Demo the app

Alternate links

https://play.google.com/store/apps/details?id=com.betterlostandfound

https://play.google.com/apps/testing/com.betterlostandfound

https://play.google.com/apps/internaltest/4701595370371427022

version 2

Play store demo
(Internal test)

internal app share
(more steps)

Demo the app

password is 6 character minimum

https://tinyurl.com/4zajhkw2

(android only)

Jun 3 2025

Grant Keo

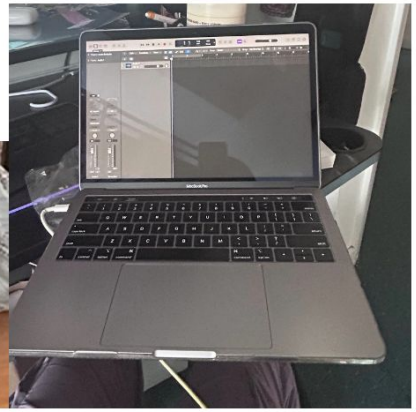
Better Lost and Found

Why I made a mobile app for my senior capstone

CAPSTONE JOURNEY

1. The Problem – Lost and NOT found
2. Guiding Question
3. Survey
4. Notable Rejected Ideas
5. Better Lost and Found
6. How to use this app
7. Obstacles I faced
8. Timeline
9. How I made the app
10. Next steps
11. Shoutouts

Lost Laptop:



Folks - this Mac Laptop has gone missing. It contains a senior's portfolios for college. In addition to the identifying case, it has a blinking touc

If you have seen it, please let the Main Office know immediately – there is a $200 reward for its return.

How do we engage the SLA community to look out for one another's lost items?

The Problem:

Current System

Lost and found bin

- No convenient way to notify owner their item is in the lost and found
- Items are seldom moved to the main office
- Annoying to dig around in smelly disorganized bin

Consequences

- Lost and found bin in main office always full
- More junk mail about other people's lost items
- Trust broken in lost and found system

The Problem:

Current System

Leaving the item alone

- Finders have to search a wider area if they don't know where the item is
- Items more likely to be mistakenly claimed

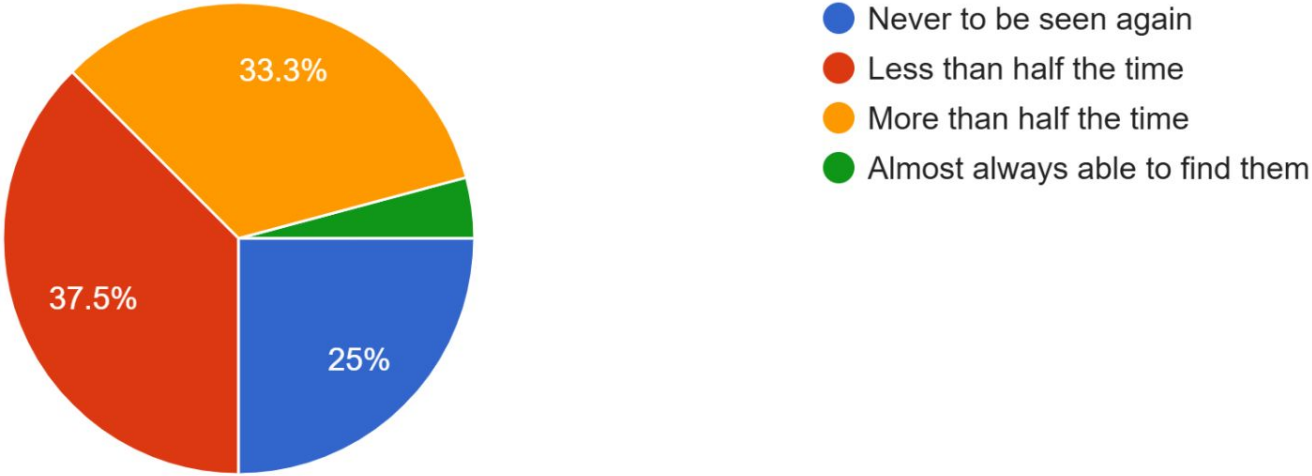
Consequences

- Junk buildup around classrooms
- Lost time looking for misplaced items
- Money wasted replacing items that cannot be found
- General inconvenience and stress for everyone involved

