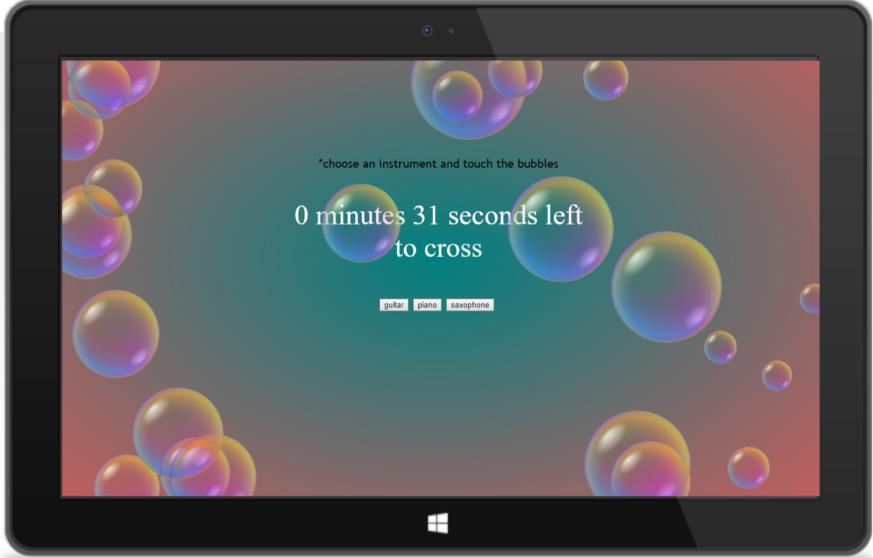


DECO 3200 Portfolio

ANTI-PROGRAMMING PROGRAMMING CLUBE

A documentation of working and reflection through out the project from ideation, background research, programming and prototype developing.

Benj Deng



Final Concept

Music Bubble

An application for entertainment when pedestrian waiting for the traffic light, every bubble respond to physical touch with musical instrument sound effect, user can click bottom below to switch instrument sound effect. Also, the screen give user how many seconds left to cross the road, and audio alter when traffic light turned into green.

Problem Statement

Phone zombie



We focused on people looking at mobile phone when waiting for the traffic light most of the time, which most people did have experienced. People under this situation were easy to lose attention on change of traffic light, which is likely to cause potential safety issues.

We were aiming to improve pedestrian experience while they waiting for the traffic light.

In this case, we came up with idea that add **entertainment** element to the waiting stage, and **remind** user when traffic light has changed.

Team Structure

LIANGYI

Styler
Documenter
Background researcher

Gathering background information for the target group and creating frame for the report.

JINGZHU

Data gatherer
Documenter
Usability test conductor
Actress

Conducting usability test and interview, been doing data gathering and organizing.

Benj

Woodworking
Programmer
Audio designer
Photographer

Programming with jack, adjusting audio component and text in the program, and been doing woodworking for the prototype.

