

Written Report

Group Name: VerFunden@HCI

Group Members:

Oak Soe Khant (1P1),

Owen Sebastian Saputra (1P1),

Tan Jun Hao Enzo (1P1)

Group Leader: Oak Soe Khant

Introduction

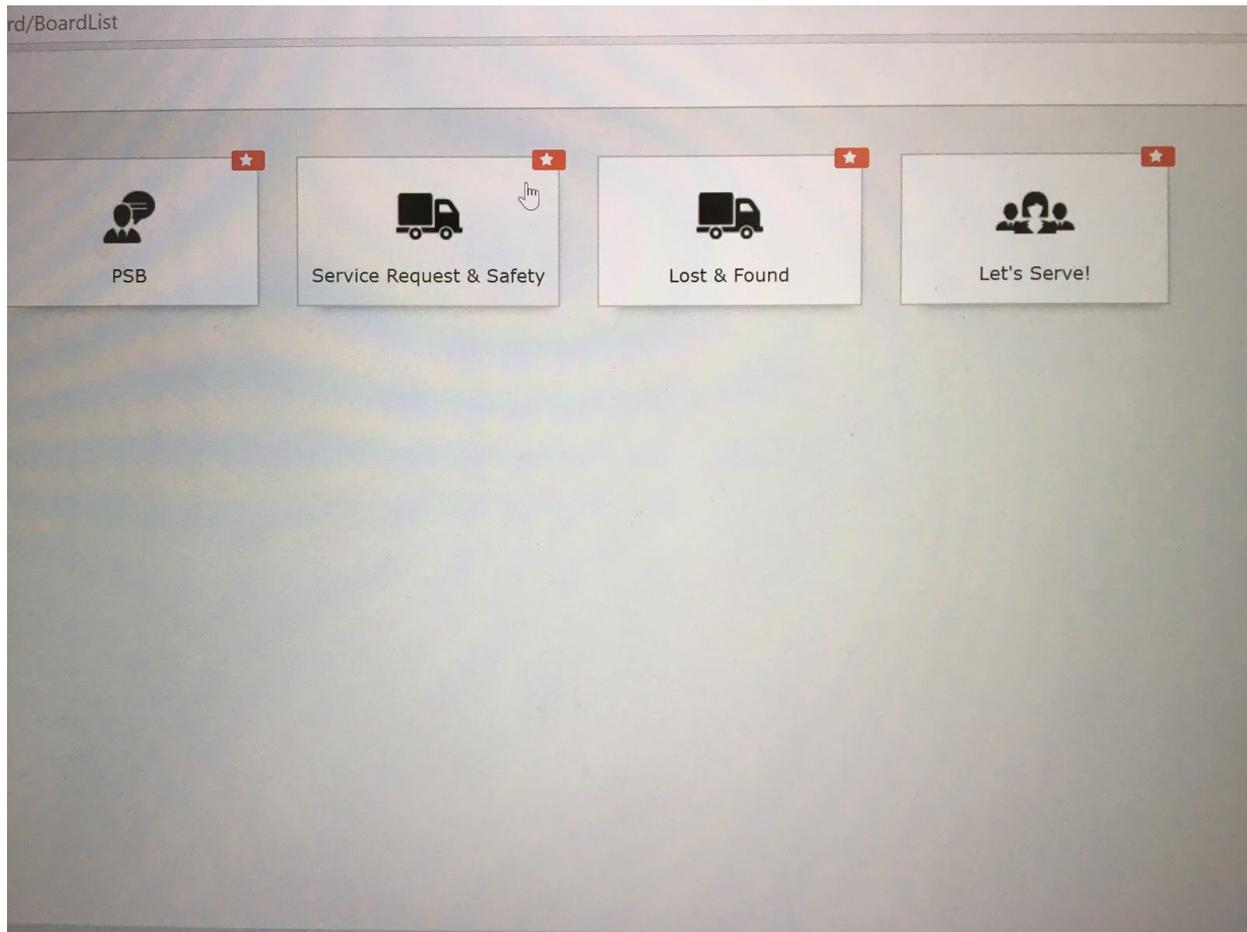
Description of Ideas/Issues/Thesis Statement:

There is currently a Lost and Found section in the school's iEMB, where students can post items they have lost or found. Yet, as our group scrolled through the Lost and Found page, we found that often times, we could only see posts for items that were lost, and very few posts regarding items that had been found in the school. Not only that, but the descriptions of most of the objects/items were vague/unclear. After conducting surveys with 78 students regarding their usage of this section, we realised that most students, especially Secondary 1 students, had lost their items at least once this year, and many had not recovered it, despite them posting on the Lost and Found section of the iEMB. Most students in the survey said that it was inconvenient to use the iEMB's Lost and Found for 3 reasons:

1. Uploading photos weren't easy and some did not know how to upload photos on their posts either. You couldn't upload photos from your gallery, for example.
2. They felt that using a website-based page was too inconvenient on their phones, especially on the go. This was why many students did not upload posts regarding items they had found as they were going around the school.
3. They weren't sure as to whether or not they could post misplaced objects they had found around the school or not.

Thus, we decided to make an Android version of the Lost and Found section, which we believe will create a big impact on the student's lives.

Literary Review:



The photograph above shows that the iEMB has a Lost and Found page that was set up, which shows that the school believes that students are able to help each other in locating their lost items, without any external aid from the school. However, this is not the case a lot of times.

Post Date	From	Message Heading	Priority Attention	View/Response
12-Aug-18	3S3 (2018) (4)	LOST BLACK CASIO RECTANGULAR WATCH	2018 All (HS);	Viewer: 71 Response: 0
10-Aug-18	1P3 (2018) (34)	Lost NCC uniform.	2018 All (HS);	Viewer: 84 Response: 1
08-Aug-18	1I1 (2018) (8)	Lost blue water bottle	2018 All (HS);	Viewer: 89 Response: 0
03-Aug-18	1O2 (2018) (17)	Lost black wallet near basketball court	2018 All (HS);	Viewer: 113 Response: 0
03-Aug-18	2O2 (2018) (25)	Lost earpiece in computer lab, reward given if found	2018 All (HS);	Viewer: 121 Response: 0
30-Jul-18	4S3 (2018) (3)	Lost Black/Silver Casio Watch at basketball court	2018 All (HS);	Viewer: 120 Response: 0
29-Jul-18	1P2 (2018) (12)	Lost Black Watch	2018 All (HS);	Viewer: 122 Response: 0
28-Jul-18	1A3 (2018) (4)	Lost pocket pouch	2018 All (HS);	Viewer: 125 Response: 0
22-Jul-18	1A3 (2018) (22)	LOST NIKE SQUIRT BOTTLE	2018 All (HS);	Viewer: 141 Response: 0
22-May-18	3O2 (2018) (6)	LOST WALLET	2018 All (HS);	Viewer: 252 Response: 0
13-Jul-18	2O1 (2018) (6)	Lost earphone. UGRNT!!!	2018 All (HS);	Viewer: 195 Response: 0
16-Aug-18	2O1 (2018) (8)	LOST PENCIL CASE	2018 All (HS);	Viewer: 9 Response: 0
12-Aug-18	4H1 (2018) (26)	Lost Ezlink	2018 All (HS);	Viewer: 72 Response: 0

However, as you can see from the photograph above, there has been many lost items posted, but no found items at all. Additionally, judging by the number of views and their respective responses for each post (which is mostly 0), not many people check this Lost and Found portion of the iEMB .

Rationale of Project:

The app we’re making aims to make reporting lost/found items easier by making a separate app for the Lost and Found section, so as to make uploading posts containing images easier and more convenient, as well as making clear distinctions between pages containing posts regarding lost items and pages with posts regarding found items, to make navigating through the posts easier, and to encourage people to post items they had found around the school as well. This will thus increase the effectiveness of such an application.

Focus and Significance of Project:

The app allows for a clear distinction between lost items and found items. This makes it more convenient to post items that users have found, and not only that, but to see if the items they have misplaced have been found. This thus solves the major problems we had highlighted, and increases the effectiveness of such a lost and found platform.

Scope of the Project:

The project focuses on all Hwa Chong students, as this app is a port of the HCI Lost and Found webpage into an app, with additional features like increased flexibility when uploading posts and images, and increased portability, as well as better navigation.

