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LOST ITEMS RECOVERY SYSTEM

¹ VALLUVAN.S, ² VIGNESH.S, ³ THIVINPRAKASH.V, ⁴ SRIRAM.M, ⁵ Dr.M.DEEPA

¹²³⁴⁵ Department of Information Technology, Batchelor of Technology, Sri Shakthi Institute of Engineering and Technology(Autonomous) Coimbatore-641062

ABSTRACT :

A digital tool called the Lost Items Recovery System was created to assist users in effectively reporting and recovering misplaced possessions. Through a centralized system that incorporates item descriptions, photos, location tagging, and time stamps, it links people who have lost things with those who have found them. Through the use of filters and notifications, the system makes recommendations for potential matches when users search for or report lost or discovered objects. Trust and secure transactions are encouraged by features like user verification and secure messaging. This technology, which is intended for usage in public areas like malls, offices, transportation hubs, and schools, increases the likelihood of item recovery while saving time and effort. In the end, it creates a more cohesive and supportive community by promoting integrity, accountability, and teamwork.

INTRODUCTION

Losing personal items in public is a frequent and frequently upsetting occurrence. Conventional lost-and-found techniques usually have a low recovery rate because they are disorganized, time-consuming, and unreliable. In order to address this issue, the Lost things Recovery System offers a centralized online platform that makes it simple for users to report lost or found things. The system increases the likelihood of reuniting objects with their original owners by utilizing features including item categorization, image uploads, location tagging, and search filters. Additionally, it facilitates secure user communication and real-time notifications, which speed up and improve the reliability of the recovery process. Schools, workplaces, airports, and other public spaces can all benefit from this system's ability to foster a more accountable and cohesive atmosphere.

OBJECTIVE

The Lost Items Recovery System's goal is to develop a user-friendly, safe, and effective platform that makes it simple for people to report and retrieve lost and discovered items. By offering a centralized database where users can input comprehensive information about objects they have lost or found, the system aims to cut down on the time and effort required to locate misplaced belongings. Features like location tagging, image uploads, and intelligent search filters increase the likelihood of a successful recovery. Additionally, by making it simple to report found things and establish secure connection with the proper owners, the system promotes integrity and community cooperation. This solution is perfect for use in public areas such as workplaces, shopping centers, schools, and transit hubs.

LITERATURE REVIEW

Logbooks and physical storage are two manual procedures that are frequently ineffective and prone to human mistake in traditional lost and found systems. Research indicates that digital platforms, which include centralized databases, search capabilities, and real-time tracking, might greatly enhance the rehabilitation process. Existing systems in locations like colleges and airports offer rudimentary item reporting capabilities, but they frequently lack user verification, intelligent matching algorithms, and secure communication features. Additionally, research emphasizes how crucial data privacy and user-friendly interfaces are to fostering trust and promoting involvement. It is now possible to create more sophisticated and effective systems thanks to developments in cloud storage, geolocation, and mobile app development. The suggested system expands on these discoveries to produce a dependable, easily accessible, and community-driven lost item recovery solution.

METHODOLOGY

The Lost Items Recovery System employs a methodical, multi-stage process that covers lost property detection, reporting, recovery, and mitigation. To identify frequently lost objects and the difficulties they provide, the procedure starts with collecting user data. The design and application of recovery strategies like item classification, image recognition, and location tagging are aided by this knowledge.

1. Data about often lost goods, such as their categories, locations, and states, are gathered by the system during the identification phase. To identify typical loss points, this entails evaluating user reports, completing surveys, and incorporating location-based data. Based on consumer preferences, it also entails creating an intuitive user interface.
2. Users can add descriptions, photos, and location information to report lost and found objects during the reporting phase. System walkthroughs, user education, and public awareness initiatives guarantee that users are conversant with the platform. It's also crucial to teach employees how to manage reports effectively.
3. Matching lost and found things as soon as possible is the main goal of the recovery phase. Reports are compared, objects are categorized, and real-time alerts are sent when matches are found using intelligent algorithms. Items are returned promptly when users and local authorities communicate well. Coordinating the recovery process and monitoring item status are made easier by GPS and cloud storage.
4. Mitigation is continuous system enhancements to lower the likelihood of lost items. This entails enhancing reporting protocols, incorporating AI to improve item monitoring, and evaluating data to pinpoint high-risk areas. Users' constant feedback aids in system improvement and raises recovery rates in the future. The system adapts to changing needs and continuously enhances the healing process thanks to data analytics and community involvement.

EXISTING METHODS

1. Lost and Found Manual Systems

Several public locations, such as shopping centers, airports, and schools, still handle misplaced objects by hand. Usually, this entails keeping misplaced possessions in a certain location and charging customers to come by or call to check on their goods. For example, travelers must physically visit the lost and found office at airports to look for their items, which resulted in inefficiencies and recovery delays.

2. Lost and Found Websites

Online platforms have been implemented by certain organizations to allow people to report lost or found objects. Users can look through a database of found products and report missing items on websites such as www.founditem.com. The efficacy of these systems is limited because, although they increase accessibility, they frequently lack sophisticated capabilities like location monitoring, real-time updates, and secure user interactions.

3. Social Media to Report Misplaced Objects

Reporting stolen objects on social networking sites like Facebook and Twitter is becoming more common, particularly among community organizations. For instance, Facebook groups such as "Lost & Found in [City]" have gained popularity when people want to exchange information about misplaced items. Despite their convenience, these platforms can be chaotic and inadequately secured, which makes it more difficult to trace products and validate claims.

4. Systems Specific to Industry

Lost things are managed using increasingly sophisticated methods like barcode scanning and centralized databases in sectors like transportation (airports, train stations) and hospitality (hotels). Airports, for instance, frequently employ barcode labels on luggage and keep track of item characteristics in a centralized system. Although more effective, these systems are usually restricted to particular institutions and do not provide a comprehensive, networked solution for users in many places.

DISADVANTAGES

1. Insufficient Centralization: Tracking lost objects across various sites is challenging because the majority of current systems function independently within institutions.
2. Time-consuming and manual: In-person queries and physical logs waste time and frequently lead to missed recoveries or delays.
3. Restricted Availability: Users are frequently required to appear in person or call during business hours, which limits their access to the system.
4. Absence of updates in real time: The likelihood of a speedy recovery is decreased by the lack of real-time tracking and fast notifications offered by traditional methods.
5. Ineffective Verification and Communication: There is frequently no safe means for owners and finders to communicate or confirm claims, which raises the possibility of mishandled or lost items.

PROPOSED SYSTEM

A centralized digital platform that can be accessed through online and mobile applications is introduced by the proposed Lost Items Recovery System. Uploading location information, photos, and descriptions makes it simple for users to report lost or discovered items. For quicker search and retrieval, this guarantees that all data is kept in one location. It lessens reliance on manual logbooks and in-person visits.

The technology automatically links lost item reports with found ones using intelligent search filters and matching algorithms. When a potential match is discovered, users receive real-time notifications. This makes it more likely that misplaced objects will be found promptly and precisely. Users spend more time obtaining results and less time seeking.

Processes for secure user registration and verification are included to guarantee the security and legitimacy of communications. Returns can be arranged by users via an integrated messaging system. This lowers the possibility of misuse or fraudulent claims. Because of accountability and openness, user trust is increased.

GPS tagging and cloud storage integration enable real-time location tracking of misplaced or recovered objects. Data accessibility from any location is ensured by using the cloud. High-risk locations where things are commonly lost can be found with the use of GPS data. System administrators can use this to produce insights and gradually enhance recovery plans.

Software Requirements:

HTML

CSS JAVASCRIPT

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