SRM University AP, Andhra Pradesh CSE 305 - Software Engineering

<u>Software Requirement Specification Document</u>

BY - MTH Junaidi, CSE - B, AP17110010074

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Introduction:

The Lost and Found system is a generalised universal system customisable for every Institution/Organization. This software intends to provide a solution to the conventional problem of people losing their belongings in the physical vicinity of the organisation/Institution. This will also be used to navigate to the owner of the un-possessed belongings. This software will be available in the form of a web/Android/IOS application with a user login system corresponding to each individual who is a part of the organisation.

Purpose:

The purpose of this SRS document is to explain the functionality of the Lost and Found System. This Document will be useful and relevant to the following stakeholders:

- The Organisation Management
- The Developer
- The Tester
- The Administrator

Scope:

The lost and found portal for all the members on campus where everyone can report a lost or found item along with its images. We will maintain a publicly visible database of all such entries. The stakeholders can claim their belongings and also can report any lost or found Item they found.

This system will be geographically limited to the physical space of a particular organisation typically having stakeholders of about less than 50,000.

Definitions, Acronyms and Abbreviations:

Institution/Organisation	A Considerably large group of people who are physically together for a specific business/Purpose. Eg: University/Office etc.
StakeHolder	A stakeholder is an Adult who should be physically part of the organisation.
Entity	An object which belongs to one of the stakeholder Eg. Mobile, ID card etc.
Lost Entity	The Entity which is not in a physical location known to the respective stakeholder
Found Entity	The Entity which is lost by a stakeholder and then recovered by another stakeholder who are not in communication

Overall Description:

 Product Description: lost and found portal for all the stakeholders on campus where everyone can report a lost or found item along with its images. We will maintain a publicly visible database of all such entries. The stakeholders can claim their belongings and also can report any lost or found Item they found.

Objectives of the Lost and Found System

- To develop a modern state-of-the-art entity recovery management system to automate and save time of all the stakeholders using web technology
- To provide users with quick response and accurate information regarding their lost entities and recovery of such.
- To develop a system with a very user-friendly interface.

Feasibility of the Lost and Found System

- This software will definitely add value in terms of the reduction of hassle and difficulty in locating a lost entity of a stakeholder of any organisation.
- Economically this software will save the cost of all the lost items by the stakeholders.
- Technically we will be using HTML, CSS, JS, PHP/SQL. The organization will have to hire engineers with relevant experience to maintain the system.

Advantages of the Lost and Found System

- Very Easy to use and User friendly system with easy adoption
- This system saves time to navigate to the lost entity and to establish communication between the stakeholders for the same purpose.
- This system can be spread over a good geographical area and can be hosted on the internet
- The user data can be valuable to the institution incase of any situation.

Limitations of the Lost and Found System

- This system is designed for a particular organisation based on personalised requirements and hence cannot be ported to other organisations.
- The user has to understand basic mobile and computer operations to operate the software
- Internet/Intranet connection for using the software is mandatory
- Maintenance costs can be variable and effortful. Dedicated maintenance team should be hired
- This can help only those stakeholders whose entity is lost and recovered by another responsible stakeholder and not others
- Authentication and verification of the ownership of the entity is not full proof.

System Requirements

- PC/Server 1.6 GHz, 1GB Ram and 100 Gb HDD/SSD
- Client/Stakeholder Devices: Minimum of 1GB Ram and proper browsing facility with internet connection.
- Tech Stack HTML, CSS, JS, PHP, SQL
- Browser Google Chrome

Functional Requirements

- The user should be able to report a lost or a found item through user friendly UI
- The Owner of an item should be able to authenticate his or her belonging
- The user should be able to contest any claimed item

Non Functional requirements

- The system should be reliable without any data loss on both internet and intranet
- The system should be able to to accept and store requests even when the user is not in the network and then push it to the network when the user joins
- Efficient database management is expected for all queries

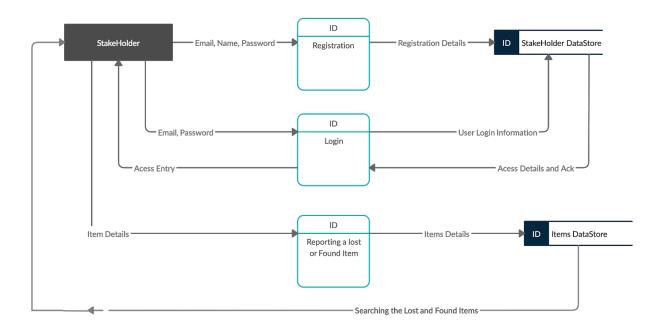
Conclusion and summary

As per the current systems the students, Faculty and staff receive emails about the lost and found items in the campus. That is If a person loses or finds something he/she writes an email to the Director CLM and then the same email is circulated to every one. This is a very tedious system and also floods the emails.

