# Public Photography Contest Using Social Media Polling

The project submitted to the

SRM University – AP, Andhra Pradesh

for the course project of

**(CSE-305L) Software Engineering Lab**

**Department of Computer Science and Engineering.**


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# Abstract

Public photography system is the organization of photography contests with ease and efficiency. Administrators can initiate contests based on specific topics, providing a focal point for participants' creativity. Winners can be selected through two methods: based on the number of likes received by each photograph or through direct selection by the administrator. The system enables remote access for administrators, allowing them to view and select the best submissions from anywhere. Photographers are encouraged to register, ensuring they receive timely notifications via email or SMS regarding contest deadlines and completion. One week prior to the contest, registered photographers are notified to prepare and submit their entries. In the event of an overwhelming number of submissions, administrators first shortlist the top images before engaging users in the final selection process. Users are granted the opportunity to vote for their favourite photographs, with each user permitted to vote for a maximum of three images. Upon the conclusion of the contest, the winner is notified promptly via email or SMS. The role of the administrator extends to verifying the authenticity of submitted images, ensuring they belong to the registered photographer and are not sourced from elsewhere. This validation process safeguards the integrity of the contest and protects participants' intellectual property rights. In summary, our system streamlines the management of photography contests, fostering engagement, fairness, and creative expression.

# Introduction

Public photography contest using social media polling contests with efficiency and fairness. Designed to simplify the contest management process, administrators can effortlessly initiate contests centered around specific themes. With two distinct methods for selecting winners—based on popular vote or direct administrator choice—the system offers flexibility in determining the victors. Administrators benefit from remote access capabilities, enabling them to evaluate submissions and ensure the quality of selected images from any location. Additionally, photographers are encouraged to register, receiving timely notifications regarding contest deadlines and completion. This system not only promotes creative engagement but also prioritizes authenticity, with administrators tasked with verifying the originality of submitted images.

**Objective:** The primary goal is to streamline photography contests, offering administrators two selection methods: popular vote or direct choice. Remote viewing capabilities enhance contest management convenience. Photographer registration and timely notifications aim to boost engagement. In cases of high entries, a fair two-stage selection process is implemented. Ultimately, the system seeks to promote creativity, authenticity, and community involvement while ensuring contest integrity through image verification.

**Summary:** Our system facilitates photography contests with flexible winner selection methods and remote viewing for administrators. It promotes engagement through photographer registration and timely notifications. In cases of high participation, a fair two-stage selection process ensures transparency. Overall, the system aims to foster creativity, authenticity, and community involvement while upholding contest integrity through image verification.

**Contest terms and working :** Our system offers features such as photo uploads, allowing direct selection of winners by administrators or through popular vote based on likes. Additionally, photographers can register, receive notifications, and participate in contests, ensuring fair and engaging competitions. Admins have the authority to verify image ownership and maintain contest integrity, ensuring a seamless and transparent process for all participants.

**Full-stack development:** Our project adopts a comprehensive software development methodology, encompassing the design, implementation, and maintenance of both the frontend and backend components. This includes the development of user interfaces, databases, and server logic, ensuring a cohesive and functional application.

**Backend database management:** It refers to the procedures used to store, retrieve, update, and delete data as well as manage and organize it inside a database system. It entails creating and executing database tables, queries, and schemas.

**User Interface (UI):** The interactive and visual components of a software program that let users communicate with the system. It has menus, controls, and graphical features that are intended to encourage user interaction and task completion.

**Scalability:** Our project achieves scalability through load balancers for horizontal scaling, database sharding for enhanced performance, caching for reduced queries, and a microservices architecture for easier scaling and fault isolation. These strategies collectively ensure efficient handling of growth and adaptability to changing demands while maintaining optimal performance and reliability.

**Security Procedures:** protocols established to protect sensitive information, prevent unauthorized access, and ensure that data remains confidential and unaltered. This includes setting up systems for controlling who can access what, verifying the identity of users, and encoding data to make it unreadable to anyone without proper authorization.

**Privacy regulations** are the legal specifications and guidelines that control how personal information, photos are gathered, stored, and used. Individuals' rights to data protection and privacy are upheld when privacy laws are followed.

