

# ONSTREAM CUSTOMIZED PORTRAY SYSTEM

<sup>1</sup>Dr.P.G.K.Sirisha, <sup>2</sup>T.Vasanth Lakshmi, <sup>3</sup>R.Sai Sushma, <sup>4</sup>Y.Jeevana, <sup>5</sup>T.Rajani

<sup>1</sup>Associate Professor, Department of CSE, KKR & KSR Institute of Technology and Sciences, Guntur, AP, India.

<sup>2,3,4,5</sup>B.Tech Student, Department of CSE, KKR & KSR Institute of Technology and Sciences, Guntur, AP, India.

## ABSTRACT:

From the years, several artists have defined and explained as to what constitutes art. Different art types like representational art, portraits of gods & deities, landscapes, historical events, material objects, and depiction of current issues can be seen widely at an art museum. Material objects belonging to a particular period or culture has immense popularity in itself. The techniques and equipment used in creating the art is also very important. Across the history, artists have experimented with different tools and techniques in order to bring revolution in the art.

Due to the effects that are caused due to traditional offline art exhibitions, we try to make virtual art galleries which enable the visitors to experience the feeling that looks similar to the real venues through user interaction. This application is mainly used to sell arts of the local artists irrespective of their nationality, gender, and religion. In this project, we are solving different problems affecting to direct sales management and purchase management. People who are interested to go for the painting exhibition but doesn't have the time to go outside due to personal issues, can buy the art of their desired requirements over the internet. The aim is to computerize the existing manual system with the help of full-fledged computer software. Reputed art galleries and popular exhibitions attract people from all across the globe by offering different variety of arts categorized by the artist's name. If a gallery possesses high featured collection, it gains huge popularity. Internet is a great source to find popular art galleries in a particular location or area.

## I. INTRODUCTION

Without denying the fact that art world is magnificent, it takes your desire to the next level. Art gives you pleasure and furnish all your design requirements, whether it a home décor, furnishing or workplace revamp. India has great creative minds all across the corners that create compelling paintings from their ingenious thoughts. Different art forms, paintings and sculptures in India have already been so popular, and as of now it gains more privilege with the advent of online art galleries.

As we all know that, art means preserving the knowledge and make available to future generation. There are different forms of art like painting, sculpturing, dancing, architecture etc. Each form has the different sub-techniques to apply them and they are many beneficial things to know about the art like problem solving skills, lateral thinking, complex analysis, etc. Painting is the practice of applying the paint on the solid surface area for applying the paint we use some tools like brush, sponges, etc. The importance of painting is it will enhance the new level of skills not only that we can produce the relaxing open environment. It makes the artist to feel secure to explore their own creativity.

Traditional way of marketing in portrait sector is conducting an event to exhibit their portraits to customer. And customer buy the portrait if customer likes it. Conducting an event is not a simple thing they have to find the place and organize the paints and market about the event it is a huge process and it is even difficult for the customer to find where the event is going.



**Fig 1: Selecting the art online**

In this modern world, everything is available in online even we can buy the painting. There are many online art gallery software applications. These applications make the marketing easy compared to the traditional way of marketing and it is very easy for customers to find the address of the event. Here we display all the paintings in the application along with cost so that user can buy the painting even he is not in the event. This application follows the trend so that customer can buy the latest collection of painting wherever in the world. All the existing applications can make somewhat easy to customer but if the customer wants painting with his own specific requirements, customer has to plan the meeting with artist.

## II. LITERATURE REVIEWS

[1] M. Yousefi, P. Zarmehr, A. T. Targhi and M. M. Dehshibi, nowadays everyone is using the mobile applications, from entertainment to education. In these painter finder app has been taken into account. Finding the similar information about paintings from their images is a sort of image recognition. According to the features of paintings image nature, the number of SIFT descriptors numerous and this issue leads to inappropriate online matching. To overcome this issue, they used ASIFT, which can reduce the processing time compared to the SIFT results. ASIFT improves the both time-saving and complexity-reducing on painting database and distortion between two images viewpoint changes and give the fair results.