SURVEY RESPONSES

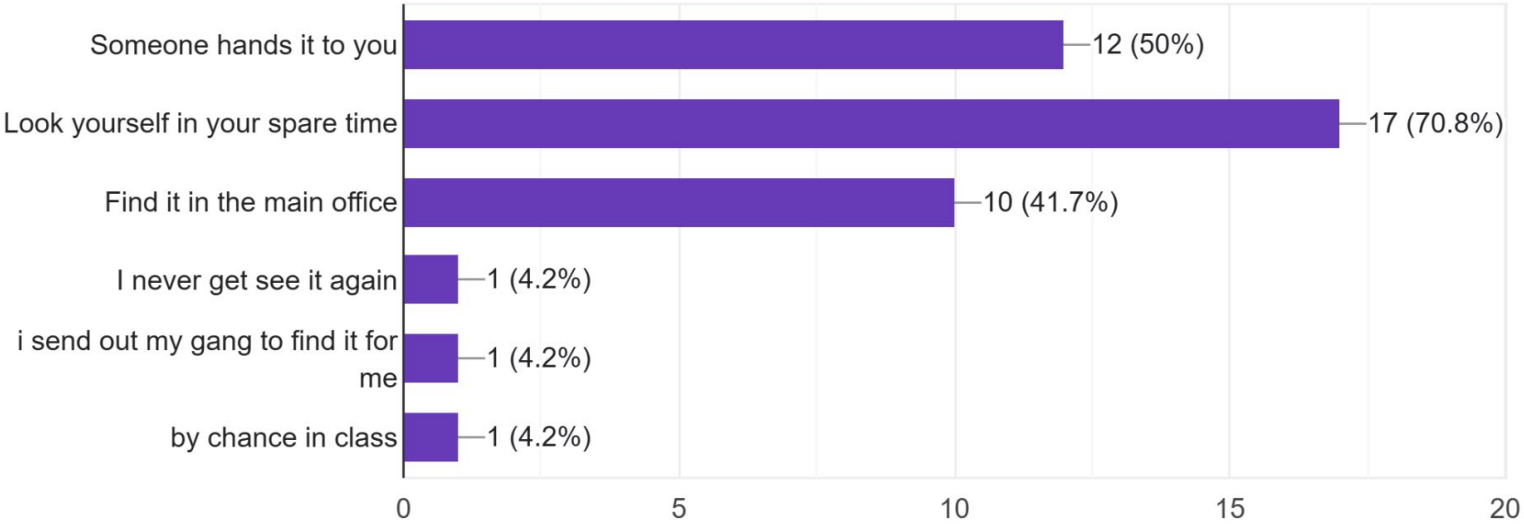
When you lose something in school how often is it found again?

24 responses



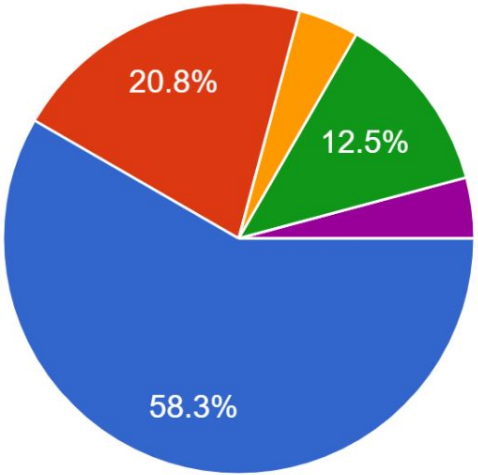
When you lose something, how do you usually get it back?

24 responses



If you stumbled upon a lost item, what would you do?