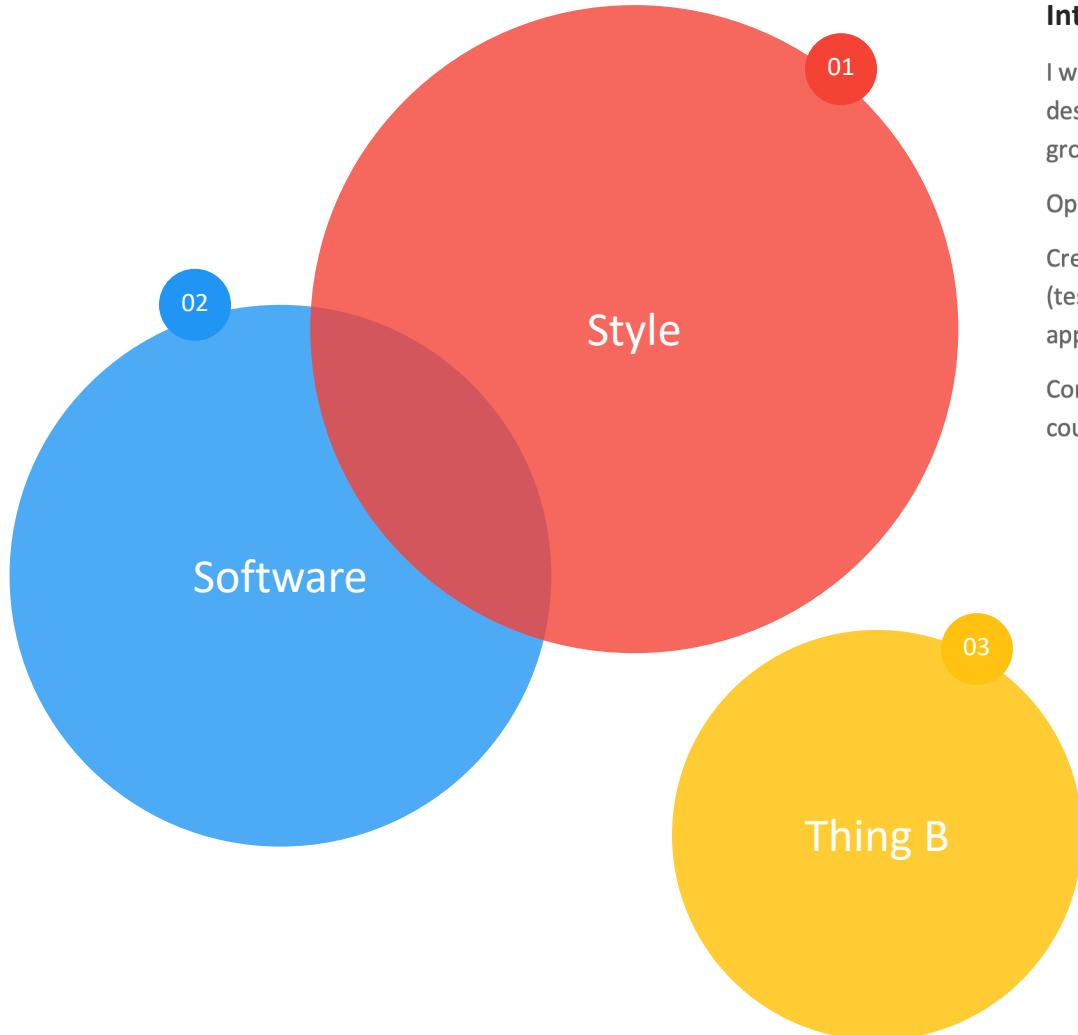
Jack

Painting
Programmer
Moving designer

Main programmer, working on coding with java, motion control, and painting the prototype.

As a team which no one good at programming, jack and I took this job voluntarily, and decide to focus on solving the problem, how audio can affect user behavior rather than high level of programming skill.

My Responsibility



Software Programming

I was mostly dealing with CSS and part of java script for the project, since both programmer in our group have not been doing much coding before, most job was done in terms of refining choices.

Interface and Audio Design

I was mainly playing a role of audio designer and interface designer for our project. Making sure our design fits the target group and solve the issue that we were targeting.

Optimizing framing style and text size and position sing CSS;

Creating audio feedback for every bubble by using GarageBand (testing audio in different noisy environment, select most appropriate instrument and note within range of scale);

Confirming audio with rational relation with the experience when counting to 0;

Building Prototype

Besides, I had been dealing with wood working building part of the porotype, designing the shape of pillar

Contribution



I am really interested in how audio feedback can control user behavior, and have been focusing on it since the first three initial concept coming up.

We used to struggling with ideas for final concept, I propose this concept of entertainment audio feedback with random musical notes within different instruments, and this had give more potential to our design in terms attracting pedestrian and encourage then to play with it within a short time.

Although that this concept wasn't going further, the study of user reaction towards sound had laid the foundation for the following development.