[2] W. Kelun, R. Hongxiang and W. Shuang, for art gallery simple polygon using 3-colouring schemes will not give the best results. So here to overcome the problem this paper use the 4-colouring schemes. The results that given by the 4-colouring schemes is condition of any type of colour could cover the polygon, at least polygon covers one colour. In 4-colouring schemes, we have two types tetradic colours and square colours. In tetradic colour we have the two sets of complementary colours making four colours total in this scheme one colour is dominant. In the square colour we use the four-colour spaced evenly apart from each other on the colour. Here each colour is used in equal amounts.

[3] Z. Zou, T. Shi, S. Qiu, Y. Yuan and Z. Shi, This paper proposes an image-to-painting translation method that generates vivid and realistic painting artworks with controllable styles. Different from previous image-to-image translation methods that formulate the translation as pixel-wise prediction, they deal with such an artistic creation process in a vectorized environment and produce a sequence of physically meaningful stroke parameters that can be further used for rendering. They design a novel neural renderer which imitates the behaviour of the vector renderer and then frame the stroke prediction as a parameter searching process that maximizes the similarity between the input and the rendering output. They explored the zero-gradient problem on parameter searching and also show that previous neural renderers have a

parameter coupling problem and re-design the rendering network with a rasterization network and a shading network that better handles the disentanglement of shape and colour.

[4] S. Ran and L. Lin, in recent years, the in-depth study of deep network has greatly promoted the progress of image processing technology, especially the combination of deep network and painting art has become a hot topic. Segmentation is of great importance in image processing. In this paper, U-Net and IndexNet are selected to study the Figure segmentation of ancient painting. [5] Anupam Chandra, Praveen Uchil, Our research is aimed at developing support for providing value for works of artists through developing an artist friendly website wherein artists can sell their art without the aid of art curators. They attempt to transfer the same experience virtually to the user.

[6] Mohamad Hanif Abdul Wahab\*, Alia Fatin Ahmad Zuhardi, Art gallery exhibition is an event where the artist can display his ideas to the visitors through visual quality towards the artwork display. This paper seeks about the importance of human visual factors from the literature review which was tested by an observation survey at Solaris Dutamus in Kuala Lumpur. For data collection qualitative methodology is applied. Most people have visited the art galleries to observe the art of the artist. By observing the artwork closely creates a feeling of excitement, appreciation, enthusiasm towards artwork. All these feelings happen because of light, here light plays the significant role. To increase the visual performance and visual comfort can be achieved from technical understanding on the luminaire type. In every art gallery we need to identify the distance and this paper gives some recommendations for better visuals.

[7] J. Trant and D. Bearman, in this present world technology has increased drastically. By using this technology, we can create the virtual art gallery. No need to go paris to visit the Louvre, or New York to visit MOMA. People can visit on their comfort zone. Online experience resembles closely than the physical experience by using stimulated 3D space and virtual reality and this paper explains some positive and negative of using virtual art gallery. [8] Simon Schama, Vincent Van Gogh's use of colours of varying depth reflects the artist's visionary intelligence. His mixed and matched use of different colours to give it distinctiveness shows the painter's mastery of illusion. He was able to inject life into his paintings and this is evident in his painting of the old lady and the Potato Eaters. His brush spoke his mind, and this is something that he has left the world to admire and understand.

[9] Pat Thomson, Liam Maloy (University of Nottingham), The report is designed to support the work of the APPG into Art, Craft and Design Education it takes a strong UK perspective, often focusing specifically on England. They collected published scholarly papers that addressed the benefits of Art, Craft and Design (ACD) education and that were published between 2000 and March 2021. In this review they also showed frequent differentiations between the visual arts (painting, drawing, photography, collage, etc.) and the performing arts (music, dance, drama, etc.)!! [10] Ajad raghuwanshi, Online Art Gallery is an online application, which is used to display and sell art works of artist irrespective of their nationality, gender and other narrow consideration, through auction. It is an application software and it is very helpful for the art lovers and others who wants to know the addresses where this kind of arts will we sold.