**Software Requirements Specification (SRS):** Software requirements specification, serves as a detailed guide outlining what a software system should do, how it should behave, and any constraints it must adhere to. It’s like a roadmap for both stakeholders and developers, providing clear instructions on the system’s features, interface, and performance requirements.

## Existing System/ Literature Survey

The existing system or literature survey for this project involves a platform where the System Admin can organize contests based on specific topics. The Admin has the authority to choose the winner through two methods: either by the number of likes on a photograph or by directly selecting the winner. Additionally, the Admin can remotely view the images and select the best one. Photographers can register themselves on this platform to receive notifications (via email or SMS) about the contest. They are notified one week before the contest begins. If the number of entries exceeds the required limit, the Admin will first select the top images, and then users will vote for the best one. Each user is allowed to vote for only three photos. The winner of the contest will be notified either by email or SMS. It is the Admin's responsibility to ensure that the images belong to the registered photographer and have not been taken from other sources.

**Management and advantages of the contest:**

1. **Wider Reach:** Social media platforms have a vast user base, allowing for a broader audience to participate in the photography contests. This increases the visibility of the contest and encourages more participation.
2. **Engagement:** Social media polling encourages user engagement as participants can vote for their favorite photographs easily with just a click. This interactive aspect enhances user involvement and interest in the contest.
3. **Viral Potential:** Social media platforms facilitate easy sharing of content. Contest participants often share their entries with their social networks, thereby increasing the contest's exposure and potentially attracting more participants.
4. **Real-time Results:** Social media polling provides real-time results, allowing participants to see how their entries are performing instantly. This transparency enhances the excitement and competitiveness of the contest.
5. **Community Building:** Participating in a public photography system via social media can foster a sense of community among photographers and enthusiasts who share similar interests. It provides an opportunity for networking, sharing tips, and appreciating each other's work.

6. **Cost-effective:** Compared to traditional methods of organizing photography contests, using social media polling is often more cost-effective. It eliminates the need for printing materials, postage, or venue rentals, making it accessible to a wider range of participants.
7. **Feedback and Analytics:** Social media platforms offer built-in analytics tools that can provide valuable insights into participant demographics, engagement levels, and preferences. This data can be used to improve future contests and tailor them to the audience's interests.
8. **Accessibility:** Social media platforms are accessible across various devices, including smartphones, tablets, and computers. This accessibility ensures that participants can easily access the contest and vote from wherever they are.

**Limitations of the contest:**

1. **Quality Control:** Since the contest relies on user-generated content, ensuring the quality and authenticity of the photographs can be challenging. There may be instances of low-quality or inappropriate submissions that could diminish the overall integrity of the contest.
2. **Privacy Concerns:** Participants may have concerns about their privacy when sharing their photographs on social media platforms. They may be hesitant to participate if they feel their images could be misused or shared without their consent.
3. **Bias and Manipulation:** Social media polling can be susceptible to bias and manipulation, such as fake accounts or bots artificially inflating votes. This could undermine the fairness and credibility of the contest results.
4. **Platform Dependence:** Relying on social media platforms for hosting the contest means being subject to their terms of service, algorithms, and potential changes in policies. This lack of control over the platform could impact the stability and longevity of the project.
5. **Limited Accessibility:** While social media platforms are widely used, not everyone may have access to them, particularly in regions with limited internet connectivity or where certain platforms are restricted. This could exclude potential participants from engaging in the contest.

6. **Technical Challenges:** Managing a photography contest on social media platforms may pose technical challenges, such as ensuring compatibility across different devices and addressing any issues related to platform updates or downtime.
7. **Legal and Copyright Issues:** There may be legal implications associated with hosting a public photography contest, such as copyright infringement or disputes over ownership of the submitted photographs. Ensuring compliance with intellectual property laws and obtaining necessary permissions can be complex.
8. **Overreliance on Social Media:** Depending solely on social media for hosting the contest may limit the project's reach and effectiveness. It's important to consider other channels for promotion and engagement to reach a more diverse audience.

# System Requirements

To effectively implement the public photography system using social media polling, the following system requirements should be considered:

1. **User Management:**

- Registration and login functionality for photographers and users.

- User profile management, including the ability to update personal information and preferences.

2.**Contest Management:**

- Creation and management of photography contests by the administrator.

