checkbox"/>	Đăng Quỳnh Trang	Yggdrasil by Free Artists	View content	Dec 2, 2022, 10:45:44 PM	...
<input type="checkbox"/>	Đăng Quỳnh Trang	Yggdrasil by Free Artists	View content	Dec 2, 2022, 10:46:11 PM	...
<input type="checkbox"/>	Free Artists	Wonderland by Free Artists	View content	Dec 3, 2022, 11:53:15 PM	...
<input type="checkbox"/>	Đăng Quỳnh Trang	Sakura Site by Sakura Kinomoto	View content	Dec 4, 2022, 1:30:41 AM	...

6 results

< Previous

1

Next >

- Admin and Mod cannot edit **User & Artwork**, for Admin and Mod ethics

5.2.2.4. Manage Likes

<input type="text"/> Search		Đăng Quỳnh Trang
Like		
<input type="checkbox"/>	User	Artwork
<input type="checkbox"/>	Đăng Quỳnh Trang	Wonderland by Free Artists
<input type="checkbox"/>	Đăng Quỳnh Trang	Sakura Site by Sakura Kinomoto
<input type="checkbox"/>	Đăng Quỳnh Trang	Light Butterflies by Đăng Quỳnh Trang
<input type="checkbox"/>	Đăng Quỳnh Trang	Paradise by Free Artists
4 results		< Previous 1 Next >

- **Add and Edit** is not allowed, Admin and Mod can only delete likes.

5.2.2.5. Manage Users

Q Search Đặng Quỳnh Trang




User

<input type="checkbox"/>	Name	Username ↕	Email ↕	Roles ↕	
<input type="checkbox"/>	Free Artists	free_artists	free_artists@gmail.com	User	...
<input type="checkbox"/>	Đặng Quỳnh Trang	belemom	belemom@gmail.com	Admin, User	...
<input type="checkbox"/>	Mod-chan	mod	moderator@gmail.com	Moderator, User	...
<input type="checkbox"/>	Sakura Kinomoto	cardcaptor	sakura@gmail.com	User	...
<input type="checkbox"/>	Tester-chan	tester123	tester@gmail.com	User	...
<input type="checkbox"/>	User-chan	user123	user@gmail.com	User	...
<input type="checkbox"/>	Esther Seirenia	esther_se	esther_seirenia@gmail.com	User	...

7 results < Previous 1 Next >

- **Add** is not allowed
- **Username & Email** cannot be edited
- User can have many roles

5.2.2. For mod

-  Manage artworks
-  Manage categories
-  Manage comments
-  Manage likes

- All except **Manage user**

6. Logout (accessed by users only)

- User will be logged out and redirect to **Home** page if clicking the button

7. View Artwork (only approved artwork or only current user's artwork, else Not Found structure)

Light Butterflies

December 04, 2022 Đăng Quỳnh Trang 3 views 1 likes 0 comments

Liked



The artist left nothing...

Categories

Nature Fantasy Landscape Night Butterfly

Comments Room

There haven't any comments yet. Be the first to do it! ❤️

Hey Đăng Quỳnh Trang, let drop a comment to this Artwork!~

Paragraph

B *I*

Comment

- Whenever a user views it, the total of views will increase
- If you have not logged in, clicking the “Like” button will direct you to Login page
- If A, M, U click “Like” button, state will change to “Liked”, total likes will increase
- If A, M, U click “Liked” button, state will change to “Like”, total likes will decrease

Light Butterflies

December 04, 2022 Đăng Quỳnh Trang 5 views 0 likes 0 comments

Like

- If artwork has no category, this section will not be displayed

- If comments flow existed, it will be displayed in timeline order, for example:

Comments Room



- Else, it may be in two situations. One is captured above, and other is like below, and comment area will not be displayed:

Comments Room

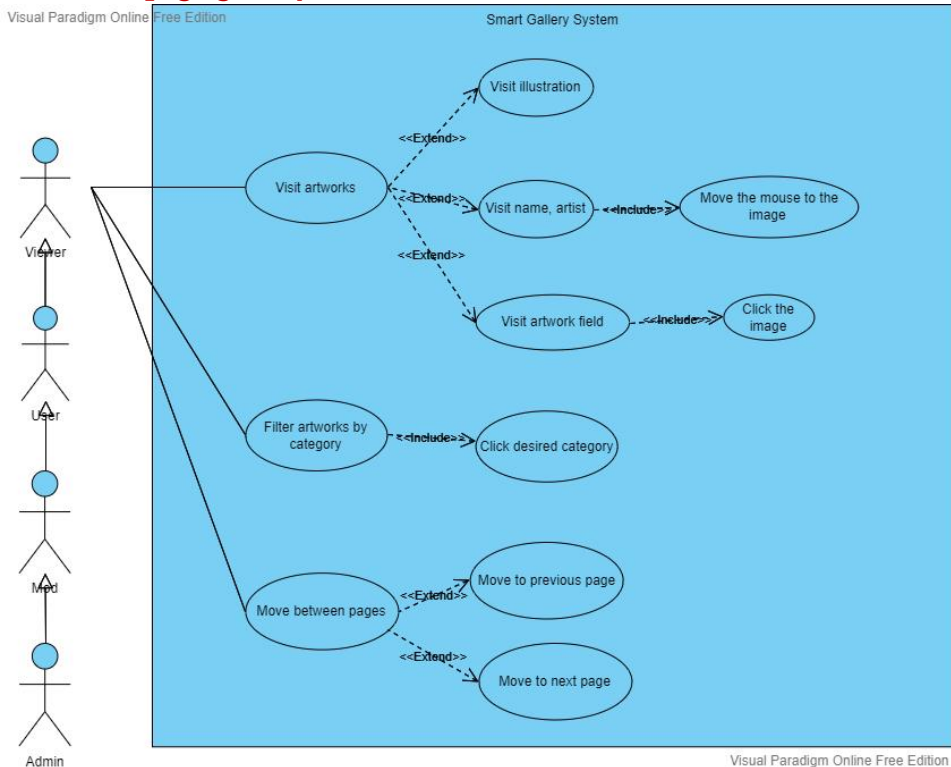
There haven't any comments yet. Be the first to do it by login! ❤️

5. Security features

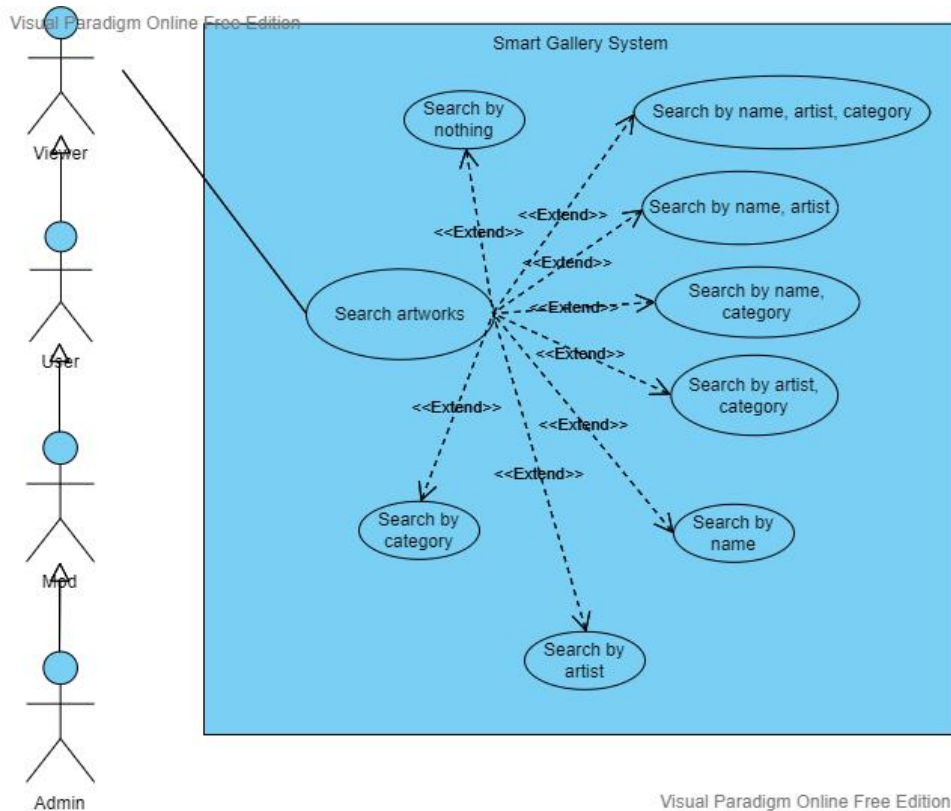
1. Register / Login mechanism
2. Session
3. Access denied for certain page
4. Never display unapproved artworks in public
5. Not found for unapproved artworks except for its Artist, Admin and Mod