[11] Z. Chen, L. Chen, Z. Zhao and Y. Wang, AI Illustrator: Art Illustration Generation Based on Generative Adversarial Network is a proposed novel project, Painting Creator, which uses deep learning technology to enable the computer to generate artistic illustrations from a short piece of text. Their scheme includes two models, image generation model and style transfer model. [12] A. Wijaya, Kefry, W. Wihalin and A. A. Santoso Gunawan, UI and UX design in an online art gallery has a big impact for user satisfaction. The purpose of this research is to find out how UI and UX design affects user satisfaction and how to design good UI and UX in an online art gallery.

### III. PROPOSED SYSTEM

Digital platform for selling exhibits the works of many artists. Each artist is given a specified space on the online webpage. The artists are charged for the space allotted to them on daily basis. The charges vary in different months. For using this platform for their marketing, in Jan to April and August to December the charges are Rs 200 per day per exhibit, from May to July charges are Rs 300 per day per exhibit. Each exhibit has a name and style of painting. The exhibits can be bought by the online customers who need to register with the art gallery. On receiving the full payment, the painting is sent to the customer. The system keeps track of the status of delivery of the painting to the customer. This status can also be seen by the customer. The gallery also stores the information about the visitors of the gallery who need not register with the art gallery website. For visitors only email id of the visitor is asked. Every month a complete information of business through online site is created for the artists as well as for the site promoters. Here, the users have an opportunity to contact with the artist and get the paintings of their desired requirements. A user interface is provided where there will be a communication with the artist for their required design and picture.

The art gallery is where the arts or art crafts of the artists can be displayed for the visitors' view. People additionally comment on arts that artist's show so that there will be some scope of improvement of the arts that is displayed. However, these days because of the busy schedule of the people, they don't have time schedule-wise to visit the art gallery to view the paintings of the famous artist. Yet, imagine a scenario where the artist display is available on the online. Indeed, it is conceivable. The online art gallery is the application that enables the clients to transfer their paintings and make it available to the visitors' view.

The technologies used here are:

**Front end: HTML, CSS, JavaScript**

1. HTML: HTML is used to create and save web document. E.g. Notepad/ Notepad++
2. CSS : (Cascading Style Sheets) Create attractive Layout
3. Bootstrap : responsive design mobile friendly site.
4. JavaScript: it is a programming language, commonly use with web browsers.

**Back end: PHP, MySQL**

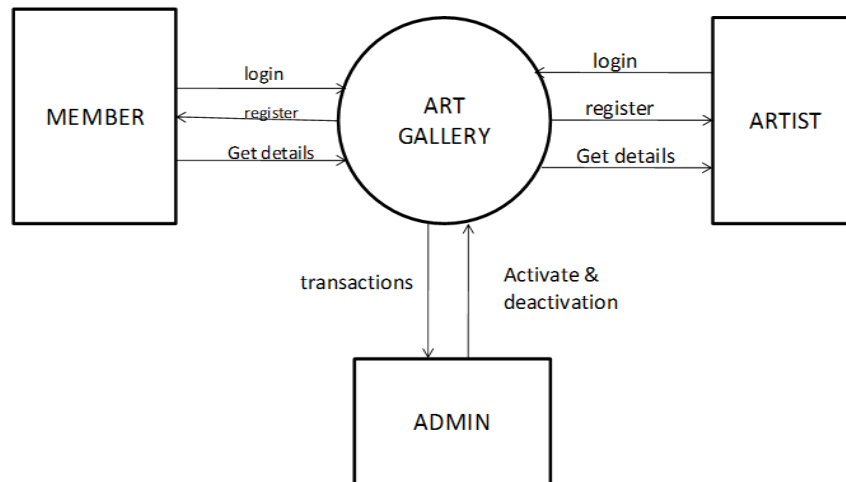
- 1.PHP: Hypertext Preprocessor (PHP) is a technology that allows software developers to create dynamically generated web pages, in HTML, XML, or other document types, as per client request. PHP is opensource software.
- 2.MySQL: MySQL is a database, widely used for accessing querying, updating, and managing data in databases.