- Ability to specify contest details such as topic, duration, entry requirements, and voting criteria.

- Option to set up automated notifications to participants regarding contest details, deadlines, and results.

3.**Photograph Submission:**

- User-friendly interface for photographers to upload their photographs.

- Support for various image formats and sizes.

- Validation checks to ensure submitted photographs meet contest requirements (e.g., resolution, file size, content).

4.**Voting System:**

- Integration with social media platforms for conducting polls and collecting votes

- Limiting the number of votes per user to ensure fairness (e.g., one vote per user, per photograph).

- Real-time monitoring of voting activity and results.

5.**Notification System:**

- Automated notifications to photographers and users via email or SMS regarding contest updates, deadlines, and results.

- Customizable notification settings to allow users to opt-in or opt-out of receiving notifications.

6.**Content Moderation:**

- Mechanisms for monitoring and moderating user-generated content, including photographs and comments.

- Ability to flag and remove inappropriate or violating content.

- Implementation of measures to prevent spam, fake accounts, or fraudulent activities.

7.**Analytics and Reporting:**

- Tracking and analysis of user engagement metrics, such as participation rates, voting patterns, and feedback.

- Generation of reports to evaluate the success of contests and identify areas for improvement.

8.**Security:**

- Implementation of secure authentication and authorization mechanisms to protect user accounts and data.

- Encryption of sensitive information (e.g., passwords, personal data) to prevent unauthorized access.

- Regular security audits and updates to address vulnerabilities and mitigate risks.

9.**Scalability and Performance:**

- Designing the system architecture to handle a large volume of users and concurrent activities.

- Optimizing performance to ensure fast response times and minimal downtime during peak periods (e.g., contest deadlines).

10.**Compliance:**

- Ensuring compliance with relevant regulations and legal requirements, including data protection laws and intellectual property rights.

- Providing users with clear terms of service and privacy policies outlining how their data will be collected, used, and protected.

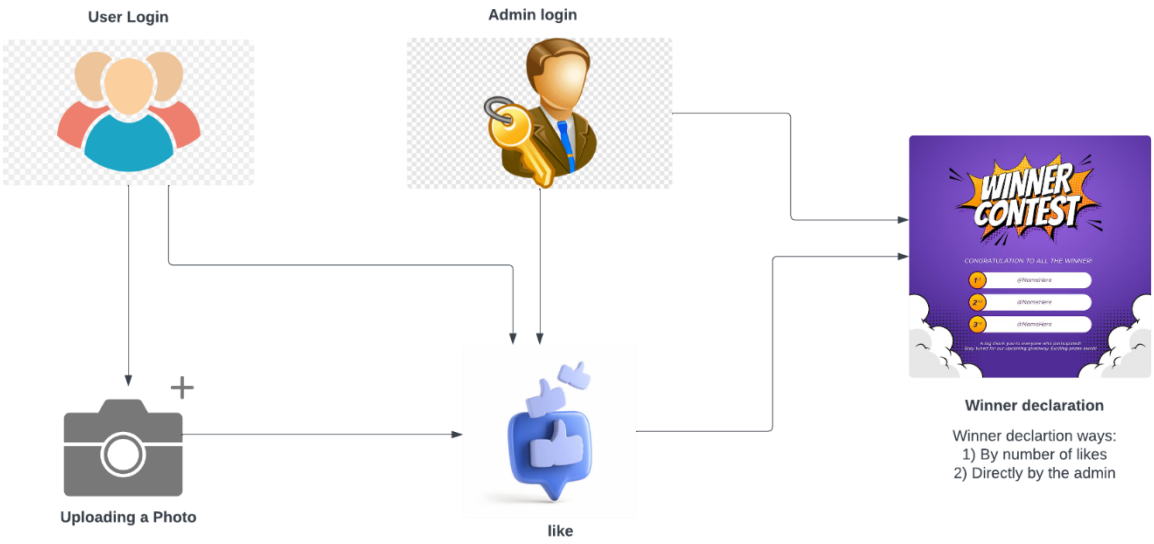
By meeting these system requirements, the public photography system can provide a seamless and engaging experience for participants while maintaining fairness, security, and compliance with applicable standards and regulations gate potential risks.

