

Lost and Found System for VNR VJiet

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Abstract - Lost and Found is an online solution that sits within the VNR VJiet college. This assists individuals with placing lost items back into the hands of rightful owners. When someone returns the item, their details are taken along with the item. They will be appreciated as heroes of the month. Found items can be added to the database and can be listed in the website only by the admin. People who lost their stuff can login to the website and check if it's in the existing found items and can claim them, if not they can add a request in the site and get notified by admin, when that item is found. Once the admin approves the claim, the approved user comes to pick the item, then admin will verify the proofs and handover the item or disapproves. Item can be reclaimed by the right owner if the item is mistakenly approved to the wrong person. If the users directly contact the admin, admin can approve the item by taking their details without any online requests. Certain time period is given for the claim of found items after which valuable items are donated to the needy with the help of NSS or SF and others are discarded. String matching will be used in implementing the search technique. Automatic mailing feature is also added to notify the status of requests raised by users.

Keywords - *Lost and found, search techniques, approve, disapprove, items in dispute.*

I. INTRODUCTION

Generally people tend to forget and lose things. Lost property can be very valuable to the owner and must be dealt with extreme care. There are many people who feel responsible and try to return any such items if found. The purpose of Lost & Found is to ensure that any misplaced things are restored to their proper owners as soon as possible.

Unclaimed things after some retention period will be donated to the needy. Even in our college, many people forget or lose their things and then they find it hard to get them back. They can be wallets, devices, keys, bags, books, ID cards, cash etc. As there is no proper lost and found management system in the college currently, people face various issues in this regard. So this platform can be very helpful to make things easier.

II. RELATED WORK

In [1] they used Notepad ++, PHP, Google Chrome, HTML, CSS, JavaScript and MySQL Server. It has

limitations like it is not so user friendly, no automatic emails and messages to the users whenever a lost item is found and returned to the office and there is no good encryption algorithm for the authentication purposes.

They created an Android application in [2] that allows users to report lost and discovered items. Users can post found things by identifying the location and providing all necessary information. The individual who has gone missing can look for it by picking a location on the map. The shipment service in this application is provided by the Dunzo API. Internet-enabled communication between a mobile application, a firebase, a spring boot application, and a Postgres database could be part of the design. Only mobile applications are available. There is no process to verify and validate if the claimer is the actual owner. Location where the item is lost/found is not accurate.

They made an android application LFD in [3]. The Lost and Found Dog programme uses a matching approach from an information retrieval course to give users with an excellent searching tool for lost canines. This provides a route for users who have lost their dogs to communicate with others. They'll have a better chance of finding their dogs and returning them home. It also has statistical records containing information like the amount of lost and found dogs in each area of Thailand. It can be used only for dogs. There is no guarantee that the rightful owner can only claim the dog. Moreover it is available only for Thai people and only as an application.

In this work [4] the Android client provides different functions. The functional and technological architecture, as well as the database structure of the system, have been created using the Android system and interface technologies, while also focusing on the actual key needs. They used the CIS architecture and MVP development approach to construct a lost and found system based on the Amap API. Users will be able to easily release, browse, search, and share lost- and-found information using the client's picture and location service and spatial analytic tools.

The few limitations in this are that it deals with complex architecture, mostly dependent on location services for which higher maintenance is required, enabling each and

every object or thing with location services is not easy and its cost associated.

The purpose of this work[5] is to develop a web- based facility that makes the recovery of lost personal documents easier. The main research objectives of this work are to develop an efficient, interactive way to recover lost personal documents without incurring unnecessary costs or delays, to evaluate how an effective feedback system influences document recovery in Kenya, to investigate how Information Communication Technology could influence the reunification of lost personal documents with their holders in Kenya, and to evaluate how the registration and replacement processes can be improved. This paper focuses only on lost documents and the system is not a portable application.

They created a web application in [6] that allows individuals to publish about people who have been lost or found. For best results, brief description as well as an image are provided. For frontend development, they used HTML, CSS, and Bootstrap. MySQL was used to create the database. Without logging in, users can access some of the website pages and search for lost and found items. However, they can't record any lost or discovered issues without first registering and logging in. It is based on missing people rather than items, and it does not have automatic mails or messages.

