

# **Chapter 1**

## **Introduction**

### **1.1 Background**

Losing items around a college campus is a common phenomenon. Although, a physical lost and found department is in place which is helpful, but it presents a number of problems. The major issue is that there is no way of informing the owners that their items have been found. The students have to frequently visit the office and enquire about the lost items. Also, students circulate WhatsApp messages around groups enquiring about their items, but it is unable to reach a massive audience. If someone does manage to find a lost item, they have no means to find the owner and the lost and found department has no way to notify the owner about it. There is no system that facilitates a communication between all the parties. Facilitating a communication and a connection while making the process simpler and effective between the concerned students and the department, is the main goal of the system.

### **1.2 Objectives**

- i. To provide a platform for students and faculty to report lost and found items.
- ii. To help students and faculty to locate and search for missing items within the college premises.
- iii. To reduce the time and efforts put to report and look for lost or found items.
- iv. To increase the chances of recovering the misplaced items by providing a common platform for listing lost or found items.
- v. To make it easier to connect the owner and the potential person who might have the item in his possession.
- vi. To provide a reliable system to manage lost and found items.

### **1.3 Scope Purpose and Applicability**

#### **1.3.1 Purpose**

The major purpose that the system serves is that it provides a common platform for all the students and faculty to report lost or found items and to streamline the process by making it convenient and easy for owners to recover their lost items. The need for the system arises as there is no such system in place and the process to find a lost item is very time-consuming and tiresome.

### 1.3.2 Scope

The system is developed for students and faculty members currently a part of the V.G. Vaze College. The app will deal with lost items such as personal belongings, clothing, jewellery, books, gadgets and would exclude basic stationary items such pens, pencils.

Some limitations that might occur could be the type of images uploaded and data privacy of faculty members.

### 1.3.3 Applicability

The application though specific to the college, it can be used in various other places as like: -

- Hotels – Guests can find their personal belongings that have been misplaced.
- Airports – Can be used to find luggage and other belongings such as electronic gadgets, passports, etc.
- Malls – People can use it to find their bags, etc.
- Offices – Electronics such as laptops, mobiles and various other important files are quite oftenly misplaced. The app can be used to find these items.
- Public places – Hospitals, Parks, Societies, etc can also use this app.

## 1.4 Achievements

The project achieves the seamless integration between the Flutter framework and Node.js and Express.js backend to solve the major issue of finding lost stuff around the college. It successfully allows the users to search, view, report lost/found items. It also allows for communication between two users using Socket.IO which is key to finding the owner and creating an online community that helps to find the items quickly. The project helped me learn the complexity and the inner working of the technologies and how various features such as chatting work in the real-world. I learnt to leverage the powerful and feature-rich Flutter framework along with Node.js, Express.js, Socket.IO, etc in order to simplify the process of finding lost goods around the college campus. It taught me and forced me to think on a number of problems that occur while implementing the features hence enhancing my problem-solving ability. The difference between planning and actual implementation was quite evident during development. The importance of planning and engineering an application at this scale, helped me grasp the shortcomings in my design decisions and architectures, and helped me understand why are certain approaches followed in the industry today to develop such a project and the need for other technologies such as hosting the database on cloud.