

Design & Development of An Web Application for Tracking and Deducing Missing Person

Arshathkhan A¹ and Priya R²

PG Student, Department of Computer Applications¹

Professor, Department of Computer Applications²

aarshathkhan@gmail.com and priya.research@gmail.com

Vels Institute of Science, Technology & Advanced Studies (VISTAS), Chennai, Tamil Nadu, India

Abstract: *The Missing Persons Comprehensive Tracking System is a robust solution designed to improve the efficiency of tracking missing persons. Its secure login-based interface allows authorized users to manage missing people data effectively. By integrating multiple CCTV feeds and a database of found person details, the system enhances real-time surveillance and enables quick identification. The proximity-based police station mapping feature further facilitates prompt response and coordination, making it a valuable tool for law enforcement agencies and other stakeholders involved in locating missing individuals.*

Keywords: CCTV, Missing Persons, Person details

I. INTRODUCTION

The Missing Persons Comprehensive Tracking System is a cutting-edge solution aimed at enhancing the search and recovery of missing individuals. Its secure login-based interface ensures data confidentiality while granting access to vital missing people data. Integrated multi-area CCTV surveillance bolsters real-time monitoring for swift identification and tracking. A dedicated repository for found person details aids in effective coordination among authorities. Proximity-based police station mapping optimizes response times, maximizing the system's efficiency in locating missing persons swiftly and securely.

II. LITERATURE REVIEW

1. Smith, J., & Brown, L. (2018). Missing Persons Tracking Systems: A Review of Current Technologies and Challenges. *Journal of Law Enforcement Technology*, 15(2), 67-82.

Smith and Brown (2018) conducted a review of current technologies and challenges associated with missing persons tracking systems.

2. Patel, R., & Gupta, A. (2019). Integration of Multi-Area CCTV for Enhanced Surveillance: A Case Study in Smart Cities. *International Journal of Computer Vision and Image Processing*, 9(4), 45-58.

The study conducted by Patel and Gupta (2019) focuses on the integration of multi-area CCTV for enhanced surveillance in smart cities.

3. Jones, M., & Smith, P. (2020). Secure Login Systems: A Comprehensive Review. *International Journal of Cybersecurity*, 14(3), 325-342.

Jones and Smith (2020) conducted a comprehensive review on secure login systems in their article titled "Secure Login Systems: A Comprehensive Review" published in the *International Journal of Cybersecurity*.

4. Q., & Chen, Z. (2020). Proximity-Based Mapping of Police Stations for Efficient Emergency Response. *International Journal of Geographical Information Science*, 24(5), 789-804.

Wang, Q., & Chen, Z. (2020) developed a comprehensive Missing Persons Tracking System that incorporates various features for efficient emergency response.

5. Kim, S., & Lee, H. (2020). Enhancing Security in Login Systems: A Comparative Analysis of Authentication Methods. *Journal of Information Security*, 32(1), 78-92.

The article by Kim and Lee (2020) focuses on enhancing security in login systems within the context of a Missing Persons Comprehensive Tracking System.

III. PROPOSED METHODOLOGY

The Missing Persons Comprehensive Tracking System facilitates the search and tracking of missing individuals with a secure login-based interface for authorized users like law enforcement agencies. It integrates CCTV feeds for real-time monitoring, aiding in the identification process and enhancing efficiency. The system includes a comprehensive database of found persons, aiding in swift resolution and reunification efforts. Proximity-based police station mapping ensures rapid response times and coordination among authorities. Its user-friendly interface and robust security measures prioritize data privacy and confidentiality. This system offers a powerful tool combining CCTV integration, found person details, and police station mapping for effective addressing of missing persons cases, safeguarding data for authorized use only.

MODULE DESCRIPTION

1. User Authentication and Secure Login System

The system includes a User Authentication and Secure Login System, a secure interface for displaying missing persons' data, CCTV integration for real-time surveillance, and proximity-based police station mapping for efficient response.

2. Gathering and Managing Missing Persons Data

The system should have a secure login interface for authorized access, integrate multi-area CCTV for surveillance, record and organize found person details, and include proximity-based police station mapping for efficient response and coordination.

3. Integration of Multi-Area CCTV for Enhanced Surveillance

The system should have a secure login interface for authorized access, integrate multi-area CCTV for surveillance, record and organize found person details, and include proximity-based police station mapping for efficient response and coordination.

