Artsync: Virtual Platform For Artists And Art Devotees

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Abstract—Nowadays, it is difficult to search for artists to showcase their art globally, so this ArtSync: Web Application for Artists and Art-enthusiasts is developed to provide a simple and efficient way for artists to upload their art. So ArtSync is a full stack website, which revolutionizes the way of showcasing the art globally. According to our research, artists frequently avoid exhibiting their work in well-known virtual art galleries for two reasons: first, finding suitable art curators can be expensive; second, appropriate art curators are difficult to find. Our study intends to build support for giving artists’ works value by creating an artist-friendly website where artists can sell their creations without the help of art curators. The website provides a user friendly and flexible environment on smartphones or on desktops. An artist being registered in the web site has the facility to use the services. Artists can upload their art, price and sell. Clients will be able to transact through the connected payment gateway, browse through a variety of art genres, and safely make purchases. Personalized dashboards for consumers will improve their entire experience by giving a centralized spot to track purchases, view transaction history, and manage interactions with artists. The goal of this project is to bridge the gap between artists and art fans by providing a seamless and secure digital platform. The data of the consumer will be saved for the next transaction also. These features help to build a user-friendly Online Art gallery.

Index Terms—Art Gallery, Artist, Consumers, e-commerce website, Arts, Arts for Art-Enthusiasts
I. INTRODUCTION

The growing number of online shopping galleries and artists is causing a seismic change in the traditional art industry as the ageodigital media progresses. This development poses a fresh and immediate barrier to both buyers and creative people, highlighting the vital need for revolutionary marketplaces to enable the purchase and sale of artworks in a quickly evolving environment. Nowadays, artists struggle to connect with larger audiences and negotiate the intricacies of selling online[1], and art lovers want easy ways to view and purchase creative work from the comfort of their own homes.

The basic structure of the marketplace [2] for art for ages was made up of real art galleries, shows, and auction places that connected customers with popular works and gave artists a place to display their works. These conventional routes do have some fundamental restrictions, though. Connection to a worldwide audience is hampered by limitations in geography, and both exhibition operators and artists have problems with finances due to the upkeep of in-person exhibitions. Before the invention of other various technologies and methods that were used in the past for selling the art were advertisements through newspaper, exhibition, television, etc.[3]. These traditional methods were too slow, difficult for artists. This way of buying and selling arts was not effective. Due to advanced technologies many websites emerged. Additionally, patrons frequently find difficulties accessing these areas, running into problems including a restricted assortment, confusing prices, and a failure to interact with the artworks from outside art gallery sessions. So, it is now the right period for the art gallery sites to think out of the box, and to make most of the opportunities available.

With the help of this Art Gallery artists can easily upload their paintings, sculptures and any kind of art and get a lot of opportunities. And by this website the art lovers also find the good and attractive arts.

The study we are conducting aims to transform the art business by developing an integrated online shopping platform for art galleries, as a reaction to the inadequacies of conventional procedures. With the use of the latest technology and internet connectivity, our platform enables artists to present their artworks to a wide range of worldwide audiences, regardless of their physical location. We provide artists with a viable and easily used framework to flourish in the age of technology, while also giving clients unparalleled opportunity to view an extensive collection of artworks through complete online exhibitions, protected purchases processes, and personalized suggestion systems. Our creative strategy not only meets the urgent demands of clients and artists, but it also cultivates a dynamic and welcoming art community that welcomes the limitless potential of the internet and crosses geographical boundaries.

An internet platform called Online Art Gallery is frequently used to showcase and auction off the artwork of artists, regardless of their origins, gender, or other restrictions. To become an active member of the art gallery, artists need to register immediately on the website. After that, they can upload a digital copy of their artwork within the appropriate categories. They might offer their artwork for a set amount or at market.