24 responses



- Turn it in to the main office
- Give back to the owner
- Keep it, or sell it for money
- Do nothing
- Refer it to a teacher or put it in the main office

Notable rejected ideas

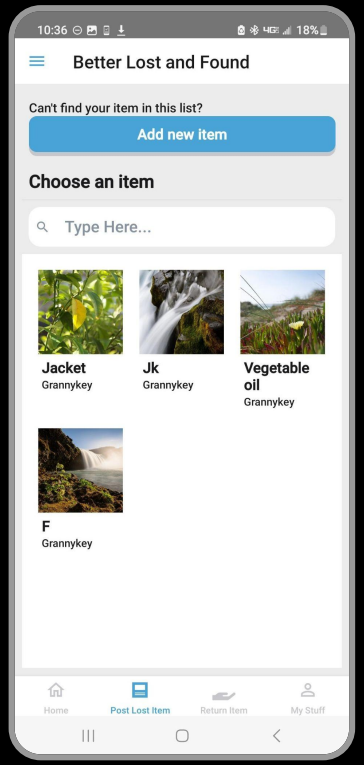
Brainstorming

- Putting rfid/bluetooth scanners on every floor of the building
- Bluetooth chip that yells when it gets too far away from your watch (screaming airtag)
- Putting sensors in each phone motel to remind students to take their phones before the next class
- Computer program that can sense devices' location in the building based on wifi and location of other users

Better Lost and Found Demo

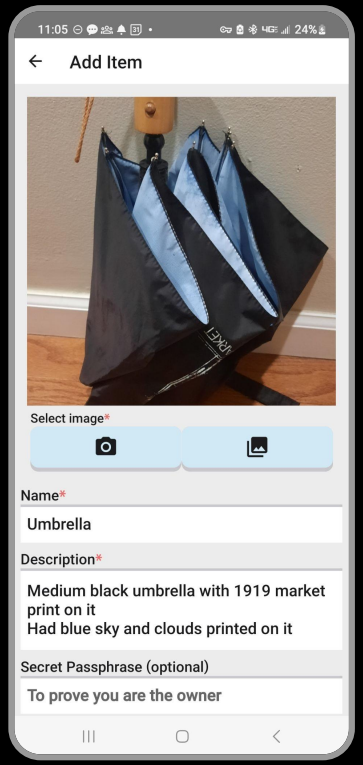
iPhone

How to use this app



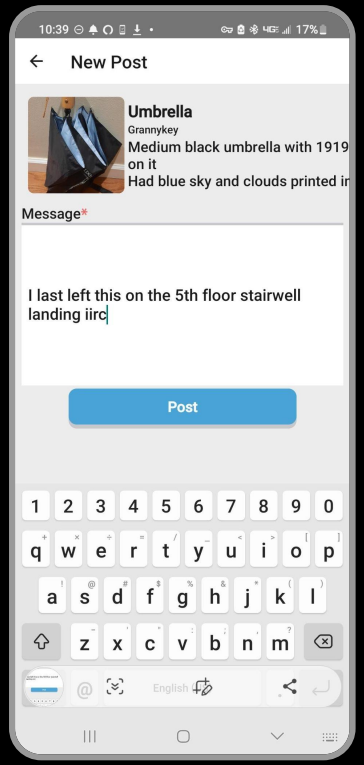
1. Choose your item

Press the big "HELP I LOST SOMETHING" button on the homepage, and pick an item. If you don't have one, you can make a new one.



2. Create new item

If you haven't added your item into the app yet, do so now. Make sure to describe any features that can be used to identify your item. Don't forget to add a picture! It's required.



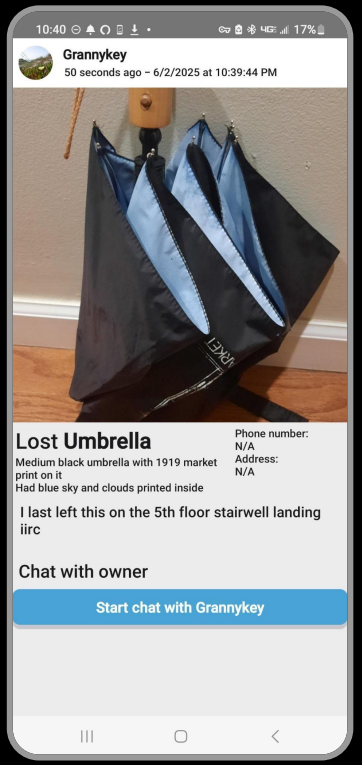
3. Write your post

This post will tell people your item is lost. Write down any information on where your item could be located and how it can be returned to you.