**Software used:(any one)**

1. WAMP Server
2. XAMPP Server
3. MAMP Server
4. LAMP Server

## IV IMPLEMENTATION

### SYSTEM ARCHITECTURE:



**Fig 2:** System architecture for digital art management system

The Online Art Gallery uses ASP.Net Webforms with individual accounts for authentication and authorization purposes. The Identity Framework is used within the Online Art Gallery providing the creation and management of users and their respective accounts. Users can be securely created and maintained due to the security features that the Identity Framework provide unique identifiers, roles, and hash-based passwords. Transport Layer Security is enabled within the Online Art Gallery to enable Hyper Text Transfer Protocol to securely process sensitive user payment information.

The Online Art Gallery incorporates the use of permission or role-based access in order to securely register and access pages according to the user's purpose of interacting with the website such as business purpose or administration. Client-side and Server-Side validation is incorporated into the Online Art Gallery. Javascript and Bootstrap are utilized within all Webforms to provide a friendly and unique user design and experience. The Object Data Source control is enabled within the Online Art Gallery allowing it to retain a three-tier architecture. Specific objects that enable the ability to Retrieve, Add, Modify, or Delete data are in the Models folder within the root directory of the Application.

The MDF file which is used as the primary means of storing and retrieving data is in the App Data folder and its label is the name of the connection string used to allow communication with the application. The MDF File can also be imported to Microsoft SQL Server for maintenance or modification purposes. Images that are uploaded by the user are stored within a folder titled 'Images' where the file path of the image appended with its file name is stored within its respective table in Microsoft SQL Server. The image that is to be displayed within the Art Gallery; the path of the file called displaying the image without the need for intensive processing.

### MODULES:

1. Home module.
2. User Registration module.
3. Login module.
4. Admin module.
5. Sell Art module.
6. My Art module.



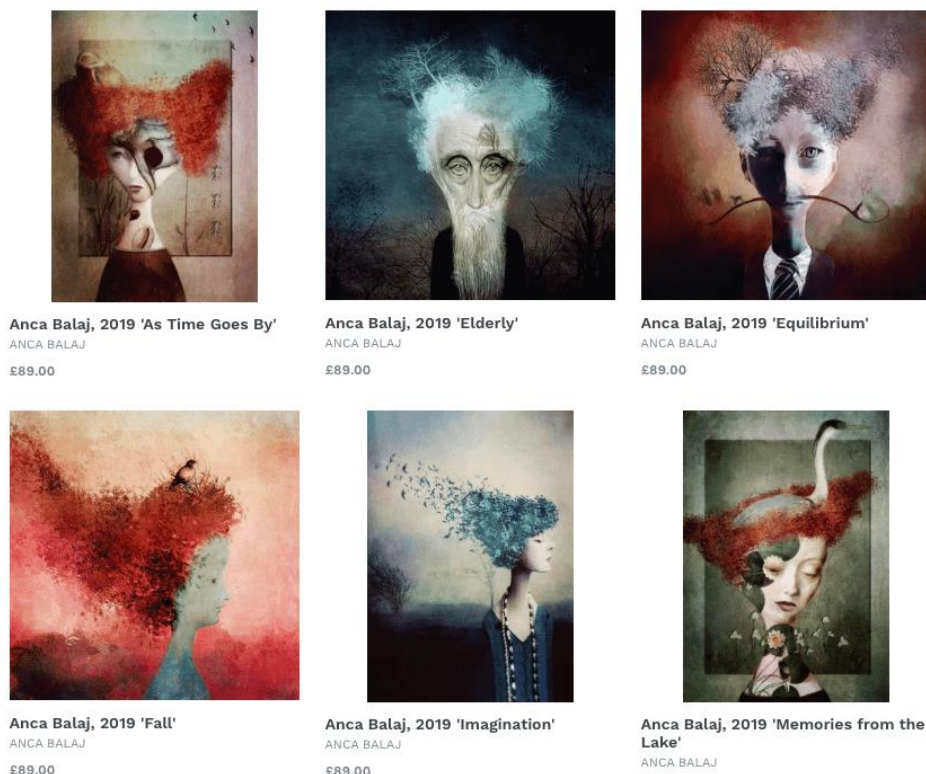
7. Order History module
8. Transaction Module
9. Cart Module
10. Art Details Module
11. Survey Module