6. Usecase diagrams

0. Register / Login / Logout
1. View homepage gallery

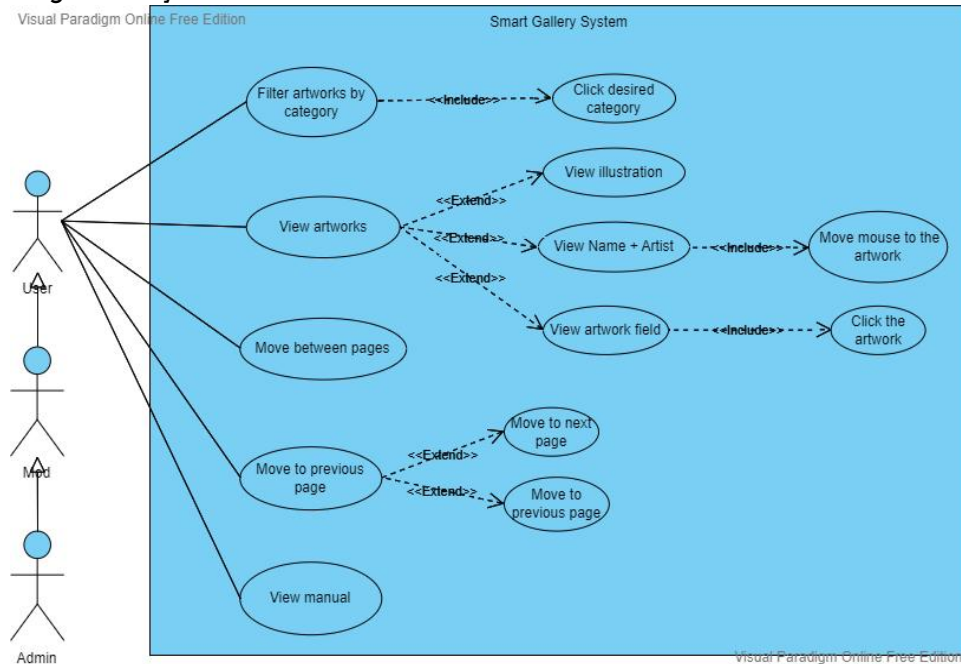


2. Search artworks



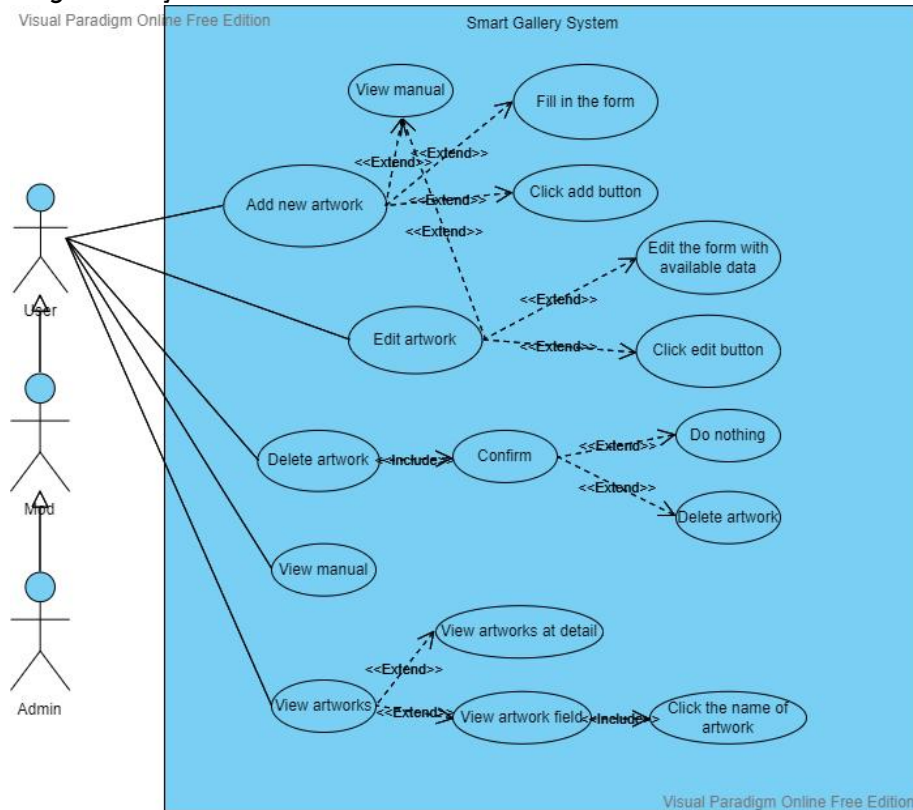
3. View gallery

NOTE: the <<include>> (Login) applied for all edge use cases will be minimized to make the diagram easy-to-read.