Galaxy A51 display
Aspect ratio 20:9

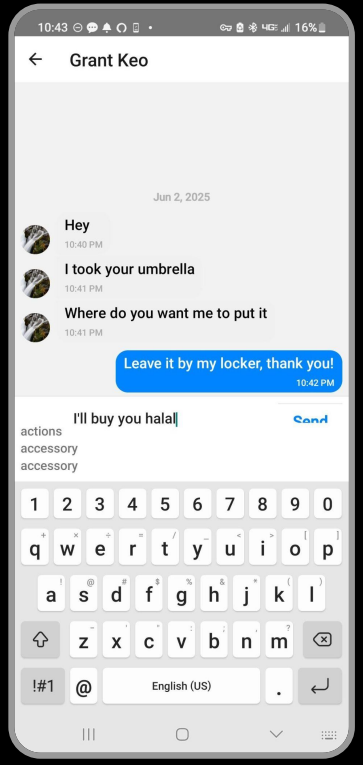
How to use this app (cotd.)

Galaxy A51 display
Aspect ratio 20:9



4. Found a lost item?

If you find a lost item, let the owner know! Tap their post & start a chat with them by pressing the Start Chat button on the bottom.



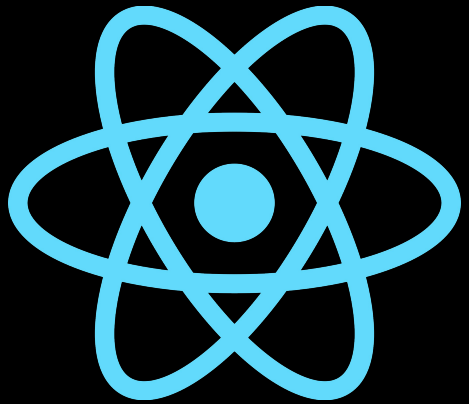
5. Chat!

The finder and the seeker can now talk to each other on whether the item matches, when and where to return it, and any other favors to exchange here.

6. Mark item as found

Once the item is returned, the owner can now give credit to the finder by pressing the Found It! button and choosing the user.

How I made this app



React Native

Makes it possible to write Android & iOS apps in Javascript & React, instead of writing each individually Created by Meta

Firebase

The general set of tools provided by Google to do things like store data in real time

Android Studio & Xcode

The tools you need to develop Android & iOS apps, respectively

Obstacles I faced

Coding errors

Majority of my frustration came from trying to fix bugs in the code. Lots of the time, various errors came down to either failing to understand how to use a tool. Most of my time was spent trying to fix errors from downloading tools I needed, especially working with react-native and all the community made tools.

Device issues

Apple only allows iOS apps to be built on apple devices via Xcode, which meant I needed a MacBook to develop the app.
I don't have a mac nor an iPhone, but I was able to borrow my mom's and Mr. Hernandez's macbooks to write the app

Money

It costs money to use the server for my app.
Hitting constant free trial limit so I could only work on an issue for 2 hours a day

Next steps

- Expand on reward techniques
  - Gamify the search via implementing a point system
  - Add a leaderboard to induce competitive helpfulness
  - Allow users to add bounties to encourage people to help look for the item
- Work on image recognition
  - The app would automatically match similar items to a camera snapshot to narrow down search
- Make posts easier and more intuitive to find and navigate
  - Reduce the amount of clicks & scrolling needed to search for items
- Fix all those errors in the app