The work [7] is built on a mobile crowdsourced guiding and finding (MCGF) framework that uses cellphones to direct indoor people and identify missing targets using IoT localization. Through participatory sensing networks built by mobile users using smartphones in places with static iBeacon nodes, the MCGF framework may collaboratively find lost/stolen targets equipped with mobile iBeacon nodes. Six item localization instances are addressed to reduce positioning mistakes using varied numbers of smartphones detecting the lost item and different numbers of fixed iBeacon nodes around these item-detecting smartphones in order to precisely localise the lost item. The feasibility and correctness of the EasyFind system using static and mobile iBeacon nodes are tested using an Android-based prototype. This work compulsorily needs iBeacon nodes and sensing networks make it more complex. This also requires Smartphones.

This paper[8] has proposed an Intelligent Lost and Found System using the Multidimensional Matching Model(ILFS). The multidimensional matching methodology, which protects users' privacy and prohibits the dissemination of dangerous information, is ILFS's innovation. This method provides a multi-dimensional matching model based on picture, text, and geographic location that can achieve item matching even when the input is asymmetric. Two elements of innovation stand out: the automatic matching method for the delay task and the WeChat applet's push

function. A method for calculating the matching degree of multidimensional item information is based on both text and image. As it uses WeChat platform for its front end part and push mechanisms, it is specific to WeChat application.

[9] is based on a platform named iFound. It gives a dynamic rundown of found and lost things. The database is being overseen, kept up and refreshed by an appointed lost and found officer. This framework would be open to all the students, heads and staff. This framework is straightforward, simple to use and understandable UI. With the normal manual strategy, the individual should put the additional physical exertion in visiting the lost and found officer to scan for their lost thing. This framework will decrease the workload of the staff, who are in charge of overseeing lost and found. This website will help foster integrity amongst students and staff within the university, will help to make awareness among the users the usefulness of search engines in solving issues related to lost item retrieval. People need to be connected to the college network to look up or report lost and found items and no notifications are sent to the user when a lost item is approved or disapproved.

Lost and Found Website [10] searches for missing people in Malaysia using an online method. Users can search for information and stay up to date on the newest missing cases in their community by using the website, which collects all information regarding missing people. Aside from that, one of the goals of "Lost and Found" is to collect data in order to raise public awareness and find a solution to missing instances. To begin, the user can search for missing people's posts and upload the missing person's details to the "Lost and Found" section. If a user has a question, he or she can use the live chat feature to immediately contact the administrator. It can be used only for human missing cases.

III. PROPOSED WORK

An online solution for our college to make lost and found system more secure, reliable, robust and efficient. Found items can be added to the database and can be listed in the website only by the admin along with required details of item and returner. Returners will be appreciated as heroes of the month on the home page. People who lost their stuff can login to the website and check if it's in the existing found items and can claim them with the proofs they have which later can be approved/disapproved by admin, if not they can add a request in the site so that they can get notified by admin(via email) when that item is found. Reclaim requests can be added for already approved items later directly by user or admin, later admin can check the proofs and approve items to the right owner. Each approval/disapproval and reclaim triggers a mail directly to the claimer and details of the person whose claim got approved are stored in order to avoid any issues later. Certain time period is given for the claim of lost items after which some valuable items are donated to the needy by taking help of NSS or SF and others are discarded. String matching will be used in implementing the search technique.

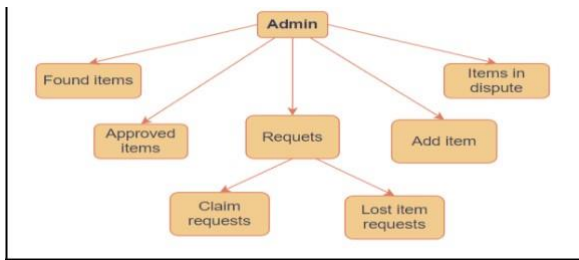


Fig 1: Admin module

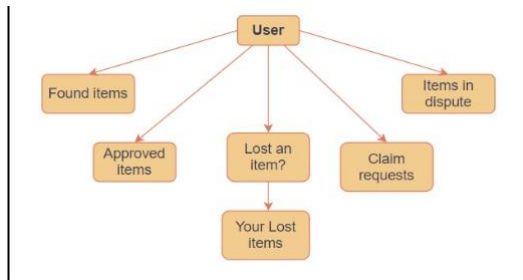


Fig 2: User module

IV. RESULTS AND DISCUSSION

We were able to create a web app with all the objectives as mentioned in the proposed work. We have tested all the scenarios possible. Our search mechanisms and automatic mailing will surely help in improving the efficiency and effectiveness of the current lost and found system in the college.