The Study and Methodology

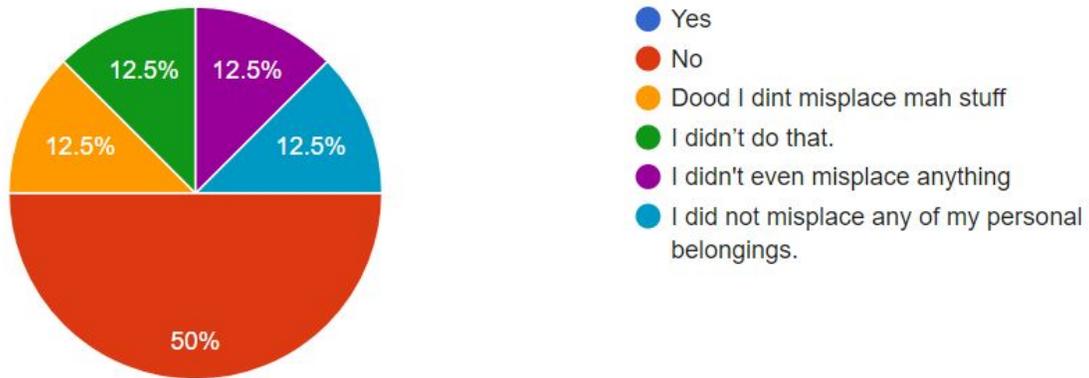
Ideation, Description of Study:

One of our group members, Enzo lost his water bottle and posted it on iEMB. However, there were no responses even though many people had read it, so he pitched an idea to us that we make a separate lost and found app so we could increase the chances of people retrieving their lost items.

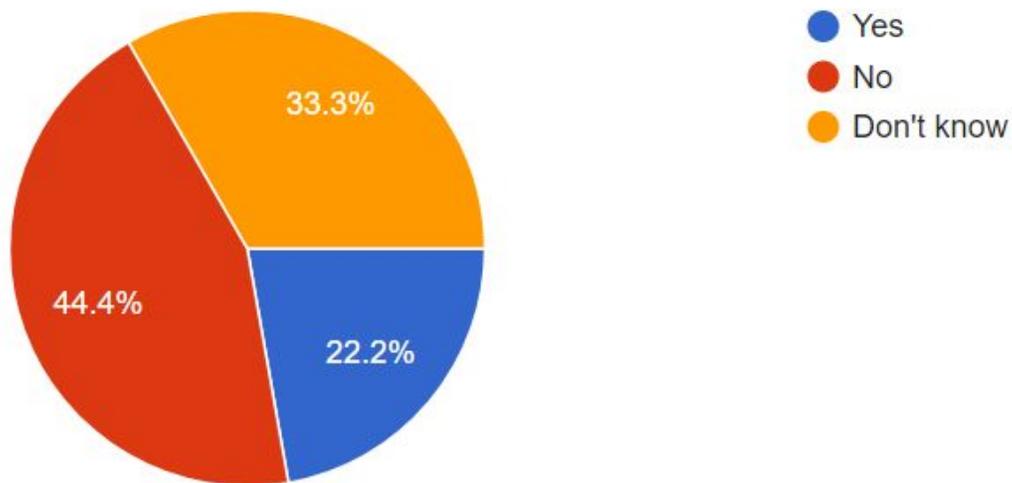
We continued interviewing our classmates, and we found that another one of them, Leroy, had lost his phone previously and had posted about it on the iEMB's Lost and Found section, yet he had not retrieved it. We decided to widen the scope of our interviews and thus, the project came into existence.

Investigation, Surveys (Needs Analysis and User Feedback), Experiments, Research:

We found out that many people had lost their items since the first day when school started through Google surveys and we feel that this is a problem that can be solved with our app. We then conducted surveys to see if the students found the iEMB's current Lost and Found webpage effective. We found that 50% of people did not get back the items they had lost.



We then asked if the iEMB's Lost and Found was convenient to use.



When we asked why, most of the students replied that it was because uploading images and posts took many steps and was not convenient. Thus, we concluded that the reason many items were not found after they were lost was because people found it inconvenient to use the iEMB's Lost and Found page and rarely posted any information regarding items they had found, and also rarely checked that page, for they found it inconvenient to access it and upload posts on it on their mobile devices.