In order to maintain the website, the artist is required to donate a portion of the sale price of each piece of art to the website. To acquire their favorite artwork or painting, sculptures, art enthusiasts must visit the art exhibition. However, they don’t have sufficient time recently to visit exhibitions and purchase artwork and paintings.

Customers can register online and explore art pieces that are categorized in a scientific manner. Customers can easily construct their own galleries to view their favorite pieces of creativity. Additionally, every customer is free to use the integrated transaction mechanism to acquire an artwork and place an offer in a public auction. After every successful transaction, the piece of artwork will be dispatched within a few days to the successful purchaser. Payment must be made through the payment channel.

ArtSync is a comprehensive website that is highly beneficial for both art enthusiasts and those seeking information about the locations of art sales. Members of this online platform can look for their artwork and paintings and make purchases for the works they have chosen. Information about the artwork is also available to the final user. You have the chance to visit virtual exhibitions of art thanks to
ArtSync Art Gallery. Every day, the virtual Art Gallery is refreshed, allowing users from all over the world to browse and purchase the newest selection of modern art. The most recent artwork is accessible for viewing and purchase at their web gallery as well.

II. LITERATURE REVIEW

For this Art Gallery we searched different surveys on the internet based on various features and services. Spending more time online is becoming more common. The internet has developed into a reliable resource for everyone looking for a better platform for their artistic endeavors.

Smith et al.’s research provides insightful information about the behavior and tastes of customers, illuminating the interaction style of online art auctions. With careful data analysis from a top online art platform, the study emphasizes how important complete explanations and excellent photos are to driving participation by users and purchase choices. Moreover, the strategic approach of implementing flexible pricing techniques becomes evident in order to improve the performance of art sales. These results highlight how crucial it is to use creative pricing techniques, along with informative and online material, to enhance the online art purchasing experience and boost sales in the dynamic world of e-commerce art galleries[4]. A thorough examination of the security and privacy issues related to online integration of payment platforms can be found in the Johnson et al. paper. The study highlights the need for strong protections in the processing of private financial information by illuminating the susceptibility of payment systems to cyber attacks and the vital significance of strict safety protocols. The paper supports an integrated strategy to protect customer information, maintain confidentiality, and promote trust in electronic payment platforms with the promotion of measures like tokenization, end-to-end encryption, compliance to industry requirements like PCI DSS, and transparent data handling techniques. [5].

Fig. 1. User’s pain point in experience journey map

The research article by Lee et al. concludes by highlighting the vital significance of building trust across the overall framework of the online art industry. By thoroughly analyzing indicators of trust and how they affect client confidence and participation, the research provides important knowledge into the complexities of creating a trustworthy environment for consumers as well as sellers of art. The study highlights the exciting possibilities of deliberately deploying trust signals in addition to identifying the essential components that support trust by closely examining variables like authority platforms, feedback from customers, and transaction visibility. By doing this, it provides insightful advice to those involved in the always changing online art auctions who want to improve customer pleasure and promote economic achievement.[6]

III. METHODOLOGY

Artists have long suffered from not being paid fairly. Purchasers of artwork have also had to deal with the issue of having to pay exorbitant costs for masterpieces of art from museums and galleries. Despite their dissatisfaction with the existing structure, buyers and sellers were forced to utilize it since there was no other option. Artists were traditionally thought to exist in a situation, separate from society; as a result, they require a middleman to promote and sell their works of art. In the end, this contributed to the growth of art museums and administrators. curators and art galleries unwittingly assumed ownership of the artwork up for sale because of how slavishly this norm was adhered to. Art galleries often charged an additional fee of more than 60% of the artwork’s worth for the bulk of
purchases. This was an excellent opportunity to build a website that would eventually help art customers and vendors by cutting down on those needless expenses. Online art galleries were starting to appear as a result of improvements in web media, but they were still inefficient for achieving the goal of fair art exchange. Finding barriers between an artist and an art buyer and attempting to create a smooth channel between them along the lines of building that website using a new age design language was the aim of that study.