**Network Requirements:**

- **High-speed Internet Connectivity:** Ensuring high-speed internet connectivity enables users to upload photos and participate in polls without experiencing delays or interruptions, enhancing their overall experience.
- **Security Measures**: Implementing robust security measures protects user data and privacy, instilling trust in the system and encouraging active participation from users.
- **API Integration with Social Media Platforms:** Seamless integration with social media APIs enables users to easily share photos and engage in polls across multiple platforms, expanding the system's reach and user base.
- **Data Storage and Retrieval:** The system should have efficient mechanisms for storing and retrieving user-generated content, including photos and poll data. Utilizing distributed storage solutions or databases optimized for read and write operations can enhance performance and scalability.
- **Analytics and Monitoring:** Utilizing analytics tools and monitoring systems provides insights into system performance, user engagement, and network health, enabling proactive maintenance and optimization to deliver an optimal user experience.

# Proposed System/Scheme

For a public photography system integrated with social media polling, a robust and user-friendly scheme is crucial. Here's a proposed system/scheme for such a project: User Registration and Authentication, Photo Upload and Sharing, Social Media Polling, Voting and Engagement, Privacy and Security, winner declaration .

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**1. User Registration and Authentication:**

- Users register using their email or social media accounts.

- Two-factor authentication ensures security.

- Upon registration, users can set preferences and customize their profiles.

**2. Photo Upload and Sharing:**

- Users can upload photos from their devices or capture them directly through the app/web interface.

- Photos undergo basic moderation to ensure compliance with community guidelines.

- Integration with social media APIs allows seamless sharing across platforms like Instagram, Facebook, and Twitter.

**3. Social Media Polling:**

- Users can create polls associated with their uploaded photos.

- Polls can be multiple-choice or open-ended, allowing for diverse engagement.

- Integration with social media APIs enables sharing of poll results and inviting participation from friends and followers.

**4. Voting and Engagement:**

- Users can browse through uploaded photos and participate in polls by voting or commenting.

- Real-time updates on poll results encourage active engagement.

- Gamification elements like badges or rewards incentivize participation.

**8. Privacy and Security:**

- Robust privacy controls empower users to manage their data and visibility settings.

- End-to-end encryption safeguards sensitive information during transmission.

- Regular security audits and compliance with data protection regulations ensure user trust and confidence.

