

Web-Based Art Showcase And Exhibition System.

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Abstract -

This paper presents the development of an online website platform that showcases, dedicated and fosters the love, passion and interest for all the art and artistic enthusiast of the world. This website allows all the artists, art lovers, creators and collectors who fascinate art and are interested to get to know more about the art world. This system allows the user to showcase once art by the Online-Exhibition feature. It immerses the Detailed Blog about the art and the artist, Interviews of the Artists, Educational Tutorials about Art. The design incorporates the connection between the user and explorer via Integrated Dashboard and Real-Time monitoring and control. We also have features like Chat Box, Art Showcase Wall, Share Option, Notification and Like/Dislike interactions. The study demonstrates the urge to build and enable all the opportunities for all the emerging artists.

Key Words: Online-Exhibition, Blogs and Interviews, Educational Tutorials, Integrated Dashboard, Real-Time Monitoring and Art Showcase.

1.INTRODUCTION

The world of art is vast and there are many aspects and opportunities for all the artists out there. This website will allow the artists to present their art and the creative things made by them, and beneficial for all the art collectors and enthusiasts. With the advent of Web technologies, there will be growing interest in Art, Cultural and Creative. This paper explores the development and deployment of a Web and CMS based system designed to market the art in real-time and control. This system aims to market all the various types of arts and showcasing small town artists. By harnessing this website, people will create an inclusive and dynamic art community around the world, and providing users with promotions of artists and community engagements. Hence making it a valuable to all for both commercial and community use.

1.1 Project Overview

This project is an innovative system of Art Showcase and Exhibition for global audience to get to know and allow all the

artists to represent their art on this online platform. The proposed system allows global Exposure through this virtual exhibition, Community building will provide an online space to interact, connect and share their beautiful and creative ideas, and will allow them to foster collaborations among all the artist community.

1.2 System Components

The ongoing development focuses on creating several components for implementing or executing of the art system are by providing a User Interface(UI) for both the artists and the art visitor which includes user and artists profile and setting. The Art module management system will be present for uploading the art and an artist profile management system allowing the artist to have a look at all the comments and the number of like, shares they have received, it also includes the information, contact details, portfolio, and their social media display. The visitor have the feature to express their view by commenting, like and share feature.

2. LITERATURE SURVEY

In this world where each work is digitally done or are making it work digitally, hence making it a digital age or era. Platforms for artists have greatly evolved, by enabling the new emerging artists to showcase their art and introduce the art culture, also connecting with more like-minded individuals, and build a beautiful art community. There are more platforms like this which are notable like DeviantArt, ArtStation, and Behance.

- 1. DeviantArt:** It is an art platform and is widely recognized among the artist that allows sharing, posting, galleries and discovering artworks. However it lacks the feature of tailored tools option or saving-drafts.
- 2. ArtStation:** This platform mainly focuses on professional artists more accurately in the gaming, animation, creating cartoons, graphics, and film industries. This platform caters to mainly professionals and may alienate all the emerging artists because it being catered to highly professional emphasis.

3. **Behance:** An Adobe-owned platform is basically a portfolio sharing platform for digital artists and designers. Hence, it doesn't cater to the fine arts community.

Challenges in Existing Platforms:

These platforms are create and useful, but they share a few common limitations, such as:

1. **Feature Gaps:** The options or features like saving drafts, detailed description of the artist and the artworks, and explore arts absent or undeveloped.
2. **Complex Interface:** These platforms are challenging to use and artist those are not comfortable with digital platform may face difficulty in using.

This web-based system portrays inclusive, and community-driven space for artists. Including, a simple user-friendly interface for artist to upload artwork with a save as draft option. An advanced explore artwork and mainly focuses on fostering, allowing artist to build a connection to other artist and a community. It aims to bridge the gaps and needs of both amateur or emerging and professional artists, creating for artistic growth and collaborations.

3. MODELING AND ANALYSIS

This diagram is an Architectural Diagram of the 'Web-Based Art Showcase and Exhibition System' representing both the user and artists login and register format and a simple flow of what are the functions available and the steps for both artist login and users login. It also includes the option and varieties of art interests.