People who helped me with my capstone a lot

Special thanks to Braskem for funding my capstone proposal

Shoutouts

Mr. Hernandez

Mentor

Ms. Sessa

Advisor

Mr. Kamal

also gave advice

Girls who code

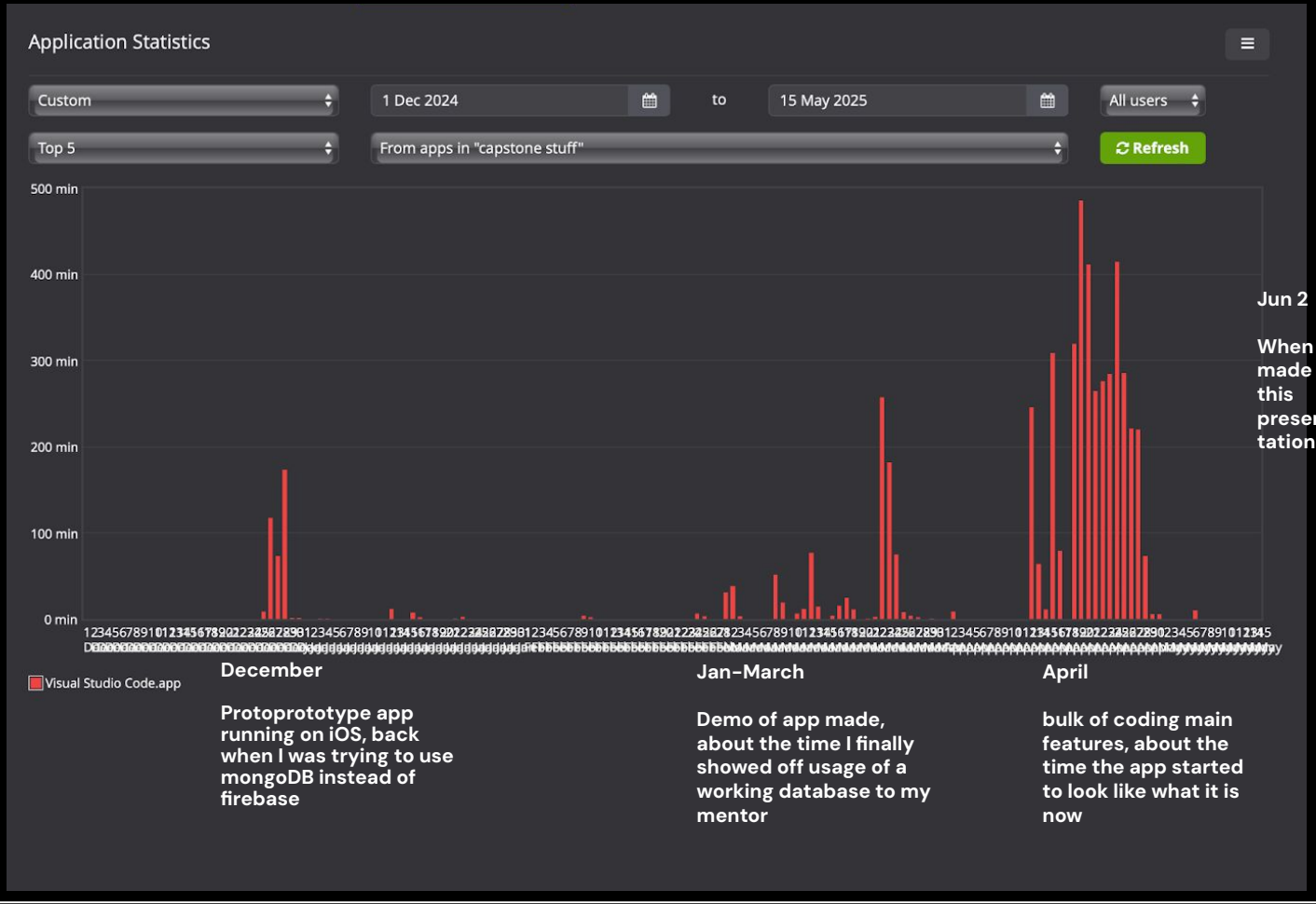
Test group

Thank You

Questions?

TIMELINE

Like many other people, I would change how I approached this capstone if I could do it all over again. Here's the amount of time I spent each day on Visual Studio Code from October 1st to June 3rd on the Macbook.



December

Protoprototype app running on iOS, back when I was trying to use mongoDB instead of firebase

Jan-March

Demo of app made, about the time I finally showed off usage of a working database to my mentor

April

bulk of coding main features, about the time the app started to look like what it is now

Jun 2

When I made this presentation