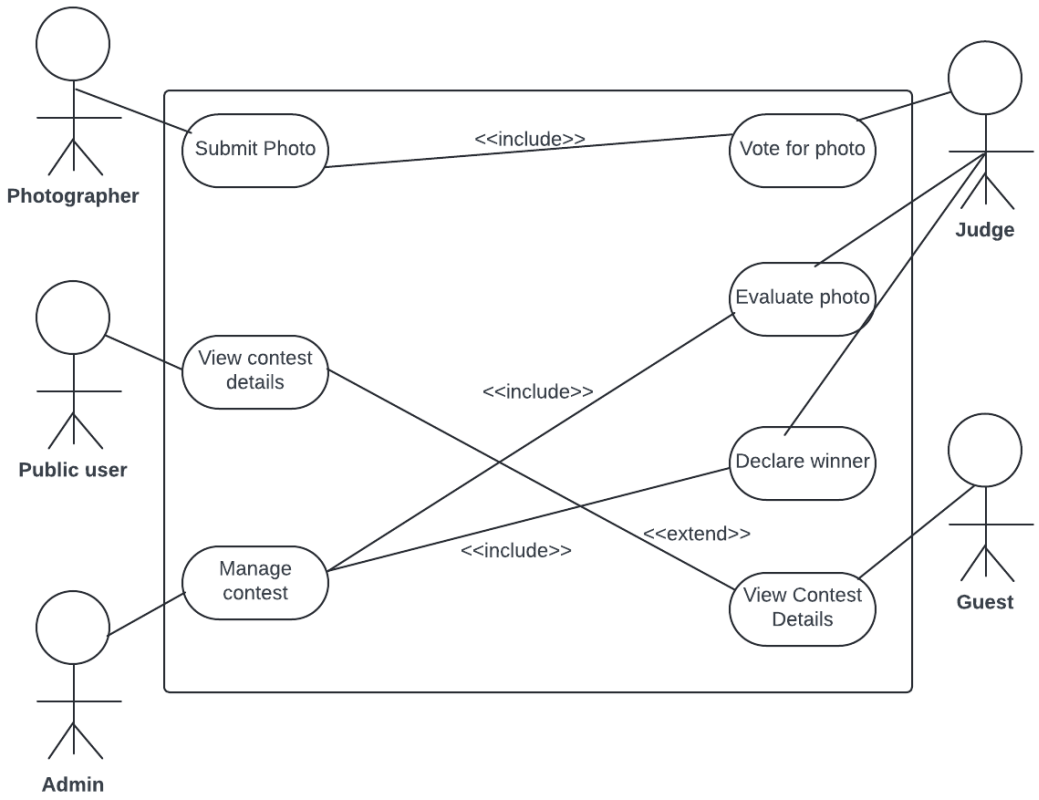
**9.Winner Declaration:**

- At the end of the voting period, declare winners based on criteria such as votes, creativity, or theme relevance. Reward winners with prizes, badges, or featured spots on the platform. Showcase winning photos across social media channels to celebrate achievements and inspire others.

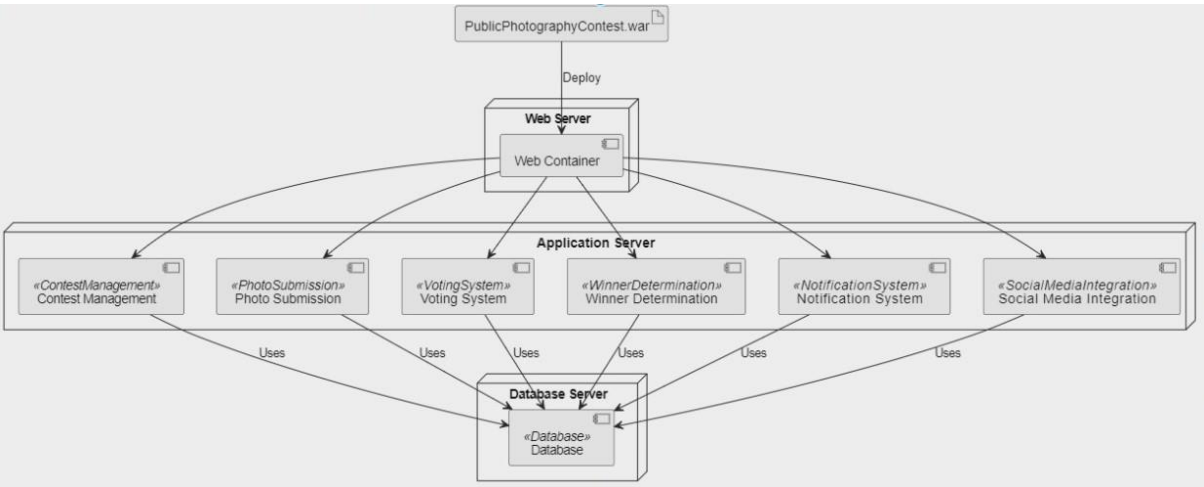
- Winner is also declared directly by admin also.

By implementing this proposed system/scheme, the public photography system integrated with social media polling can offer a compelling and engaging platform for users to showcase their creativity, participate in interactive polls, and connect with like-minded individuals.

**Use-Case Diagram:**




## Deployment diagram:



The following are some possible system presumptions for the public photography system using social media polling:

- **High-speed Internet Connectivity:** Ensuring high-speed internet connectivity enables users to upload photos and participate in polls without experiencing delays or interruptions, enhancing their overall experience.
- **Security Measures**: Implementing robust security measures protects user data and privacy, instilling trust in the system and encouraging active participation from users.
- **API Integration with Social Media Platforms:** Seamless integration with social media APIs enables users to easily share photos and engage in polls across multiple platforms, expanding the system's reach and user base.
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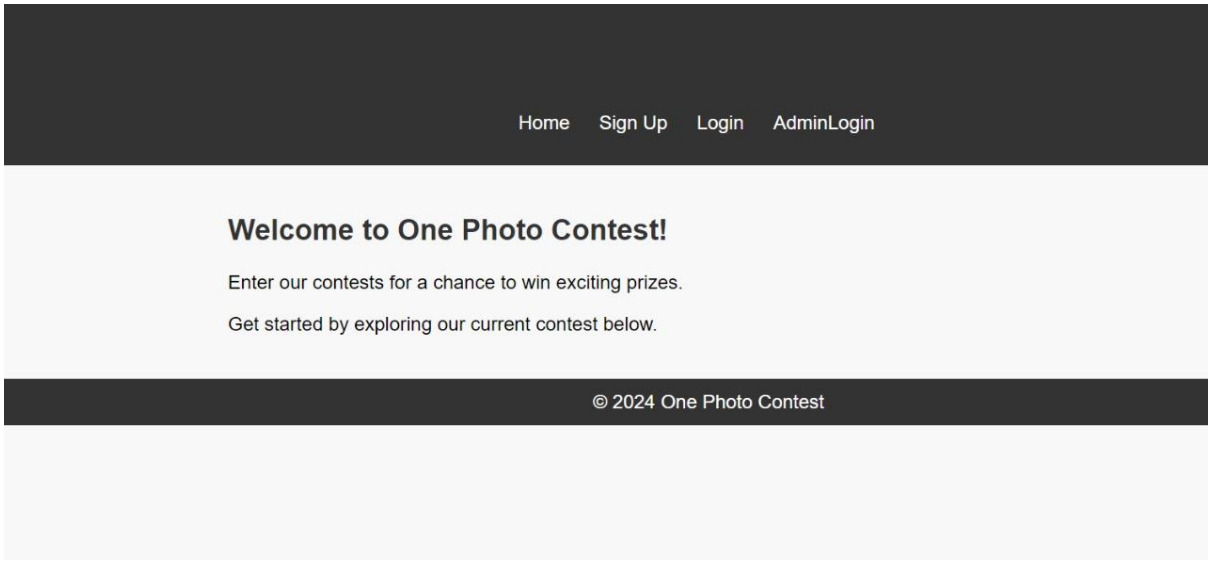
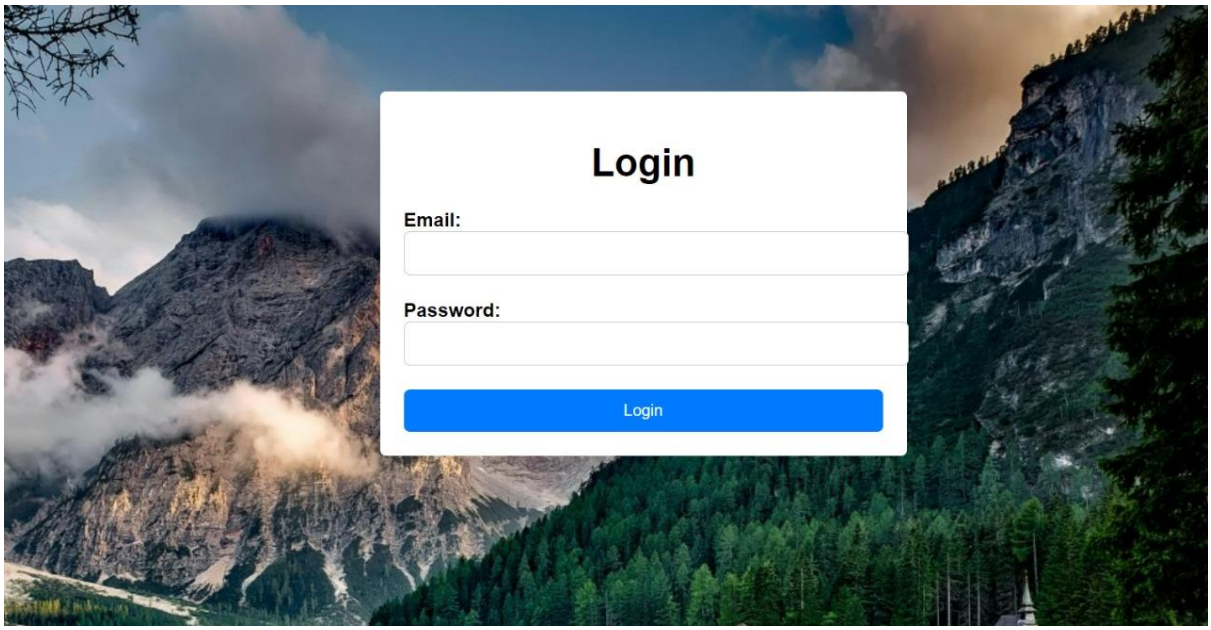
# Results/Screenshots:




**Dashboard**




**Login page**

# One Photo Contest

- Home
- logout

## Current Contest

Submit your photo for a chance to win!