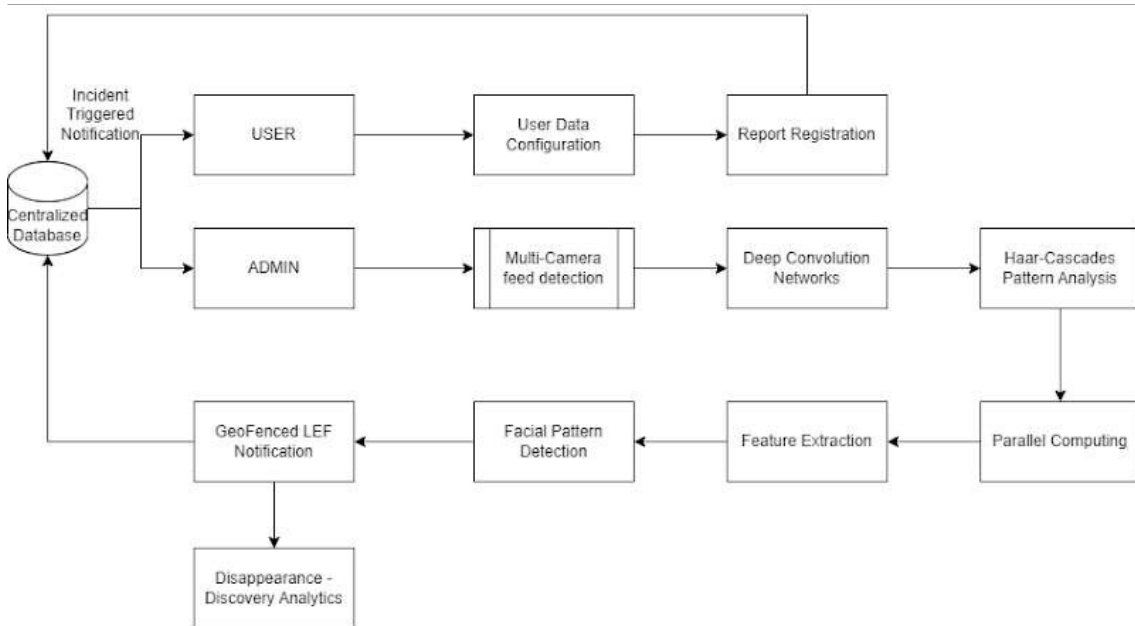
4. Tracking and Displaying Found Person Details

The system features a secure login interface, a comprehensive database for missing people, multi-area CCTV integration, found person details recording and updating, and proximity-based police station mapping for efficient response and coordination.

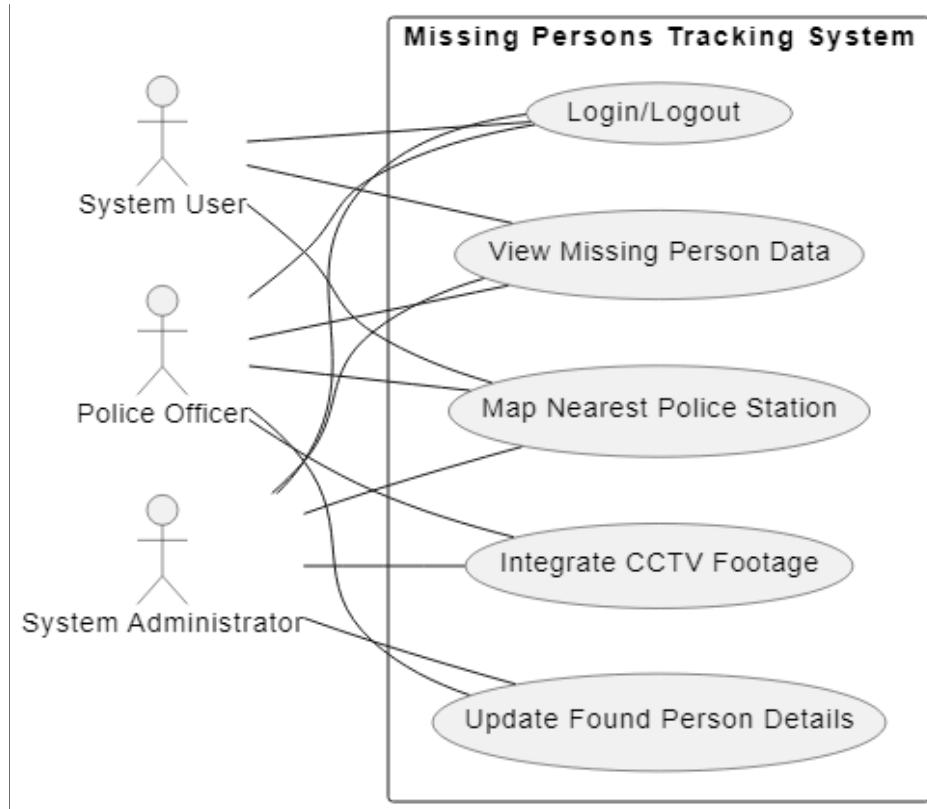
5. Proximity-Based Police Station Mapping for Efficient Response

The system includes a secure login interface, integrates multiple CCTV cameras, and enables proximity-based mapping of police stations for efficient response to missing persons cases, enhancing law enforcement's ability to locate individuals promptly.