The Home page will have the following pages: The home page is the page which provides an overview of the website.

- Registration Page: This page allows the buyer and seller to create an account in order to buy or sell an artwork.
- Login Page: The login page allows the buyer or seller to login with their email and password (username and password).
- Sell Art Page: The seller can upload the paintings and arts.
- Home Page: Buyers can view, search Artwork based on the Art Name, Artist Name, Colour of the Artwork, Date, and Price.

There are sub modules after the user has logged in have the following pages:

- Art Details: Allows the user to view a detailed version of the Artwork with the ability to purchase the artwork.
- Order History page: Allows the user to view the orders placed sortable based on the date
- My Art Page: This will allow the user to modify or delete their uploaded Arts.
- Cart Page: Allows the user to save items that he likes and allows them to purchase their items.
- Transaction Page: Allows the user to securely provide their Transaction information.
- Survey Page: Allows the user to enter a rating or comment based on their purchasing experience.



**Fig 3:** Digital platform for art marketing

**ALGORITHM:****Artist side:**

- Step 1: Start.
- Step 2: Register into the application.  
Registration includes category, Name, Email id, Account details,  
Create their username and password.
- Step 3: Login with their credentials.  
Login with their username and password.
- Step 4: If the login is successful, enter their art details.  
They should enter their art details like the type of arts, period of  
time they want to sell their arts.
- Step 5: Make payment according to their need.  
Pay amount to the admin based on the period of time (it may vary  
according to the season).
- Step 6: Start their marketing.  
They can upload the images that he/she wants to sell. They can  
also give the details of the art like pricing, size etc...After the time  
period is completed, they are unable to use the application and  
then stop their marketing.
- Step 7: Stop.

**Customer side:**

- Step 1: Start.
- Step 2: Register into their application.  
They should register using the Name, Email id and create their own username and password.
- Step 3: Login with their credentials.  
The customers should login using their username and password
- Step 4: If the login is successful, the catalogue is displayed.  
Here they can start looking at the images that are uploaded by  
different artists.
- Step 5: If they wish to buy the available arts, they can buy directly.  
The customer can buy the art by giving the details like address for  
shipping the art and make the payment to the artist for the art.
- Step 6: They can contact the specified artist to customize the art and enter the details of the art like  
image, size, shape etc...  
The advantage of this application is that the customer can  
customize the arts i.e they can contact the artist for their required  
art. It means they should upload the image which he requires, so  
that the artist can make the art and deliver to the customer.
- Step 7: The art is delivered within specified time.  
Art will be delivered to their address.
- Step 8: Stop.