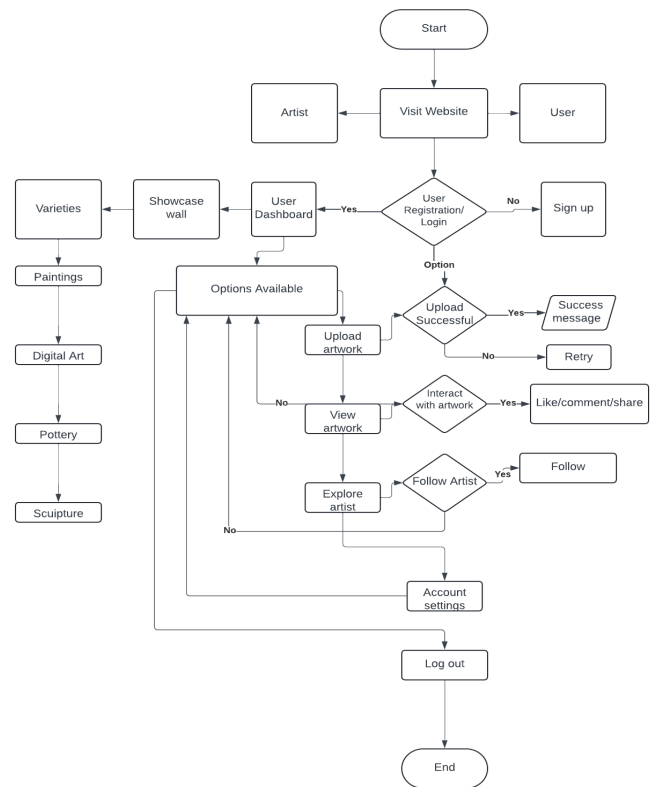


Fig-1. Flow Diagram

This figure illustrates the interconnection between how the website is going to be showcased, and be presented from an architectural diagram of the working of the 'Web-Based Art Showcase and Exhibition System'.

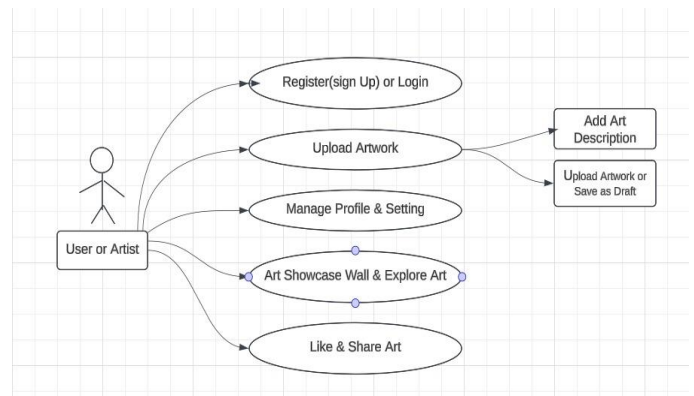


Fig-2. Use Case Diagram

The use case diagram helps to specify and describe and represent the main purpose of representing the interactions between the user and system. Here is a brief explanation of the use case diagram:

1. Actors:

- **User or Artist:** These are the primary actors who interact with the system.

2. Use Cases:

- **Registration(Sign Up) or Login:** This will allow the user or artist to login or create a new account to interact with the web-based system.
- **Upload Artwork:** This will allow the artist to upload their arts and paintings with the two options:
 - **Add Artwork Description:** It will let the artist add all the detailed description and information about the art.
 - **Upload Artwork or Save as Draft:** This feature will allow the artist to upload their art work or save it to the draft allowing it to upload it later.
- **Manage Profile and Setting:** This feature helps users to manage their account, artworks, account preference, posts, and portfolios, etc.
- **Art Showcase Wall and Explore Art:** It's a wall that displays all the arts, and artworks uploaded to help users explore more of the art culture.
- **Like and Share Art:** This enables users to promote and interact with the artist by liking the and sharing the artwork.

- **Presentation Layer:** The front-end, allows user (visitor) and artists to interact with each other and display or showcase the art wall. This responsive interface is created using HTML, CSS and JavaScript.
- **Application Layer:** The back-end, its build to manage interaction with the database, tokens for password, encryption, security mechanism. (Eg.,JSON Web Tokens_JWT) . Node.js is used to build this server-side logic.
- **Database Layer:** Designed a relational database management system with MySQL. Created tables for user, artworks section, data of the user, and message.

4. METHODOLOGY

The design of this Web-Based Art Showcase and Exhibition System centers around the developing the curiosity of Art on a global reach. The user can access the user dashboard to receive notification, and allowing them to handle to post and receive art works. Basically fostering and accepting the culture of art.