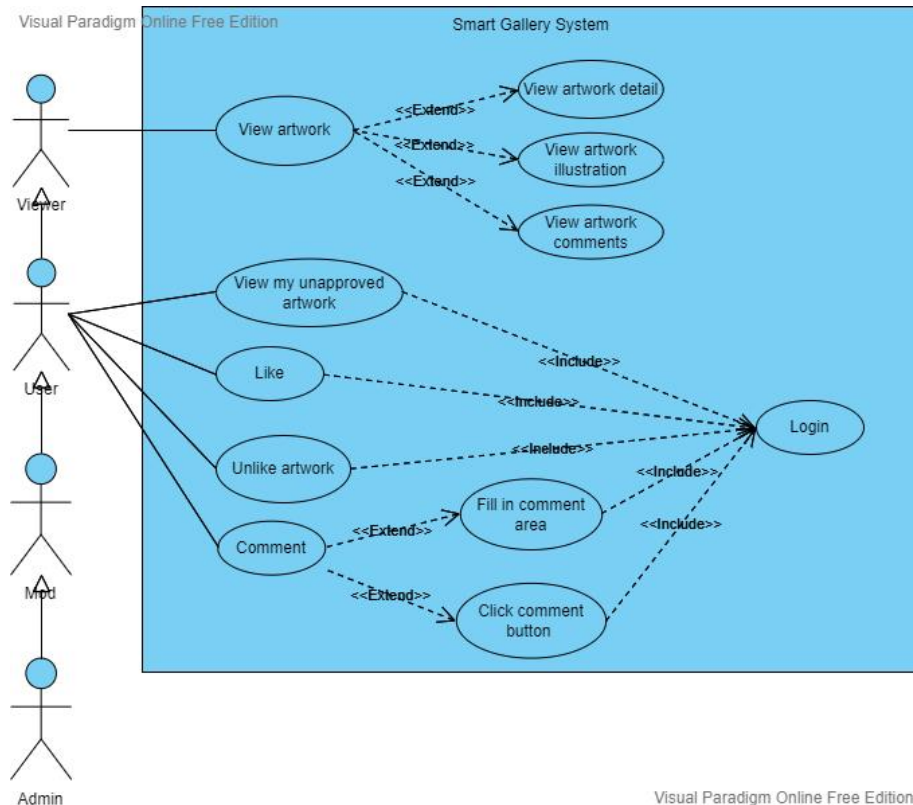


4. Manage gallery

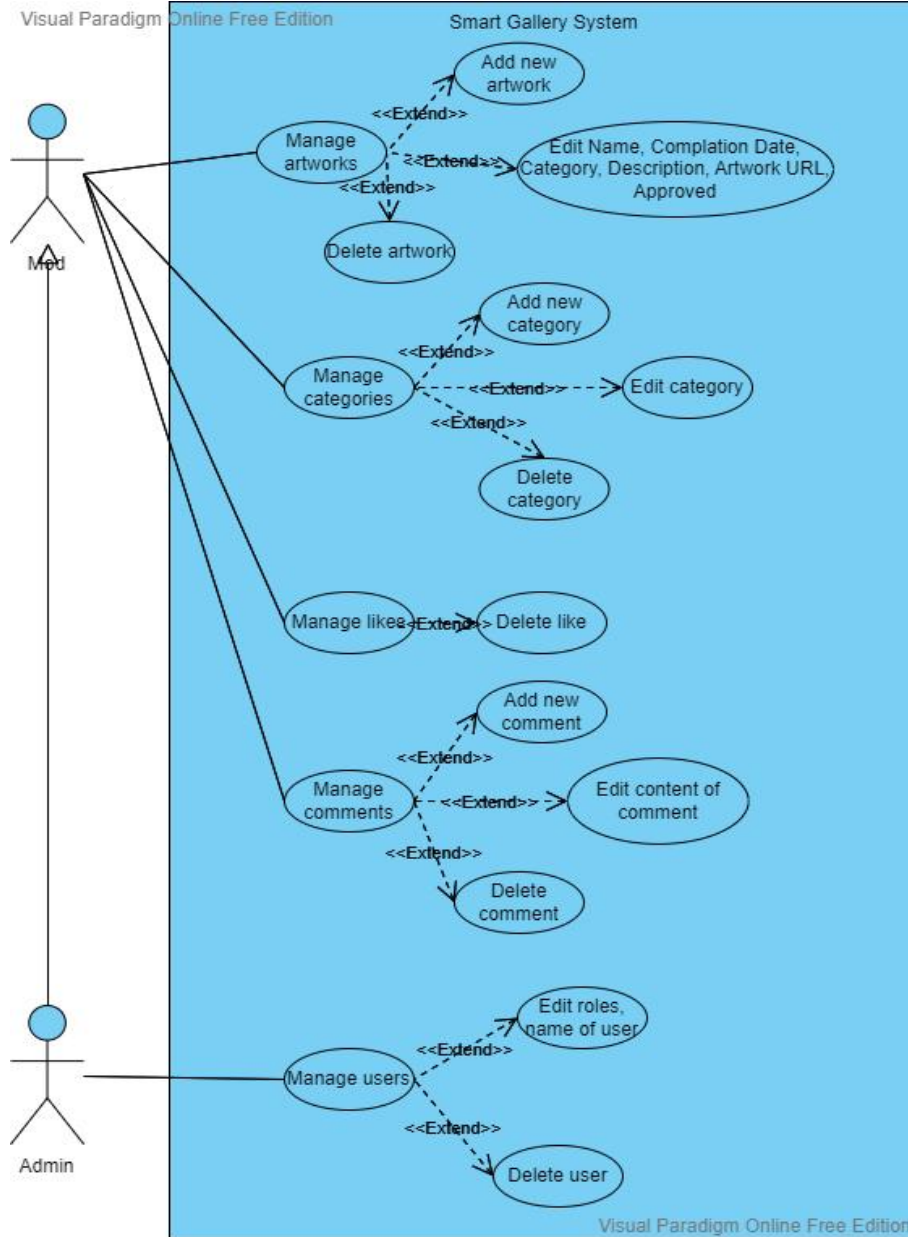
NOTE: the <<include>> (Login) applied for all edge use cases will be minimized to make the diagram easy-to-read.



