Missing Person Finder

Sagar C Golasangi[1], Assistant Professor. Venkatesh A[2]

[1]*Student Department Of Masters Of Computer Application, BMS Institute Of Technology And Management, Bangalore, Karnataka, India*

[2]*Assistant Professor, Department Of Masters Of Computer Application, BMS Institute Of Technology And Management, Bangalore, Karnataka, India*

---***---

Abstract - This paper presents the development and implementation of the "Missing Person Finder" android application, designed to enhance the search and identification process for missing individuals. The application serves as a dynamic platform for users to report missing persons, share essential information, and engage a broad user community in search efforts. Leveraging advanced geolocation technology and data analysis, the app expedites the process of locating missing persons.

The project's key objectives involve improving the speed and effectiveness of locating missing individuals while providing support to affected families and communities. The android app fosters engagement through user-friendly features, enabling users to create profiles, participate in discussions, and collaborate within groups. Real-time updates on ongoing search operations, combined with the ability to share tips and leads, facilitate collective efforts to locate missing persons.

Rigorous testing and continuous improvements ensure the app's reliability and performance across diverse mobile platforms. By merging innovative technology with user-centric design principles, this project contributes to the collective endeavour of locating missing persons and reuniting them with their loved ones.

*Key Words***:** Missing Person Finder, android application, geolocation, user engagement, data protection, technology integration, community collaboration, user-centered design.

1. INTRODUCTION

The persistent challenge of locating missing individuals demands innovative solutions that blend modern technology and community engagement. This paper introduces the "Missing Person Finder" android application, a project focused on developing a dynamic platform to streamline the search and identification of missing persons.

Harnessing the ubiquity of android devices, the app aims to expedite the reporting of missing individuals and the sharing of crucial information. Through intuitive geolocation technology, it seeks to enhance the effectiveness of search efforts while fostering a sense of collective responsibility within user communities.

Beyond its core functionality, the app facilitates collaboration by enabling users to create profiles, participate in discussions, and contribute real-time leads. A paramount concern is data security, with stringent measures to safeguard sensitive information and ensure user privacy.

The "Missing Person Finder" app signifies the fusion of cutting-edge technology and human empathy. By leveraging mobile capabilities and communal involvement, the project aims to significantly impact the quest to locate missing individuals, extending compassion to affected families and communities.

2. EXISTING SYSTEM

The existing system for locating missing persons is outdated and ineffective, resulting in a time-consuming and inefficient process. Collaboration between individuals, communities, and law enforcement agencies is limited, leading to a lack of coordination and reduced chances of finding missing persons promptly.

To address these issues, a new android application called "Missing Person Finder" is proposed. The application aims to streamline the reporting and searching process by leveraging the power of smartphones and enhanced connectivity.

By providing a platform for public participation, the app encourages community involvement and improves the chances of locating missing persons quickly. With its user-friendly interface and advanced search capabilities, the Missing Person Finder app aims to revolutionize the way missing persons are located and bring about a more efficient and collaborative approach to the process.

3. PROPOSED SYSTEM

The proposed system, "Missing Person Finder," is an android mobile application designed to revolutionize the process of locating missing individuals. With a user-centric approach, the application aims to enhance user experience while ensuring the highest level of data security. It offers a wide range of features, including seamless reporting of missing persons, robust search capabilities, geolocation services, real-time updates, and integration with external resources.

By providing an intuitive reporting feature, the app enables users to quickly submit information about missing individuals, allowing for prompt action. The powerful search capabilities utilize advanced algorithms to efficiently match reported cases with existing data, improving the chances of locating missing persons.

Geolocation services play a vital role in the system, enabling users to pinpoint their location and receive accurate results tailored to their specific area. Real-time updates ensure that

users stay informed about the progress of ongoing search efforts and any new developments.

Moreover, the system emphasizes collaboration with relevant stakeholders, including law enforcement agencies, non-profit organizations, and the community. By facilitating effective communication and cooperation, the app aims to increase the chances of successful reunions and provide crucial support to affected individuals and their families.

With its comprehensive feature set and dedication to user experience, data security, and collaboration, the Missing Person Finder system strives to make a significant impact in the realm of missing person searches, bringing hope and relief to countless individuals and communities.

4. FUNCTIONAL REQUIREMENTS

Functional Requirement	Description
User Registration	Allows users to create an account by providing their basic information, such as name, contact details, and profile picture.
Profile Creation	Users can create and update their profiles with relevant information, including physical appearance and medical conditions.
Emergency Contacts	Users can add and update emergency contacts in their profiles.
Missing Person Reports	Users can report missing persons, providing details like name, age, last known location, physical description, etc.
Search and Filter	Provides search and filter functionality to find missing persons based on location, age, gender, or specific keywords.
Notifications	Sends push notifications to users when there are matching missing person reports or updates on reported missing persons.
Map Integration	Integrates with maps to display the last known location of missing persons and user's current location for navigation.

5. NON-FUNCTIONAL REQUIREMENTS

Non-Functional Requirement	Description
Performance	The application should load quickly and respond to user interactions without significant delays.
Security	User data, including personal information and reports, should be securely stored and protected.
	Access to sensitive data should be restricted to authorized users only.
Reliability	The application should be always available and accessible to users with minimal downtime.
	Downtime for maintenance or updates should be scheduled during off-peak hours when possible.
Scalability	The application should handle a growing number of users and reports without compromising performance.
	It should be able to scale its resources as the user base increases.
Usability	The user interface should be intuitive, easy to navigate, and visually appealing for a positive UX.
Compatibility	The application should be compatible with a wide range of mobile devices and operating systems.
	It should support different screen sizes and resolutions.

6. CONCLUSION

The Missing Person Finder android application project represents a significant step forward in addressing the challenges surrounding the search for and rescue of missing individuals. By harnessing the power of mobile technology, the app offers an efficient and accessible platform for reporting and searching for missing persons. With its user-friendly interface, robust search functionalities, community engagement features, and emphasis on privacy and security, the app has the potential to revolutionize the way we approach and respond to missing person cases.

REFERENCES

[1] Aarti, Ujjawal Chauhan, Aditya Goyal, Pratyush Kumar, Richa Choudhary, Tanupriya Choudhury, "VAARTA: A Secure Chatting Application Using Firebase", Emerging Trends in Expert Applications and Security, vol.682, pp.367, 2023.

[2] Siti Maryam, Adi Purwono, Syahril, "Android application development for push notification feature for Indonesian space weather service based on Google Cloud Messaging", Journal of Physics: Conference Series, vol.2214, no.1, pp.012031, 2022.

[3] Dhanshri Therokar, Devshri Pohare, Manjiri Kolte, Priyal Sonar, Prof. Pallavi Bute, "Social Media Application Development in Android with Firebase", International Journal of Advanced Research in Science, Communication and Technology, pp.36, 2022.

[4] Reetesh V. Golhar, Prasann A. Vyawahare, Pavan H. Borghare, Ashwini Manusmare, "Design and implementation of android base mobile app for an institute", 2016 International Conference on Electrical, Electronics, and Optimization Techniques (ICEEOT), pp.3660-3663, 2016.

[5] Bin Peng, Jinming Yue, Chen Tianzhou, "The Android Application Development College Challenge", 2012 IEEE 14th International Conference on High Performance Computing and Communication & 2012 IEEE 9th International Conference on Embedded Software and Systems, pp.1677-1681, 2012.

[6] OL. Google Android Developers, Android Develop Guide, http://developer.android.com/guide/topics/fundamentals.html.