

Final Documentation

Team Shorties members:

Hui Ting Ko (43762378)
Yangyang Xu (43442401)
Siv I Choun (43681974)

Promotional material

Video link here: <https://youtu.be/vvbxOZdCHOM>

Link to prototype:

Board: www.shortiesboard.tk - where all the news and interaction happens

App: www.shorties.tk - to interact with other people on the board using this app on your phone

If the above does not work, below is the alternative link.

Board: <http://192.185.87.20/~sivivis/board/board.php>

User Side App: <https://192.185.87.20/~sivivis/app/>

Design process

- Problem space and solution

The product is a hybrid of current news, thoughts alongside with archived news, which is then displayed on an interactive board using a mobile app. The project is to raise people awareness toward news that happening around them. At the same time, we want to make a day more exciting where people can interact with other people whom which they've never met before. This will also help with socializing with other people or even just to pass the day or even notify friends or family what has happened in the news on that particular hour of that day.

There will have a digital board(yard level in ubiquitous computing) that interacts with the app which shows “news” and “your thoughts”. Also, the board will generate news randomly. That means it provides huge variety of contents. It will not focus on big news as we believe that how big is the news is, it is also a way to provide information of what is happening in the community.

Compare to traditional forum, this board allows user to do poll and leave bubble message on the board.

According to Rehead and Brereton (2009) research, comparing to text showing on the digital board only, there are 37% more people who interacts with the board while image (no text) are shown. A poll system has been implemented to show how the people feel toward the

news. Instead of using “agree” or “disagree”, we use “happy”, “sad”, “angry”, “lol”, “love”, and “regret” to create a more informal way to express user's' opinion.

At the same time, only the summary of the news will be shown. Some people may lose their interests on reading news because of the content is too long to read. We will only show the core part of the news within 100 words.

The principle of this idea is similar to Facebook, but it should be more related to the news and other people's thoughts. User only needs to do a few clicks and post short comments. However, the difference is that this is all public. People who are around the board (or have used the board before) can interact with the board.

When people are not around the board but they still want to check the status of it, we created an “out of area” version. User can only check the board that have interacted before. After choosing the location, they can view the news, poll, and the messages under “News”; messages under “Your thoughts”. They are not allowed to post anything because we want them to interact with the board physically by going there.

- User Testing and Evaluation

Colour of interface

User interface testing (design, color): most of the testers satisfied with the design and user interface. They can follow the task that we set for them (which is post a message under “News”). Different color combination should be tried to get the best result.

Board Colour Interface

Colour Name	Hex Code RGB
Navy	000080
Black	000000
Gray	808080
Silver	C0C0C0
White	FFFFFF

App Colour Interface

Colour Name	Hex Code RGB
Yellow	FFF100
Blue	2BAAE1

White	FFFFFF
Dark Grey	58585B
Grey	7C7C7C

Direct Message and Poll

User testing on function (direct msg, poll system): 4 out of 6 testers claim that they will make a poll near the board if that function exists; and they would like to see the poll result too. As a result, we use the poll system to replace the direct message function. The reason why we dismiss direct message is that we afraid cyber bullying will happen or more spam and advertisement message appear. The principle of awareness has been implemented here, users will know that they are interacting with other users by voting(also chatting under “Your Thoughts”). While users complete a vote, an animation on the bar chart will occur and users can be informed the poll result by that (Fig 1).

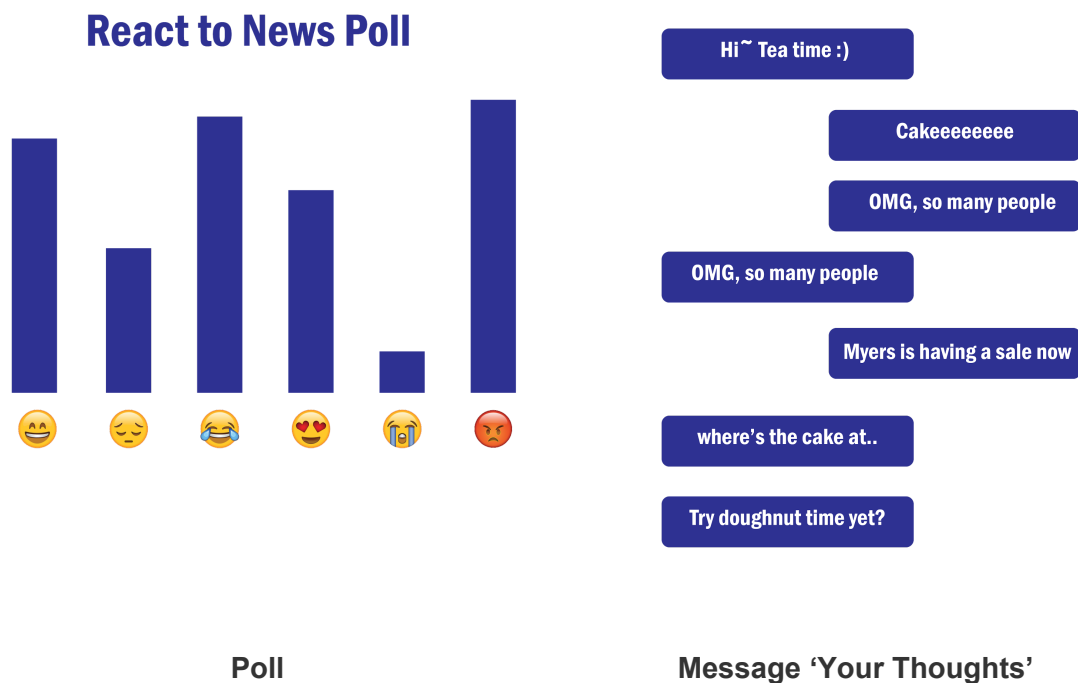


Fig 1 - Messages and Poll

Emojis

User testing on emoji design: we have set questions to test the understanding from users toward our designed emoji. However, the result is not optimistic, only around 74.9% can match the emoji with the correct expression. 53.8% user prefer to use generic emojis.