Main Page

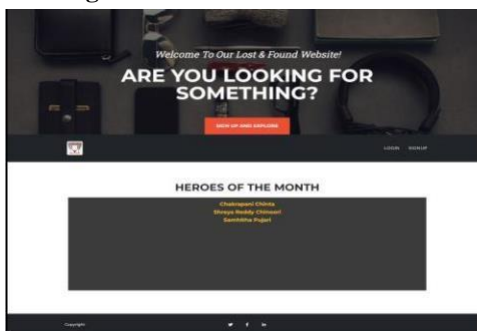


Fig 3: Main Page

This is the home page of the web application. The user has options to log in or sign up from here.

Admin Home Page

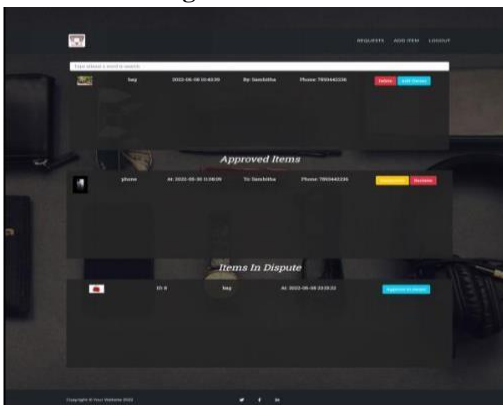


Fig 4: Admin Home Page

The admin home page is the main page for the administrators. They can access the list of lost items, the list of approved items, and the items in dispute.

Admin Requests Page

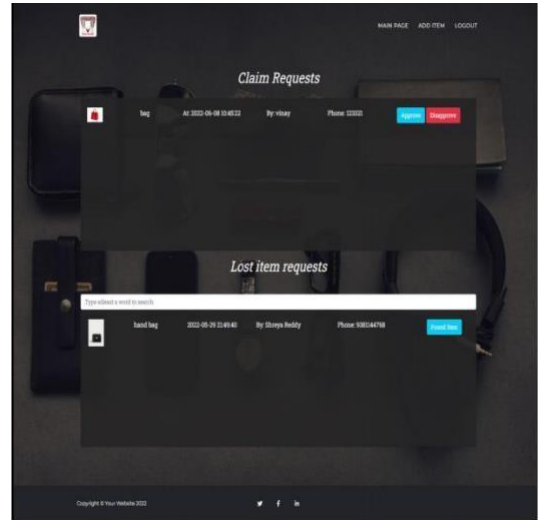


Fig 5: Admin Requests Page

The Admin Requests Page has access to view the claim requests of the users and lost item requests submitted by the users.

User Home Page

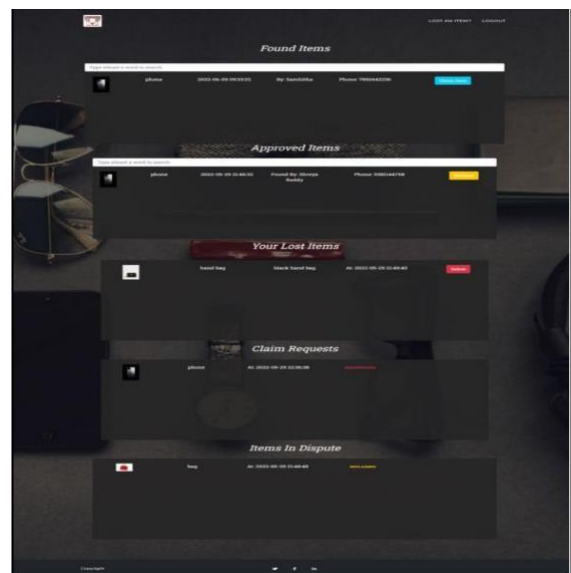


Fig 6: User Home Page

The User Home Page is the main page for the users. It displays found items, and approved items, your lost items (of the student), claim requests (made by the student), and items in dispute.



Fig 7: Approval Mail

This is the format of the e-mail which user will automatically receive when request for a lost item is approved.



Fig 8: Disapproval Mail

This is the format of the e-mail which user will automatically receive when request for a lost item is disapproved.



Fig 9: Found Mail

This is the format of the e-mail which user will receive when their submitted lost item has been found.



Fig 10: Reclaimed Mail

This is the format of the e-mail which user will receive when item which is already claimed by user is claimed by another user.

V. CONCLUSION

Our online Lost and Found solution for campus tries to maximize the lost item return rates to owners, and makes the work of admin more easier. It avoids the usage of pen and paper and removes the problem of unorganized storage and mismanagement. It also allows easier requesting and claiming processes remotely. By displaying heroes of the month in the home page it also promotes appreciation, encouragement and promotes charity by donating to the needy after the retention period.

VI. REFERENCES

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