Photo: Choose File No file chosen

Caption:

Submit

© 2024 One Photo Contest

**Contest Login**

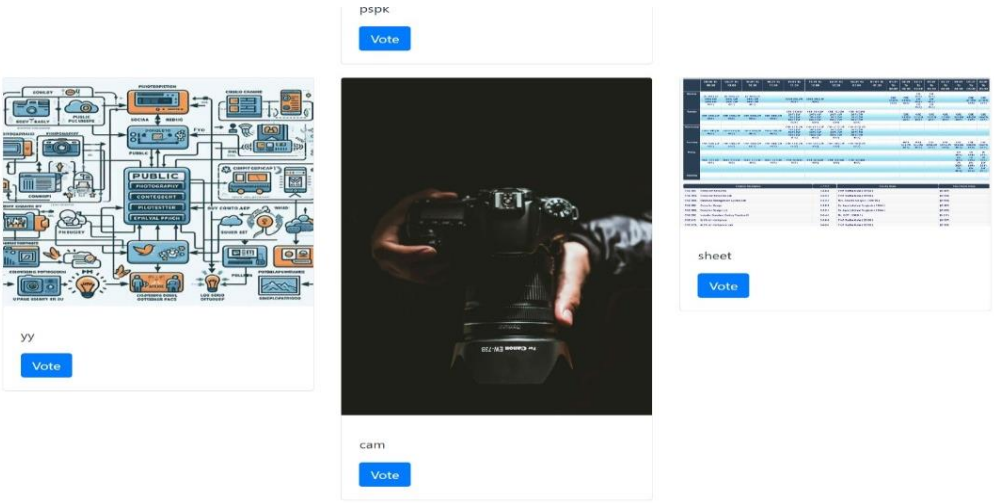
# Admin Login

Username:

Password:

Login

**Admin Login**




**Users view page/ Gallery**

# Conclusion

In conclusion, the proposed public photography system integrated with social media polling offers a dynamic and engaging platform for users to showcase their creativity, participate in interactive polls, and connect with like-minded individuals. By incorporating features such as user registration, photo upload and sharing, social media polling, winner declaration, and recognition, the system fosters a vibrant community of photographers and enthusiasts.

Through robust security measures, scalable infrastructure, and continuous improvement initiatives, the platform ensures a safe, reliable, and user-friendly experience for all participants. By leveraging analytics insights and user feedback, the system evolves iteratively to meet the evolving needs and preferences of its users.

Overall, the project aims to inspire creativity, foster collaboration, and celebrate the diverse talents within the photography community while providing a platform for users to engage, learn, and grow.

## Future Work:

The project's upcoming tasks could involve:

- **Advanced AI Features**: Integrating artificial intelligence (AI) capabilities can enhance user experience by offering features like image recognition, sentiment analysis, and personalized content recommendations. These features can improve photo discovery and engagement.
- **Enhanced Community Engagement**: Developing features like group challenges, collaborative photo projects, or virtual meetups can foster deeper connections and collaboration within the community, driving user engagement and retention.
- **Monetization Opportunities**: Exploring monetization avenues such as premium subscriptions, sponsored content, or partnerships with brands and advertisers can generate revenue while providing additional value to users and sustaining the platform's growth.

- **Global Expansion**: Expanding the platform's reach through localization, multilingual support, and cultural adaptation can attract a diverse user base worldwide, fostering a vibrant and inclusive community of photographers and enthusiasts.
- **User Empowerment and Governance**: Implementing mechanisms for user governance, such as decentralized decision-making and community-driven initiatives, empowers users to participate in platform development, content moderation, and policy creation, fostering a sense of ownership and trust within the community.

# References


1. https://www.irjmets.com/uploadedfiles/paper//issue_5_may_2022/25144/final/fin_irjmets1654576049.pdf
2. https://nevonprojects.com/public-photography-contest-with-live-voting/