**Visitor side:**

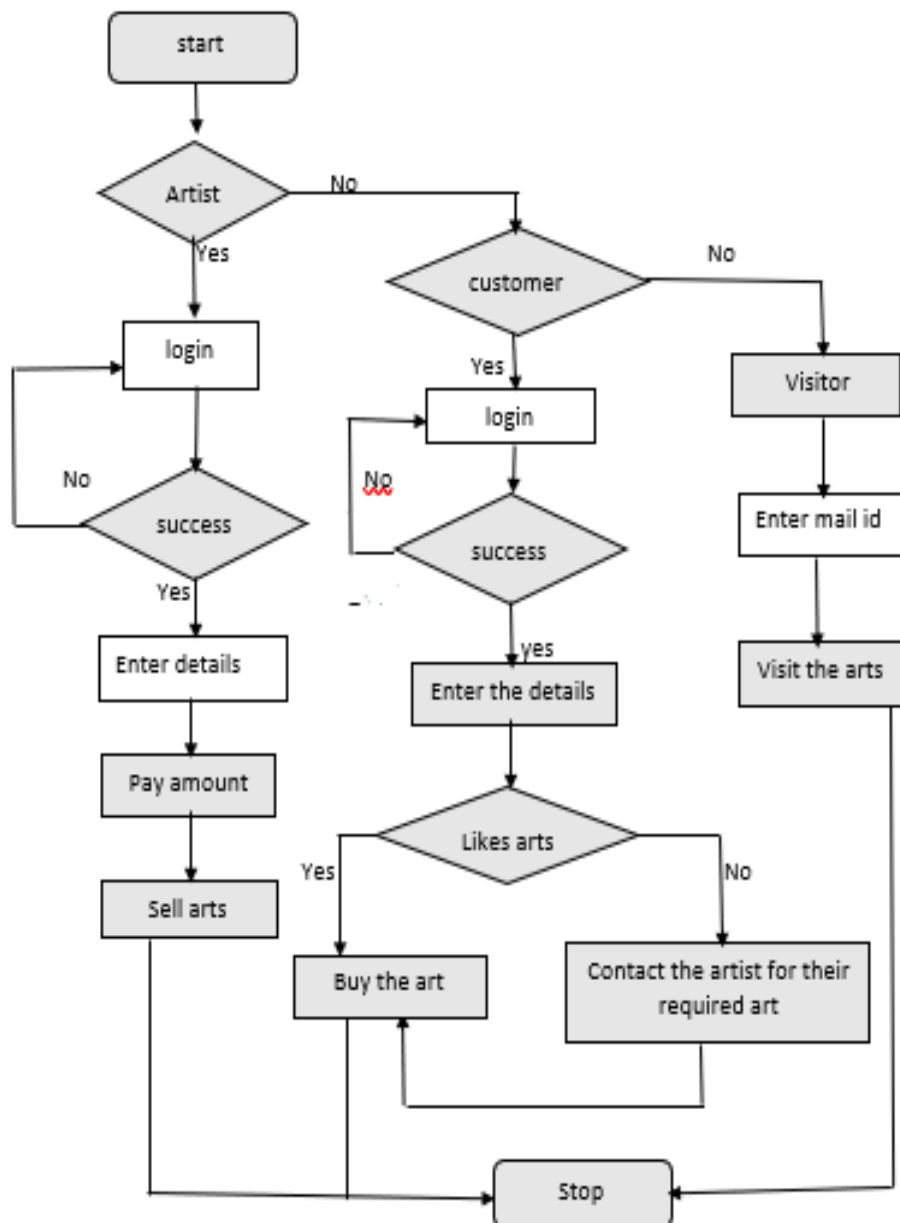
Here the visitor is the person who wants to visit the art exhibitions but doesn't have the time to go to the places where this kind of exhibitions take place. So, here the visitor can visit the arts virtually.

- Step 1: Start.
- Step 2: Enter their email id and visit the arts.

As the visitor doesn't buy the arts, there is no need to register with their complete details. They just visit the arts by entering their email id.

Step 4: Stop.