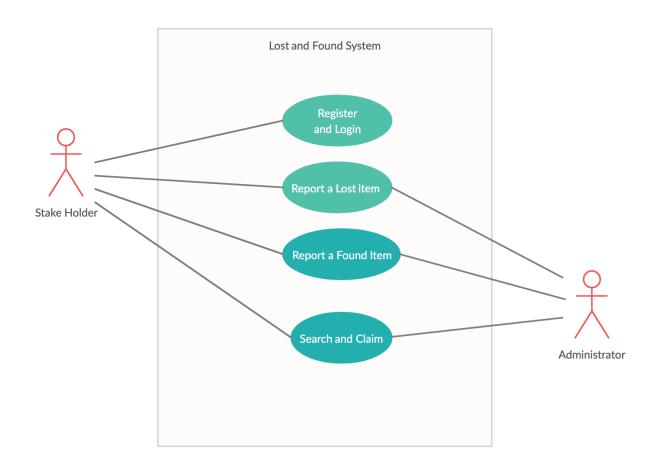
I will build a system to solve this exact problem, I will be building a lost and found portal for all the members on campus where everyone can report a lost or found item along with its images. We will maintain a publicly visible database of all such entries. This system will have a login system for all users of the srmap.edu.in account. The System will have the following features:

- Sign Up and Login and logout
- Publicly visible details of all lost and found entries
- Reporting of a lost or found Item with Images (DataBase Entry)
- Deletion of a found item which was reported lost from the Database and vice-versa

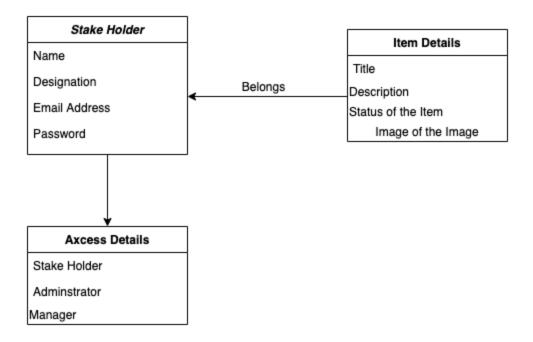
Data Flow Diagram



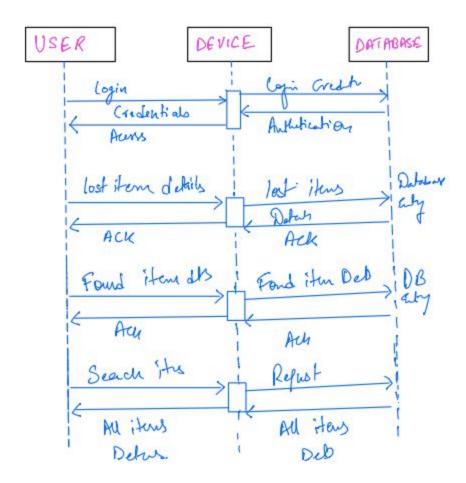
Use Case Diagram



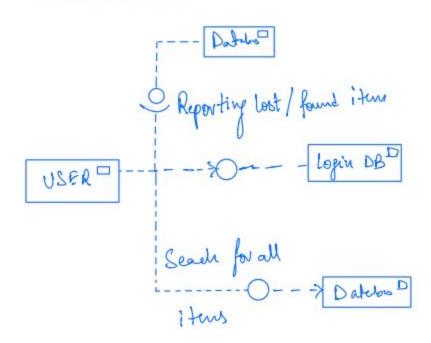
Class Diagram



SEQUENCE DIAGRAM



COMPONENT DIAGRAM



DEPLOYEMENT DIAGRAM