A preliminary review of the literature revealed a dearth of study on art e-gallery designs. The several techniques for gathering information as well as their results are explained in the next part that follows.

A number of challenges confront artists in the current virtual environment:

- Limited Exposure: Most talented artists struggle with getting beyond regional barriers, which limits the visibility of their creations to a worldwide audience.
- Payment Issues: Limited visibility and the difficulty of appropriately valuing artwork at an amount which reflects its worth are two common challenges faced by artists attempting to earn a living selling their work on digital platforms.
- Artistic Independence: Artists’ authority over how their work is shown can occasionally be compromised by the internet, making it more difficult for them to properly convey their artistic goals to potential customers.

![Fig. 2. Motive of audience while visiting an art-gallery](image)

The main obstacles that art enthusiasts suffer are as follows:

- Discoverability: Art lovers sometimes struggle to locate fresh and rising artists and their works, which leads to a loss of opportunity to interact with a diverse range of artistic mediums.
- Personalization: Clients find it difficult to find art that suits their unique preferences and style on traditional online platforms since these platforms frequently lack personalized suggestions.
- Security Issues: Buying art digitally is significantly hampered by confidentiality and safety problems relating to online art transactions, such as payment safety and authentication verification. These worries make it more difficult to discover and purchase artwork with ease.

The main problem is that there isn’t a single platform that can address the various demands and challenges that clients and artists have in the online art market. This shortcoming not only impedes the advancement and development of virtual art markets but also limits their capacity to realize their complete possibilities as hubs for the exchange of artistic ideas, gratitude, and business. The challenge is to create a web-based application that combines cutting-edge database capabilities, secure security measures, and a flexible layout in an effortless manner. The objective of this solution is to provide a user friendly and safe platform for artists to efficiently exhibit and monetize their works, as well as to provide clients with an enhanced, customized, and safe art transaction journey. Taking on this complex problem is the core purpose of our endeavor.

Introducing our fine art gallery, which was painstakingly created using the Laravel PHP framework. We’ve expertly combined modern technology and artistic vision with Laravel’s robust features to produce an engaging online experience. Our website features a carefully chosen collection of works of art, tastefully displayed in an intuitive design that encourages curiosity and exploration. We provide innovative features like interactive galleries and easy payments by utilizing Laravel’s versatility. This guarantees a smooth experience for both art enthusiasts and buyers. Our Laravel-powered art gallery welcomes you to completely lose yourself in the elegance and originality of the artistic realm like never before.
Experience the virtual world of creativity with our elegantly designed art gallery website, which was made possible by MySQL capacity for flawless database connectivity. MySQL is flexible and versatile design guarantees blazing-fast access to artworks, artist biographies, and various artwork data while you browse our carefully chosen collection of masterworks, giving art fans a complete exploring journey. Whether you’re looking at modern artwork, classic sculptures, or cutting-edge structures, our website uses MySQL’s flexibility to provide an interactive atmosphere that fosters creation and inspires boundless ideas. Explore, admire, and purchase magnificent artwork with unmatched simplicity in the realistic setting of our MySQL-driven online art gallery.

Fig. 3. Collaboration Diagram of ArtSync Art Gallery

An online art gallery where ease and innovation coexist with each click. With a wide range of fascinating creations of art from gifted artists all over the world, our website acts as a virtual haven for art enthusiasts. Our payment gateways, which are powered by PayPal, Razorpay, and Stripe, guarantee safe and easy payments so you can buy your favorite things with comfort. Whether colorful paintings, detailed sculptures, or arresting photos pique your interest, our platform offers a smooth browsing and buying experience. Inside our immersive and safe online art gallery, peruse our carefully curated collections, uncover fresh talent, and spruce up your area with breathtaking artworks.