Members' Role and Job Distributions:

Oak (Group Leader, Main Programmer)

Owen (Secondary Programmer, Android Studios Assistant)

Enzo (Administrative Work, App Design Helper)

Project Timeline:

May 27th → The app's UI is has been fully planned

June 9th → Official programing of the app starts. Key features like the login screen are added.

June 27th → App is connected to Firebase Database and Firebase Storage.

July 7th → UI is polished. First test run of the app. Bug regarding how the same posts appeared twice after uploading fixed.

August 11th → Final Bug-fixes and UI polishing.

Outcomes, Analysis and Discussions

Flowchart of the Different Features of the System:

1. User is first greeted by the login screen
2. After login, User is exposed to homepage, where he can choose whether to go to the pages containing "lost" posts, or the pages containing "found" posts by clicking on the respective tabs .
3. User can then either make new posts or look through other posts.

Include All Features of the System with Screenshots and Descriptions of its Purpose:

1. The Login screen, which the user is greeted with when he enters the app. It is there for security reasons, and is connected to Firebase Database.

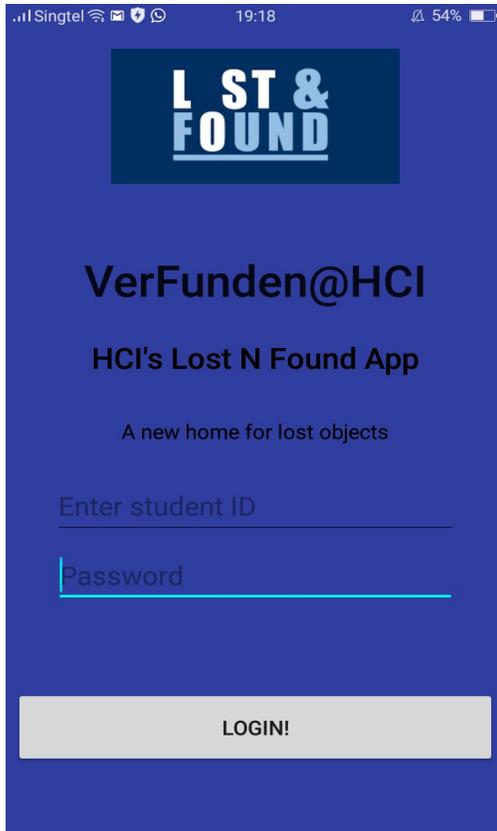


Fig 1.1, which shows the Login screen.

2. The homepage, which provides information about how to use the app.

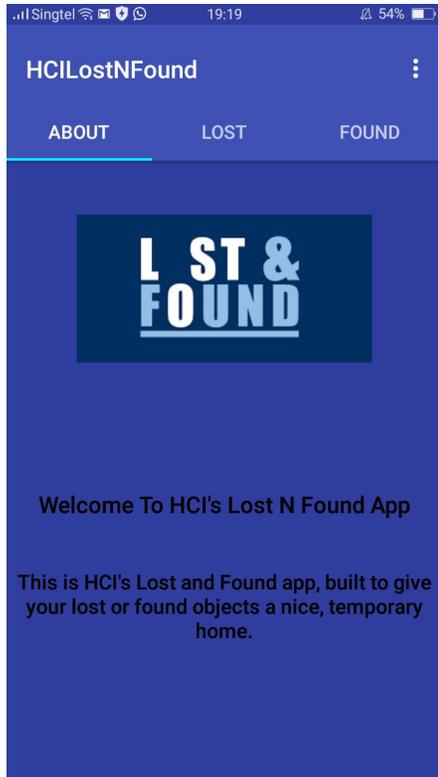


Fig 1.2: The About/Homepage, where a bit of background info of the app is add.