We did user testing on the emojis for the emotional design that we created, they were (from left to right Fig 1) “YAS”, “WTF”, “OMG” and “LOL”. The results that we tested on users were

the strong contrast of the emoji colours. Users weren't familiar with the facial expressions, so we had to resort to the generic emojis (see Fig 1.1 and 1.2), these were free from the google search, and we were able to use them to test it in our prototype. We found that users were more prone to the generic emojis, as in they were used to the colours and expressions as well as looks better and it makes them interact with the emojis in the way of expressing their feelings.

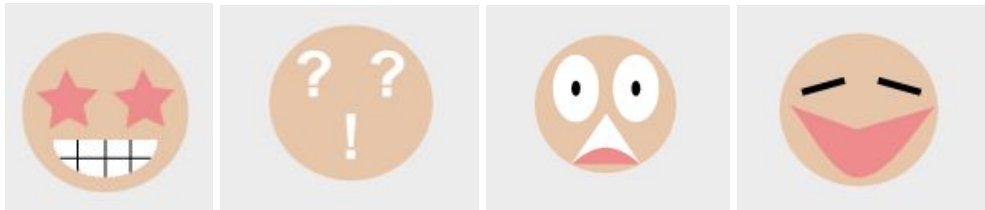


Fig 1.1 - designed by shorties emojis

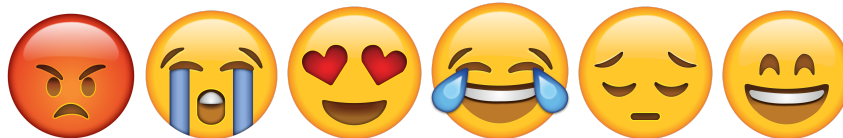


Fig 1.2 - generic emojis

Limitation

Requirement of Project:

1. It cannot Interact with users synchronously
2. Not available to show News happened around the board with a certain location
3. Detect users' locations is not accurate
4. Interface is not stable

Prototype:

1. Users need to manually allow app to use GPS service
2. Functional code is not testable, developers should pack code in classes
3. Loose page coupling

Design Process:

1. Not enough budget to simulate on an actual board
2. Need more user testing samples
3. Developers do not have mature programming techniques
4. Need more design iterations

Instructions - Setup/Use of Prototype

Using the Web App on your phone: <https://192.185.87.20/~sivivis/app/>

The image (Fig 2) page will run for 3 seconds then loads the main page. **Please note:** due to your location you are in, if you are at home your screen will show 'Out of Area' and if you are at UQ you will be able to see most of the function and features.

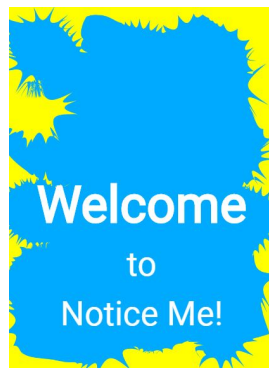


Fig 2 - Splash page

These images (Fig 2.1) shows that the user is out of area, which means the user isn't near the digital board. This will then show a list of news in in that particular location they have already been to.

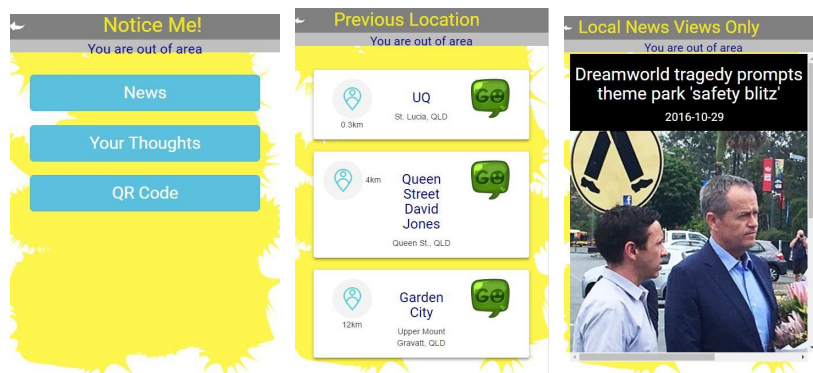


Fig 2.1 - out of area

The images (Fig 2.2) a history of the user's previous location and what they have written before in that particular location.

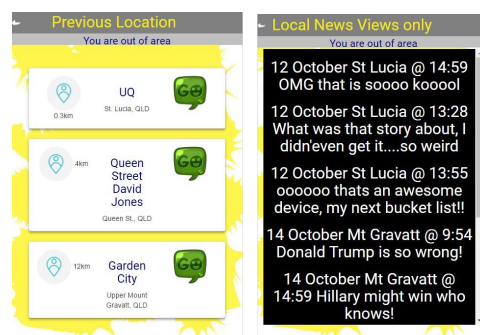


Fig 2.2 - your thoughts previous location

Using the board on a desktop/laptop: <http://192.185.87.20/~sivivis/board/board.php>

The image (Fig 3) below where it says 'News' and 'Your Thoughts' it will synchronize with the web app. The React to News is a poll of how many people are reacting to that particular news.



Fig 3 - Digital Board

Misc:

When an image doesn't appear on a particular news, another image will be replaced, this will hide the errors similar to error 404 page but with welcoming icon instead (see fig 4).



Fig 4 - When there is no page for this news