IV. RESULTS AND DISCUSSIONS

Since the beginning of our website, which serves as an online art gallery, we have observed a great deal of involvement and conversation from art fans all around the world. Our payment gateway connection with PayPal, Razorpay, and Stripe has been essential to enabling safe and easy purchases, which has raised user happiness and system confidence. Our metrics show a consistent increase in visitor numbers as well as conversion rates for sales, which is indicative of how well our intuitive layout and easy payment procedure work. Moreover, the use of MySQL for our records connectivity has shown to be indispensable in the administration and arrangement of our huge number of masterpieces and artist data. As our system grows, the flexibility and scalability provided by MySQL have enabled us to successfully expand our business processes in response to shifting demands.

We have discovered opportunities for development through frequent updates gathering and examination. These include improving search features, streamlining processing times, and growing our community of artists to provide a significantly wider variety of unique designs and materials. By taking care of these things, we hope to improve the user interface even more and establish ourselves as the go-to place for art lovers all over the globe. The outcomes thus far demonstrate how well our online art gallery website has performed in offering a simple and safe environment for people to find and purchase art. We are dedicated to building an active group of artists and art enthusiasts who are driven by a common appreciation of artistic expression and imagination even as we develop and improve.

Additionally, clients are guaranteed a flawless shopping experience thanks to the Stripe, Razorpay And PayPal payment system connection. This upgrade is expected to improve customer satisfaction overall by offering safe and easy payments. In addition to these features, the frontend design makes use of state-of-the-art technologies like HTML, CSS, JavaScript, and PHP, which combine to provide a visually appealing and accessible user interface. The interface’s simple structure and intuitive design are intended to give users a visually appealing and fulfilling exploring journey. Moreover, MySQL’s backend connection streamlines managing data by guaranteeing effective preservation and retrieval of crucial data about clients, artists, artwork, and payments. This robust framework supports the website’s dedication to providing a smooth and realistic art exploration experience by laying the foundation for long-term expansion, efficiency and performance.
V. CONCLUSIONS AND FUTURE WORK

Prior to purchasing an artwork, buyers in art galleries have been found to be curious about the medium’s longevity, the components used in its creation, and the painting’s time of creation in addition to the underlying art language. Showcasing apparent durability—which goes outside the scope of easily accessible web data—would be challenging for a virtual art exhibition (i.e. touch and feel). Digital trials are used on online marketplaces for designer products, furnishings, and eyewear to boost user confidence. A digital test on art-gallery is currently offered by the challengers.

Using the method of augmented reality (AR), an individual can practically position an artwork on their wall, adjust the brightness and reflecting projection, and choose the artwork from their mobile device. This is known as a simulated pathway. In order to accurately depict what is presented to the individual, an individual’s outline measuring six feet in height will serve as a reference point for adjusting the artwork’s dimensions.

According to our research, online art galleries are not just places where individuals can purchase and sell artwork; they’re also environments that mimic what visitors to traditional galleries would encounter. Purchasing artwork from a collection or auction, going to an virtual art gallery, and having face-to-face conversations with the artists all seem to be more about social standing than individual taste. This is one of the reasons why this area is dominated by well-known artists.[7] The goal of the research was to create a platform that would enable artists, especially those who are just starting out, to present their work without the need for a curator or art museum. The platform that is being suggested is a virtual museum where purchasers, artists, and art enthusiasts can all interact freely on one platform. The job of the curator can be reduced by posting the artwork on various social networking platforms for advertising and by developing an art converter that can estimate the correct selling price for a piece of art that is being sold.

The next topics are available for further study.

- The planned online art gallery will be accessible from anywhere in the world. Customers’ perspectives on art and their readiness to respect a work of art enough to pay a fair price differ from nation to nation.
- It is necessary to conduct research on improving particular aspects of the online galleries, such improving the level of quality of the pictures that are uploaded of the artwork displayed on the website. Include a video clip in which the creator of the artwork speaks about it.
- Transforming a basic online marketplace into an auction platform.

VI. ACKNOWLEDGMENT

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REFERENCES