5. View artwork field

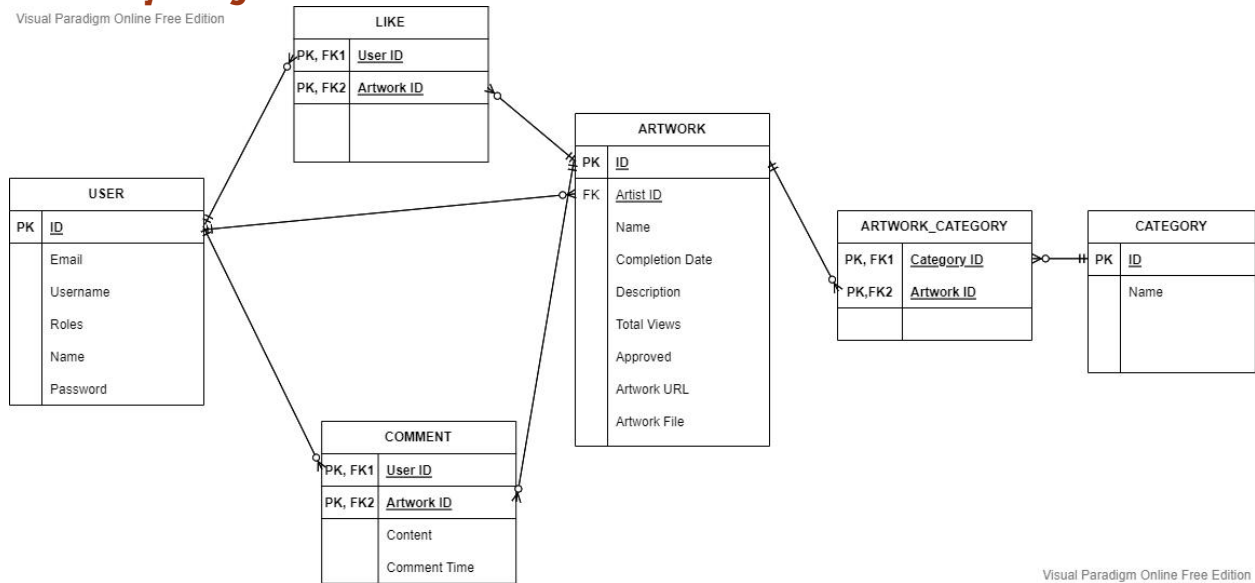


6. Administer

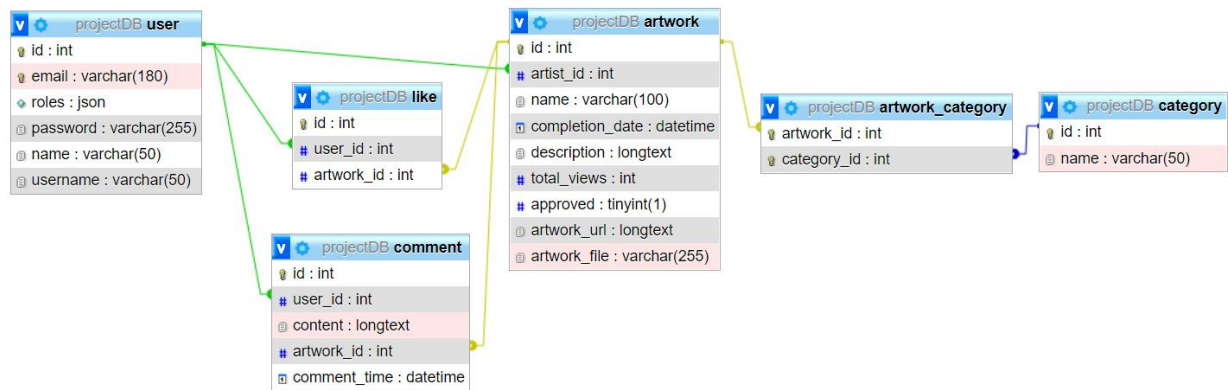


7. Entity diagram

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8. Physical data model



9. Note

Thanks for reading~