# Leap-Motion based conducting Learning program –
" Rhythm sonTA"

Rhythm Is My Life / Team03

21300207 김태운 / 21500431 유재은 / 21600202 나누리

Final Output

"Rhythm sonTA" is an educational program, targeting for music learners. It is a program that allows students to learn how to conduct music and practice it for themselves. Through this program, learners can enhance their musical understanding and skill of conducting music.
We developed this program based on 'Figma' prototype program. The final prototypes contents and configuration screen is as follows.
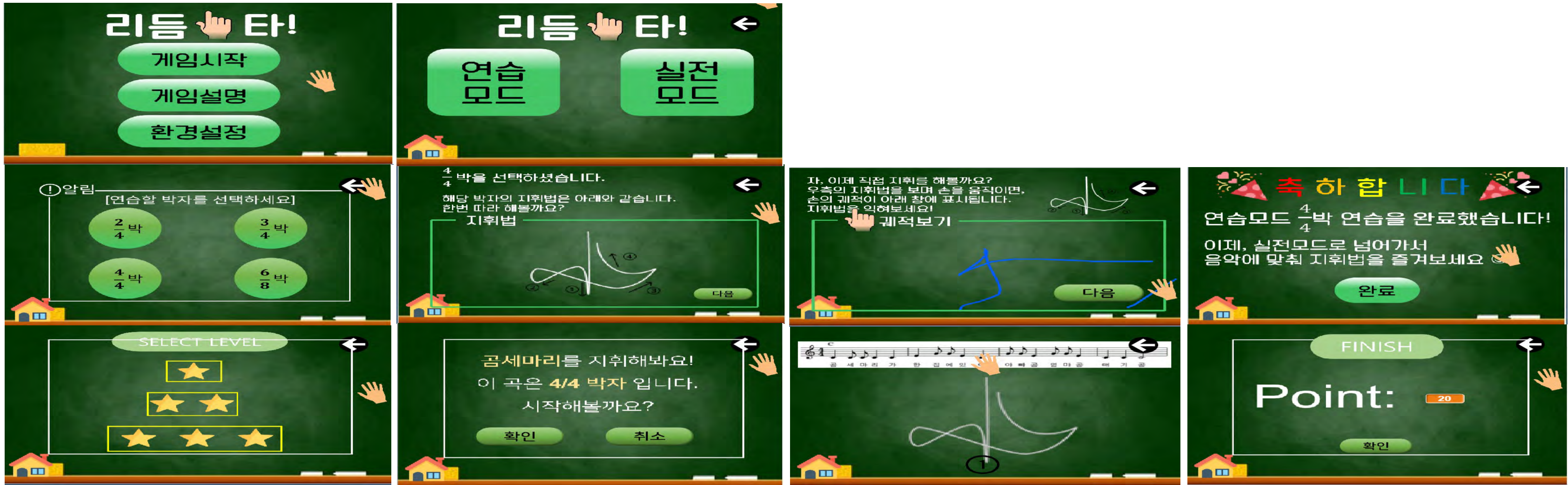
User Testing Results

We conducted user testing to HGU students. (6 people)
We let them to demonstrate the program themselves, and after that we received feedback through questions for around 5 minutes.
Our questionnaires are as follows, and feedback opinions from users was organized into individual and common.
[Questions we asked to users for evaluation of our prototype]
1. Feeling after experiencing the program
2. Understanding of program's flow and intent
3. The favorite points of prototypes
4. The part that users want to be modified
5. The Correlation between the Effectiveness of conducting methods Learning and the Program
6. Intent to purchase of completed program

Mr. Jeong
(17, Management)

Ms. Kim
(19, GLS)

Ms. Kim
(18, Spatial Environment)

Ms. Lee
(12, Management)

> Everybody could use this program including disabled people.
> Operating methods will be more effective in taking certain actions than just staying.
> If there's a way to utilize the built-in camera, there's no need to use this device.

> The hand pointer should smaller react with alacrity.
> It was uncomfortable because hand pointer couldn't reach the button well.
> If all the additional features are implemented perfectly, I willing to purchase and use the program.

> The hand pointer should react with alacrity.
> It is likely to be effective for use in educational institutions.
> It'll be much better accurately click the button.

> While playing the actual mode, it would be nice to add visual effects (e.g. Perfect! Double! Bonus!)
> It would be better to added various genres such as K-pop and pop songs as well.
> It would be better to use an interesting image other than number images.

[Common opinion]
1. The 'Leap-Motion' device is very interesting.
2. It'll be able to expect a learning effectiveness through the program.
3. Rather than putting the device on the floor, it will be more recognizable when placed in the screen or higher place.
4. It was easy and clearly understand the purpose of the program.
5. Alacrity of the device and hand pointer should be enhance.

Limitation / Further Plan

After user testing process, we made some modifications based on feedback that we received. Other various problems are constantly observed, so our corrections of program will be necessary continuously. By repeating this modification process, the program will be more complete.

(1) The patterns were modified to be visible only within the prescribed trajectory.
(2) The x-position distance of the hand sprite was modified so that the movement can be well reflected.
(3) The location of the back, home button was moved to the inside of the screen before and the touch was easily modified.

•   Further plan
(1) Adding various songs such as K-pop and international songs
(2) Adding visual effect such as "BONUS!", "PERFECT!"

Conclusion

Our research paper consists of limitations in the development process, explanation of the purpose of the program, user concept testing, As we went through the project, we were able to think about a number of ways to interact with people through existing devices and experience how they were developed and applied. It was so meaningful experiences.