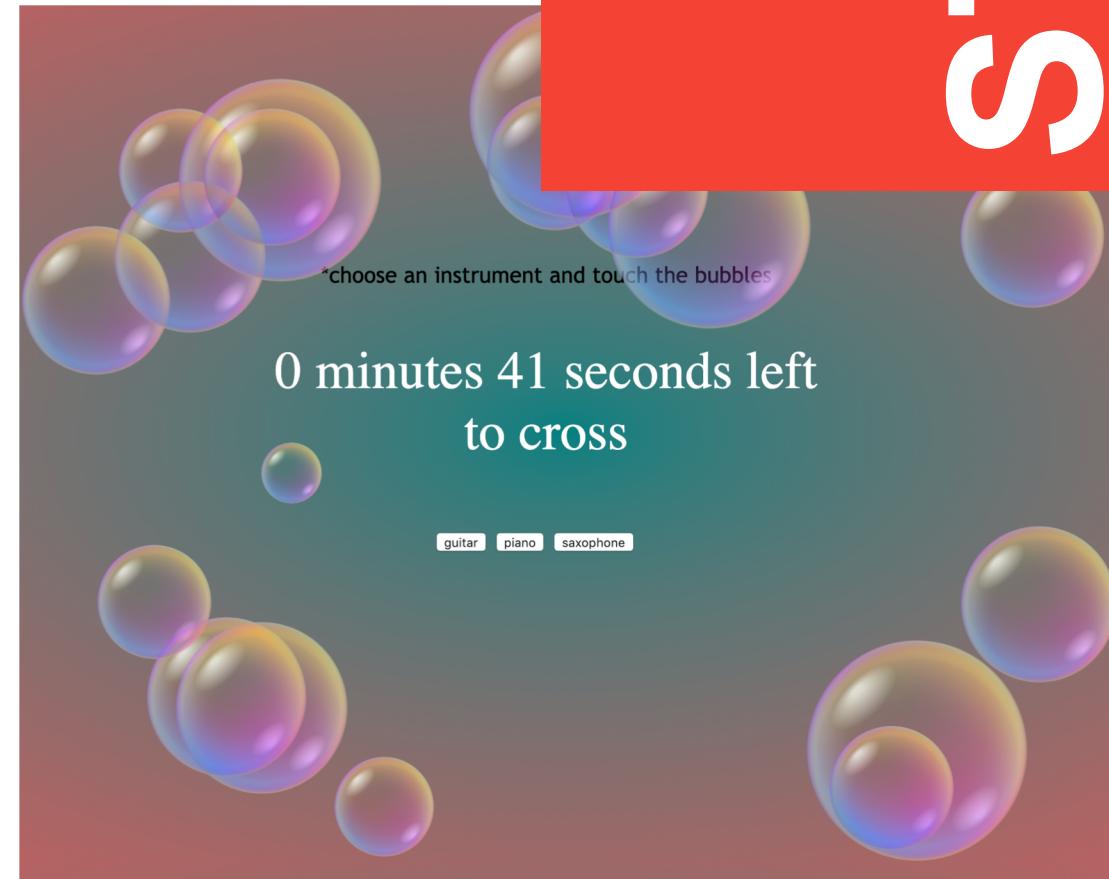


Contribution

css

To differentiate text on the screen, the main message is the count down timer. I made it bigger than rest of the demonstration it stands out when user first time see it, the instruction and optional button is different in its boundary.

I kept interface simple for the design like this in a busy environment, style of the gradient change background match the transparent bubble.