3. The Lost or Found section is where you can see all the posts.

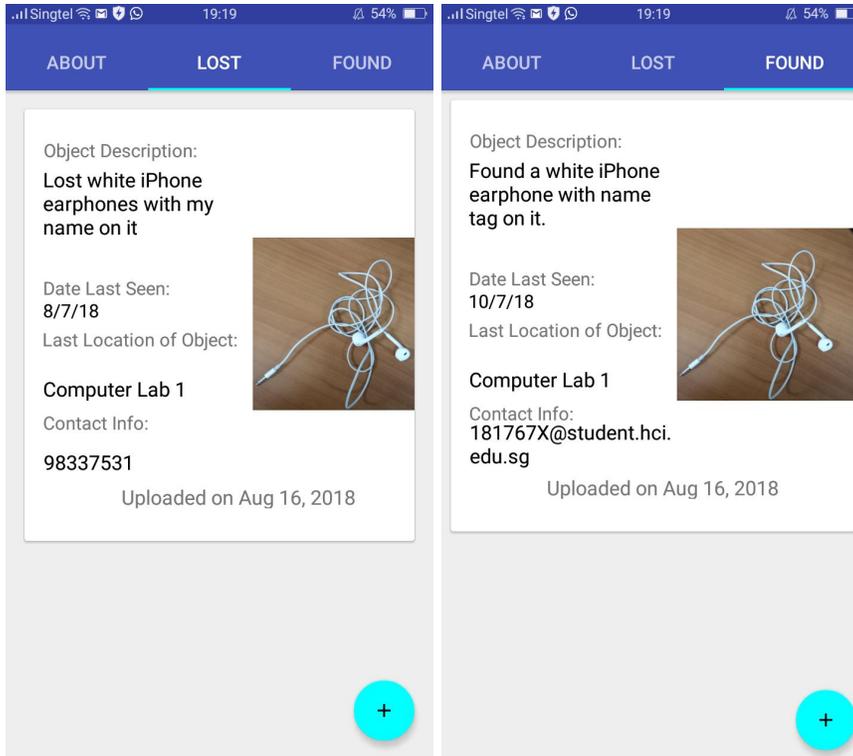


Fig 1.3 and 1.4: Lost and Found sections, where you can see other's posts.

4. A “create post” section that is oriented to be more mobile-phone friendly, as it allow for easier uploading of images and posts.

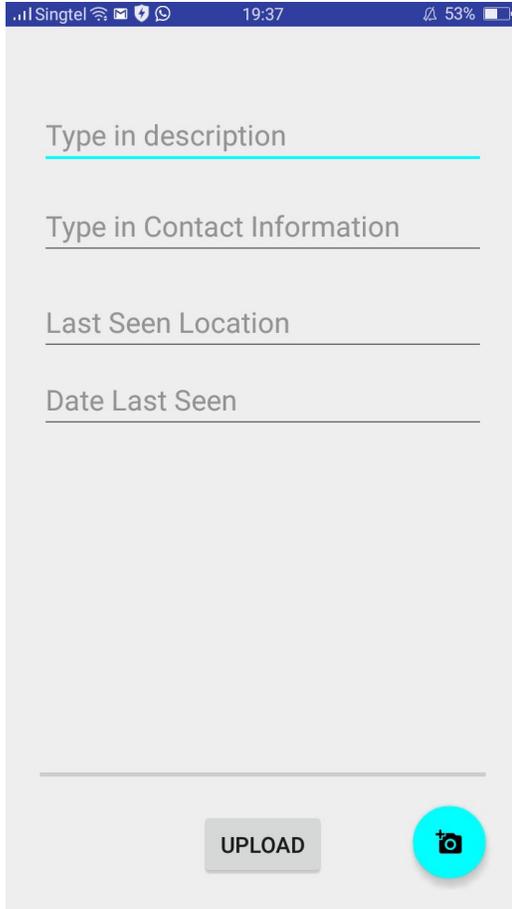


Fig 1.5: The create section, where you craft your own posts. The create sections look the same for both the Lost section and Found section.

Implications and Recommendations

Include Area for Improvements and Possible Further Extensions:

Possible features that can be added in the future:

1. An in-app private chat where students can directly communicate to arrange for meetups to return lost objects/items, thus taking away the inconvenience of
2. A page where you can see your previous posts and take them down once you have found the item already.

Conclusion

Reflection and Learning Points from the Project Development Process:

We learnt that

1. Programming is not easy. It requires a lot of problem solving and is very tedious, especially when it comes to bug-fixing. Our team had little programming experience before this, and we also gained new insight and knowledge about how app programming works.
2. Teamwork is very important. Since our team was an especially small team, we needed all members to work with each other and co-operate, from writing reports to making the slides to doing the programming.

Bibliography

APA Format: We used no external resources or reports in help