## FLOW CHART



**Fig 4:** Flow chart for digital art marketing



## V CONCLUSION

The experiences of visiting physical and on-line museums have different strengths and limitations and are complementary. Access (in a museum context) is normally measured by the ease with which any visitor can experience the museum's collection. Virtual gallery tools can extend that to a more active, personal engagement by allowing visitors to create new content out of an existing resource and add to that resource. This has the potential to create a new and vital form of cultural networking. However, planners and developers of such tools should be prepared for, and be sensitive to, resistance (ranging from nervousness to hostility) from in-house curatorial staff.

## VI REFERENCES

- [1] M. Yousefi, P. Zarmehr, A. T. Targhi and M. M. Dehshibi, "Art gallery in hand: Towards creating a mobile application for retrieving painting information," 2015 Tenth International Conference on Digital Information Management (ICDIM), 2015, pp. 256-259, doi: 10.1109/ICDIM.2015.7381894
- [2] W. Kelun, R. Hongxiang and W. Shuang, "Study on Art Gallery Based on 4-coloring," 2009 Sixth International Conference on Computer Graphics, Imaging and Visualization, 2009, pp. 255-258, doi: 10.1109/CGIV.2009.25.
- [3] Z. Zou, T. Shi, S. Qiu, Y. Yuan and Z. Shi, "Stylized Neural Painting," 2021 IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2021, pp. 15684-15693, doi: 10.1109/CVPR46437.2021.01543.
- [4] S. Ran and L. Lin, "Painting Element Segmentation Algorithm Based on Deep Network," 2021 Photonics & Electromagnetics Research Symposium (PIERS), 2021, pp. 2178-2182, doi: 10.1109/PIERS53385.2021.9694935.
- [5] Anupam Chandra, Praveen Uchil, "Art of Designing an e-Art Gallery," February 2017 [Smart Innovation](#) DOI: [10.1007/978-981-10-3518-0\\_47](#)
- [6] AicQoL 2013 Langkawi, AMER International Conference on Quality of Life, Holiday Villa Beach Resort & Spa, Langkawi Malaysia, 6-8 April 2013, "Quality of Life in the Built and Natural Environment", Human Visual Quality: Art gallery exhibition, Mohamad Hanif Abdul Wahab\*, Alia Fatin Ahmad Zuhardi Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA, Shah Alam 40450, Malaysia
- [7] Cooper, J. (2006). "Beyond the On-line Museum: Participatory Virtual Exhibitions." in J. Trant and D. Bearman (eds.). Museums and the Web 2006: Proceedings Toronto: Archives & Museum Informatics. Consulted Sep 29, 2018. Available at: <http://www.archimuse.com/mw2006/papers/cooper/cooper.html>
- [8] "Good Literature Review about The Power Of Art: Simon Schama," Free Essay Examples - WowEssays.com, 28-Feb-2020. [Online]. Available: <https://www.wowessays.com/free-samples/good-literature-review-about-the-power-of-art-simon-schama/>. [Accessed: 23-Dec-2022].
- [9] A Rapid Evidence Review of Arts Craft and Design Education in Schools (February 2022). DOI:10.13140/RG.2.2.26341.47847. Affiliation: University of Nottingham Authors: Pat Thomson, Liam Maloy (University of Nottingham).
- [10] "ONLINE ART GALLERY" International Journal of Research. Author: Ajad raghuwanshi, July 2020.
- [11] Z. Chen, L. Chen, Z. Zhao and Y. Wang, "AI Illustrator: Art Illustration Generation Based on Generative Adversarial Network," 2020 IEEE 5th International Conference on Image, Vision and Computing (ICIVC), 2020, pp. 155-159, doi: 10.1109/ICIVC50857.2020.9177494.
- [12] A. Wijaya, Kefry, W. Wihalm and A. A. Santoso Gunawan, "The Effect of UI/UX Design on User Satisfaction in Online Art Gallery," 2021 1st International Conference on Computer Science and Artificial Intelligence (ICCSAI), 2021, pp. 120-125, doi: 10.1109/ICCSAI53272.2021.9609764.