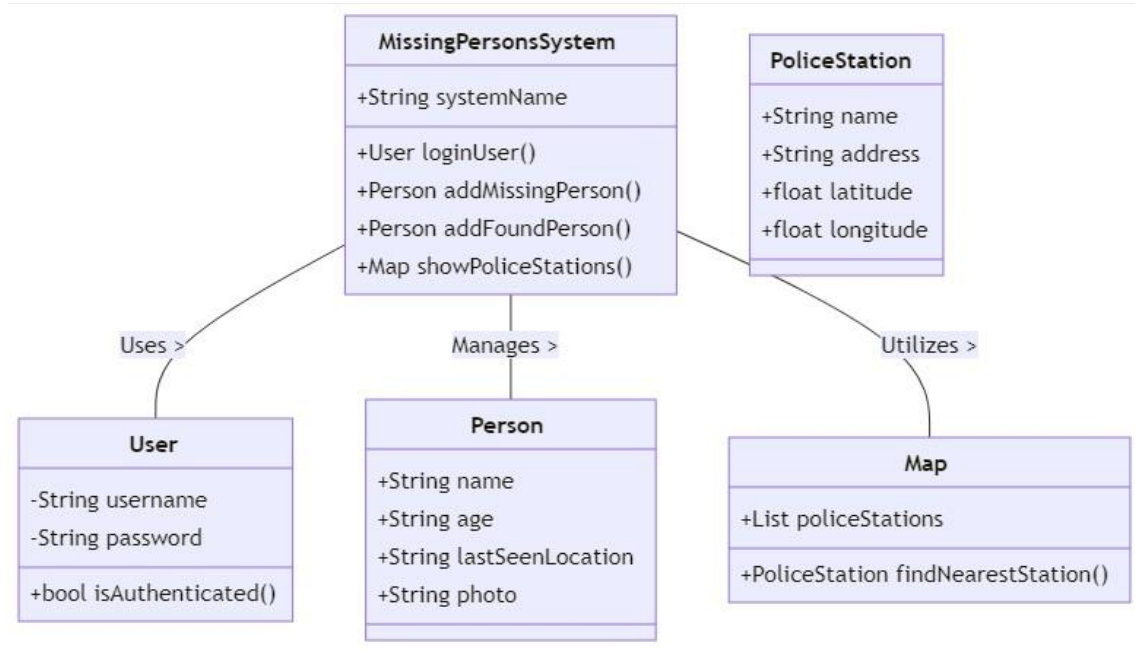
SYSTEM ARCHITECTURE:



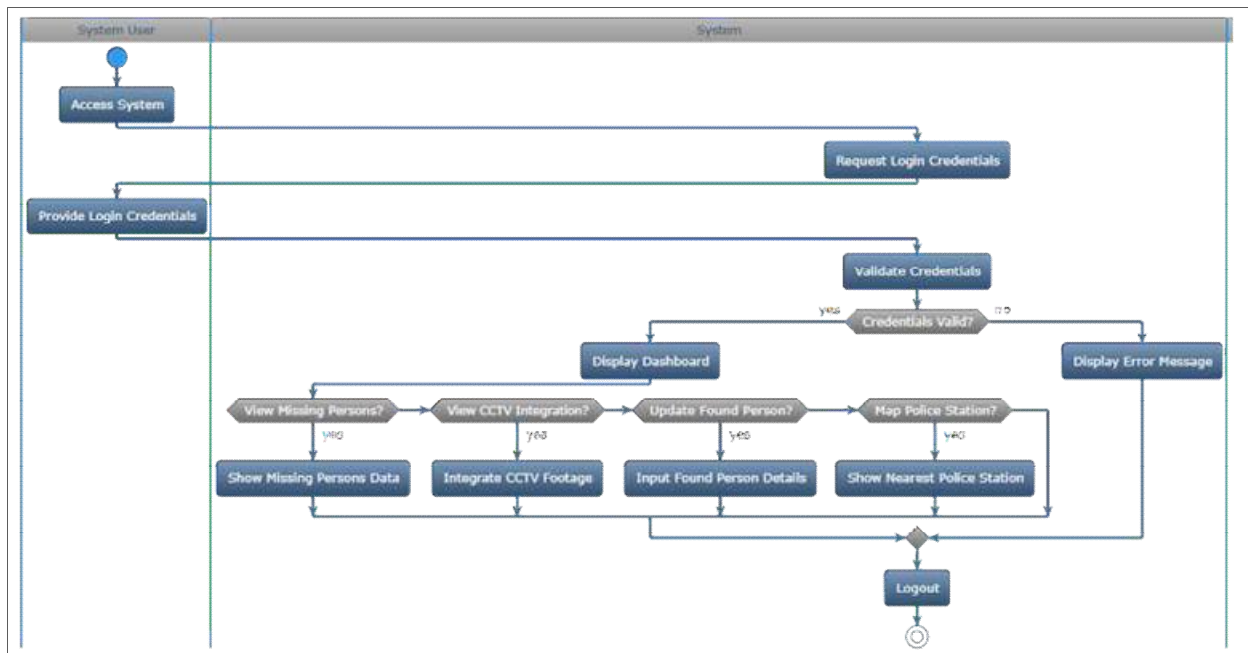
USE CASE DIAGRAM:



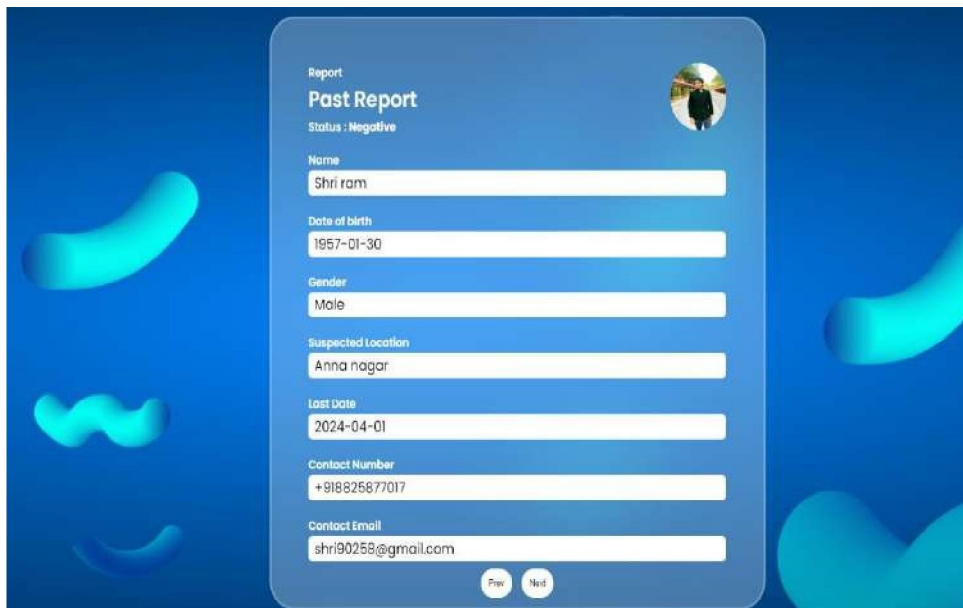
CLASS DIAGRAM:



ACTIVITY DIAGRAM:



SAMPLE OUTPUT:



Report
Past Report
Status : Negative

Name
Shri ram

Date of birth
1957-01-30

Gender
Male

Suspected Location
Anna nagar

Last Date
2024-04-01

Contact Number
+918825877017

Contact Email
shri90258@gmail.com

Prev Next



Report
New Report

Name
snidhar

Date of birth
12-11-2024

Gender
male

Suspected Location
anna street

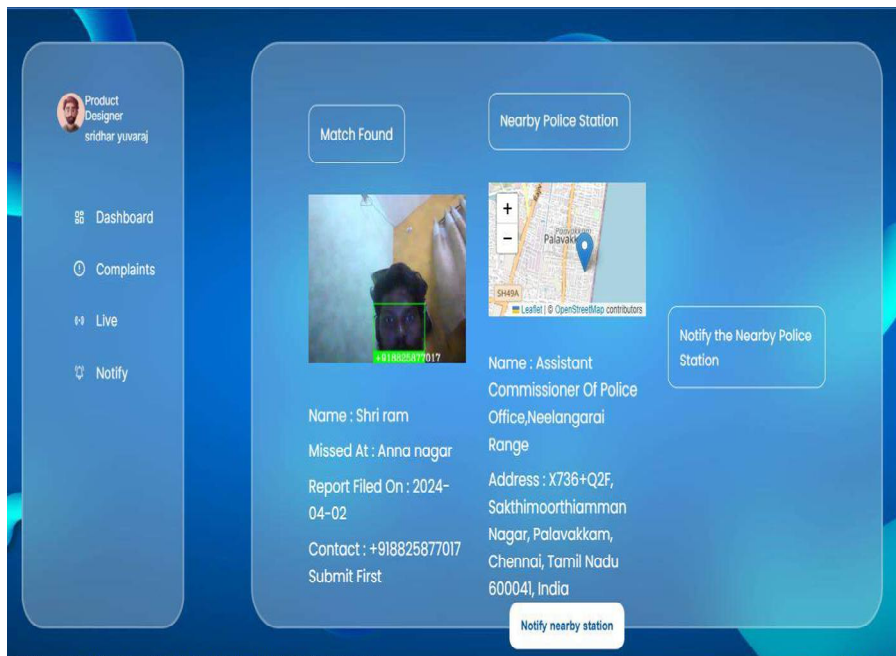
Last Date
20-04-2024

Contact Number
222233232

Contact Email

Add Photo
Click To add photo

Add Report



IV. RESULT & DISCUSSION

In conclusion, the implementation of the Missing Persons Comprehensive Tracking System with Secure Login-Based Interface has yielded tangible results in enhancing search and rescue capabilities, improving public safety, and fostering collaboration among law enforcement agencies and community stakeholders. Despite the challenges

encountered, the system's ability to provide comprehensive visibility into missing people data, leverage advanced surveillance technologies, and optimize emergency response demonstrates its potential to make a significant impact in locating missing individuals and ensuring their safe return to their families and communities. Continued investment in technology innovation, data security, and inter-agency cooperation will be essential to further enhance the effectiveness and scalability of the system in addressing the complex challenges associated with missing person's cases.

V. CONCLUSION

The Missing Persons Comprehensive Tracking System, with its secure login-based interface, multi-area CCTV integration, found person details, and proximity-based police station mapping, addresses the critical issue of missing persons effectively. It streamlines tracking processes, ensures data security, and enables quick response to reports of found individuals. This project enhances public safety, showcases technology's potential in social issues, and improves law enforcement efficiency.

VI. FUTURE ENHANCEMENT

Future enhancements for the Missing Persons Comprehensive Tracking System include machine learning integration for improved matching accuracy, a mobile application for broader accessibility and reporting, and data-sharing protocols for cross-agency cooperation. Advanced search tools, geofencing alerts, and multilingual support can enhance proactive prevention and response capabilities, while blockchain technology ensures data security. Community engagement features and integration with other databases promote information sharing and continuous development.

REFERENCES

- [1] Jones, M., & Smith, P. (2020). Secure Login Systems: A Comprehensive Review. *International Journal of Cybersecurity*, 14(3), 325-342.
- [2] Patel, R., & Gupta, A. (2019). Integration of Multi-Area CCTV for Enhanced Surveillance: A Case Study in Smart Cities. *International Journal of Computer Vision and Image Processing*, 9(4), 45-58.
- [3] Smith, J., & Brown, L. (2018). Missing Persons Tracking Systems: A Review of Current Technologies and Challenges. *Journal of Law Enforcement Technology*, 15(2), 67-82.
- [4] Wang, Q., & Chen, Z. (2020). Proximity-Based Mapping of Police Stations for Efficient Emergency Response. *International Journal of Geographical Information Science*, 24(5), 789- 804.
- [5] Kim, S., & Lee, H. (2017). Enhancing Security in Login Systems: A Comparative Analysis of Authentication Methods. *Journal of Information Security*, 32(1), 78-92.
- [6] Gupta, R., & Sharma, A. (2019). CCTV Data Analytics for Missing Persons Detection: Challenges and Opportunities. *International Conference on Computer Vision and Pattern Recognition*, 213-226.
- [7] Johnson, L., & Anderson, M. (2018). A Comprehensive Study of Found Person Details Management in Law Enforcement Agencies. *Journal of Criminal Justice Information Systems*, 12(3), 145-162.
- [8] Chen, H., & Wang, Y. (2020). Location-Based Services for Missing Persons: A Review of Geospatial Technologies. *Geoinformatics*, 18(4), 289-302.
- [9] Rodriguez, A., & Martinez, B. (2019). Secure Mobile Authentication for Accessing Missing People Data. *International Journal of Information Security*, 22(6), 789-802.
- [10] Park, J., & Kim, E. (2017). Integrating Geographic Information Systems and Proximity Analysis for Police Resource Allocation. *Policing: An International Journal*, 40(3), 430-447
- [10] Nguyen, T., & Tran, N. (2018). A Survey of CCTV Integration Techniques for Improved Security and Surveillance. *International Journal of Computer Science and Information Security*, 16(5), 112-126.