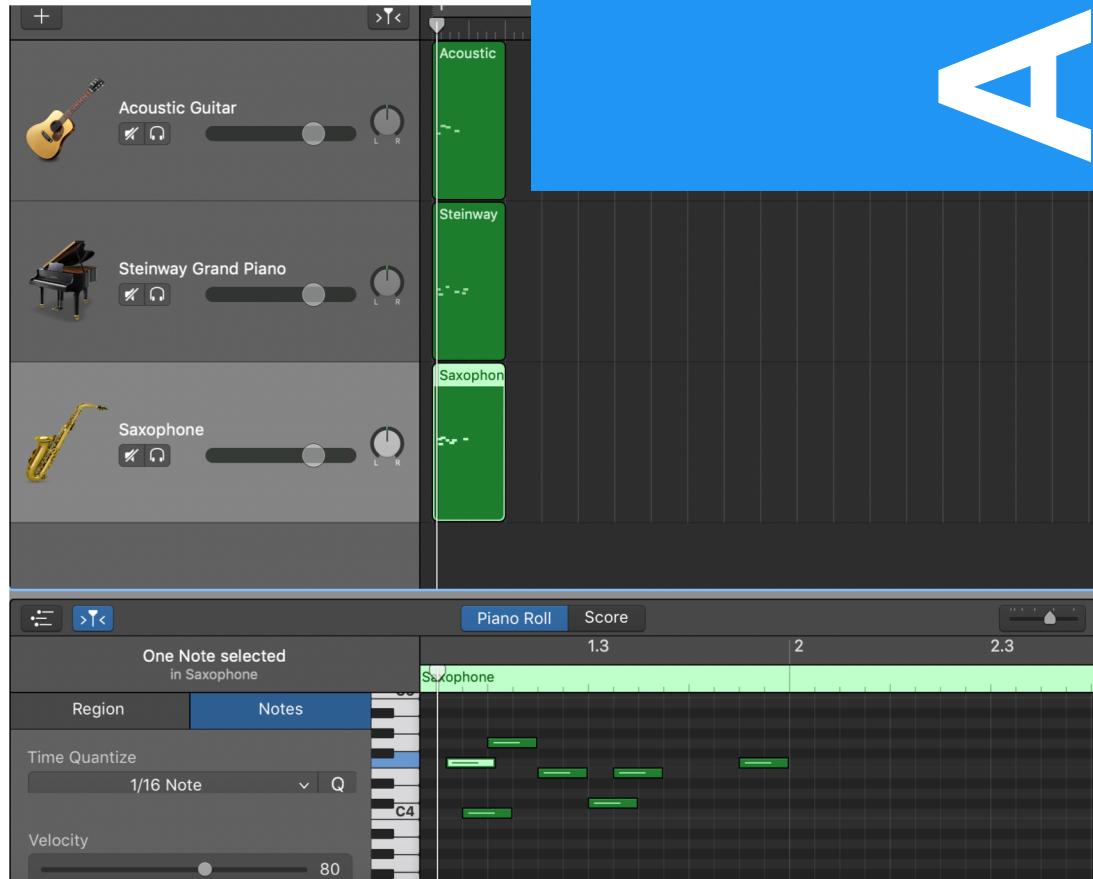


Contribution



With all the scale from the notes selection, I chosen a median c3 to c4 for guitar and piano to avoid unnecessary emotional effects. However, saxophone got natural higher tone, I raised one more stage from c4 to c5 to illustrate difference, and avoid aesthetic fatigue.

Finishing audio is a simulation of handclapping by audience, hence while it remind user to cross the road they have finalize with a completed experience.



Challenge

I had really struggling with ideation from the first stage, it is a challenge to balance between our current technical limitation and a good idea that fits the design brief.



ALWAYS KEEP GOING

Keep researching

At first, we couldn't come up with a good direction to support us going further, and I stopped.

After few pauses, that I realized there could be no exactly perfect idea or concept, I just need to keep searching about current problem and existing product, and find a way to support current concept, or it gives me a new way to improve current experience.

Challenge

Like I mentioned before, coding is the biggest challenge to me since I had vary few experience with programming, it is 'impossible' for me to code a fancy program within this short of time. Same with another programmer in our group Jack.

A GOOD DESIGN SOLVES PROBLEM

Instead of studying many fancy coding technic, I pay most of my attention on every single stage from where problem occurred, how user behave to the end of the experience.

I think for each stage, will our design attract users? How long could this design attract user? Does it solve the problem? Is the whole experience flow well? Theoretically the design had met all the requirements to solve the problem although there is still a lot could be improved.

Challenge

I used to working in a group that everyone doing same thing together, but not in this case. There were plenty of works need to be done in limit of time, we had to assign different task to every group member to met their forte. However, communication did not going well, and there had been a lot of rushes.

Liangyi

Always put effort on her own work, but she could be performed more active in the group meeting. She had many great thoughts but more of them were proposed after day or days.

Jingzhu

An active group member through out the semester. She did well on orange participants for interview, but Jack, JINGZHU and I had many opposite opinions caused stagnate on working process. We finally took strategy of working in smaller group of two to deal with different part of the assessment.

Jack

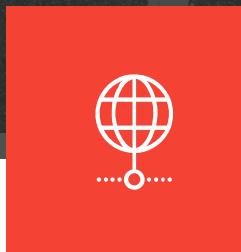
I have been working with Jack many times, our working process were always efficient. However, it is always been a problem that we both insist own perspective and trying to convince each others. Luckily, we working on different part of the assessment this time, and we both tied to take suggestion from each others.

Final Reflection

Group Meeting

I will rate myself 7 out of 10 working as group, I did have many opposite opinion in group meeting, but always able to come to one after discussion. I propose many idea to improve our concept, however, many of them were rejected.

7 / 10



According feedback from exhibition, many of them we concerned before as well. For example,

- The interface could be an indication itself with changing in color for waiting process;
- There could be more variation for the bubble to improve interaction, hence make the design more attractive.

We could arrange more group meeting or online meeting to gathering information from each other, this way we avoid wasting of time for repetitive idea or research.

It is interesting working on this project.

I would be like to working on more design in public place, it is interesting to see how one or two sensation having significant impact on user performance towards daily experience.

References

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People Standing on Road Close-up Photography · Free Stock Photo. Retrieved 8 November 2019, from <https://www.pexels.com/photo/people-standing-on-road-close-up-photography-3073037/>

A peep at some distant orb has power to raise and purify our thoughts like a strain of sacred music, or a noble picture, or a passage.

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