System Architecture

The system architecture consists of this 3-tier architecture points:

- **Requirement List Analysis:** To understand the need of the art and artists. The value of the art and building a curiosity along the globe. Providing a platform for the artist not able to showcase their talent. Also allowing them to have user-friendly and secure web-based system to spread the art community.

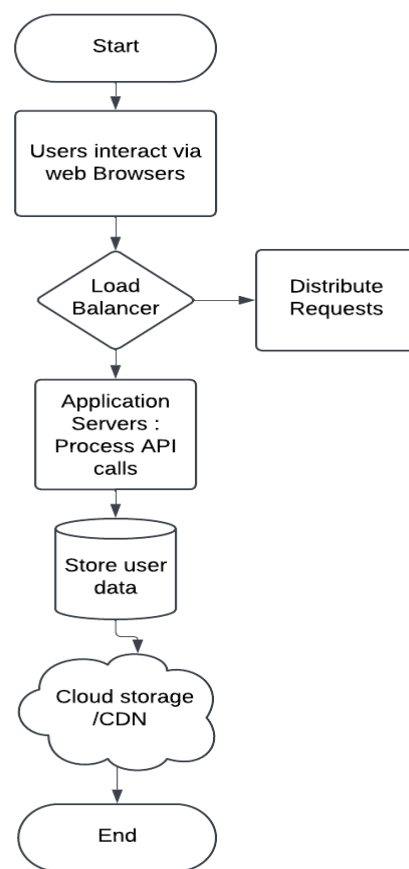


Fig-3. Diagram Description.

This methodology focuses on developing on fostering online art exhibiting, building community, and connecting with others.

Structured Methodology

This will provide a clear idea, aim and vision of the web-based system:

- **Problem Identification:** Due to the lack of knowledge about the art culture, artist are unable to

gain their required audience and a proper recognition. This website will help all the emerging artist to portray their art and portfolio giving them access to display their art and have a collaborative space.

- **Requirement Analysis:** This web based system is targeted to artists, curators, and art enthusiast. It has user-friendly interface, allowing the user to create a profile, their own portfolio, a personalized gallery, and community engagement.
- **Design and Planning:** The Web based system uses HTML, CSS, JavaScript and React for a user-friendly and interactive, responsiveness interface. MySQL is used to store the user profile, artwork, and community interaction in a database.
- **Development Methodology:** The Agile Approach is used for iterative and incremental development cycle.
- **Core Features:** The system provides user authentication, Art galleries, and Community Forums.
- **Future Scope:** Adding features like Online auction for art, Payment integration for online shopping and auctions for art sales, and Ai-based artwork recommendation as per the users liking and interests.

5. RESULT AND DISCUSSION

The implemented system was tested, and the results indicate that the website is capable of showcasing all the functions and experiences are of ease. System showcase are displayed on the dashboard, the user profile setting and the explore wall.

Table-1. System Performance Metrics.

Parameter	Value	Unit
Artwork Upload Success	99.1%	Percentage(%)
Response Time	1.2	Seconds
Page Load	1.9	Seconds
Uptime	99.5%	Percentage(%)

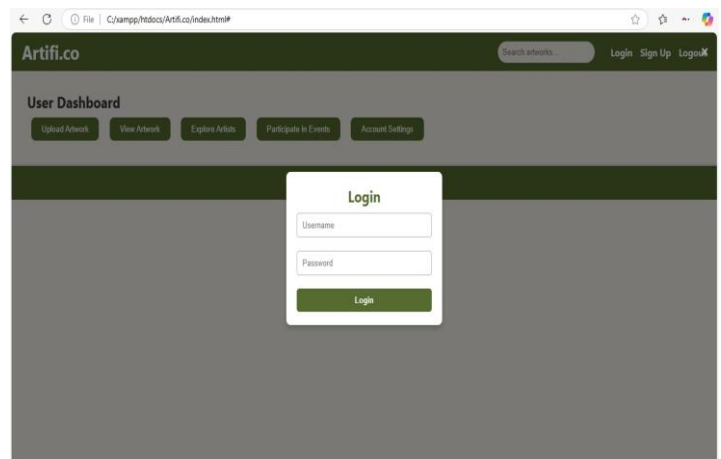


Fig-3. Login Page of Website.

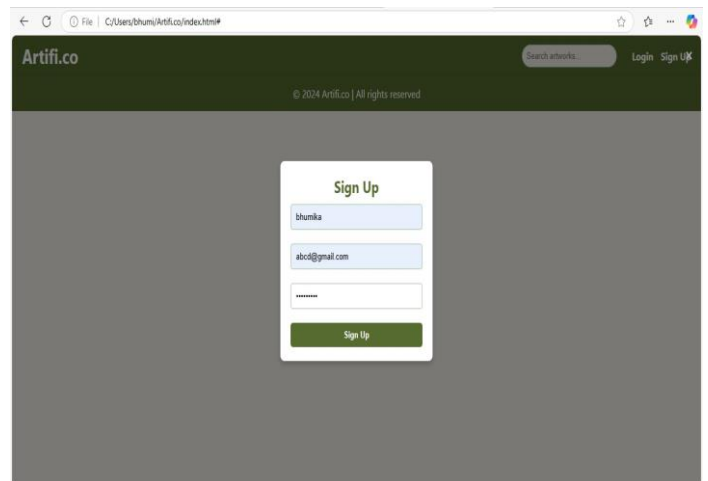


Fig-4. Sign Up Page of Website.

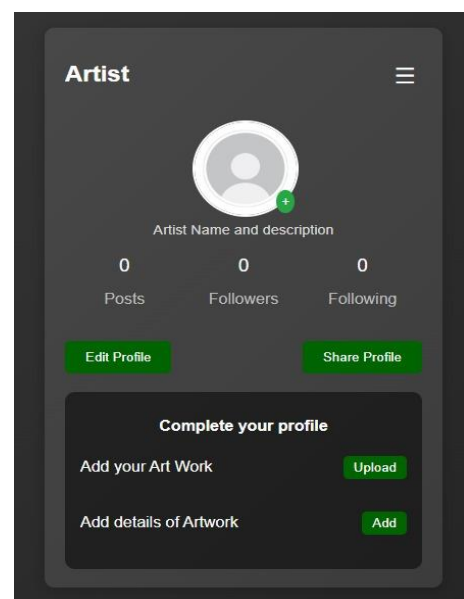


Fig-5. Profile UI

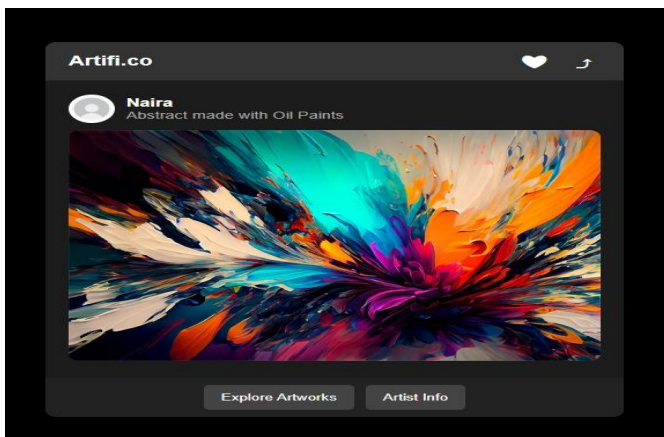


Fig-6. Artwork UI(Post Display).

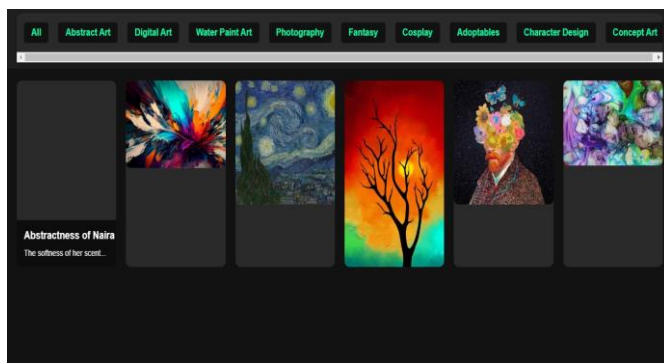


Fig-7. The Art Showcase Wall(Explore Art).

6. CONCLUSIONS

The Web-based art showcasing content management system presented in this paper effectively addresses the need for commercializing and promoting artists and their art to the world. The system's ability to manage user registration and login, exhibition, and art browsing including admin panel with real-time notifications makes it useful for commercial and community use application. Future work will focus on integrating additional features such as payment and AR and virtual exhibitions, auctions for a even greater efficiency.

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