# **EVALUATION PROTOCOL**

Evaluation ID	TEST001	
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Date	16/04/2021	
Purpose	<ul> <li>Evaluation of the main functions and interaction flows</li> <li>Collect information on users requirements through prototype interaction</li> <li>Obtain feedback on functions for improvement of the next iteration</li> <li>Make guidelines and decisions for the construction of the final product</li> </ul>	
Prototype	Link:	
Participants	Shelly, Shane, Liu, Vincent, and Peiwen	

# **Preparation**

- 1. Digital/Video prototype
- 2. Consent forms
- 3. Task sheet (PDF file)
- 4. Video camera
- 5. Observation sheet

## Introduction

I appreciate your volunteering time for this evaluation activity. Today, I am going to collect your feedback on the physical experience of the digital prototype in the situation for ideation. I will investigate how smoothly you use this device, how well you understand the process of interaction, and whether there are any struggling with the device.

First, let me introduce this product. Connection is a music ball that can detect and share the mood of the user. The system will first play the music that matches the user's mood. After that, the user can choose whether to share this piece of music and lighting with remote users. Remote users can choose to join or comfort this user after receiving the information.

Music can represent and communicate different types of emotions. According to the chart below, we can find that music with various intensity, timbre, pitch and rhythm show different feelings. In this project, we need to collect data of users' emotions, including happy, exuberant, energetic, frantic, anxious/sad, depression, calm and contentment. So, you are asked to complete several tasks to express your feelings when listening to some different types of music and analyze your physical interaction with the ball. Please note these data are only used for research, we won't share your personal information with the public in any form.

Mood	Intensity	Timbre	Pitch	Rhythm
Нарру	Medium	Medium	Very High	Very High
Exuberant	High	Medium	High	High
Energetic	Very High	Medium	Medium	High
Frantic	High	Very High	Low	Very High
Anxious/Sad	Medium	Very Low	Very Low	Low
Depression	Low	Low	Low	Low
Calm	Very Low	Very Low	Medium	Very Low
Contentment	Low	Low	High	Low

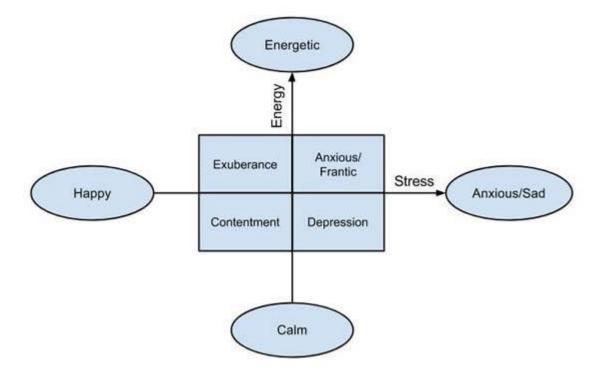
Now, you are asked to complete a consent form, which tells you the purpose of this evaluation and how to use these data. This is a voluntary activity and if you have concerns or feel uncomfortable, please let me know and feel free to stop at any time. I am going to evaluate the interaction flows and functions to improve the design and development, but won't evaluate you in any condition through this activity.

## **Consent**

(Participants read through and fill in and sign on the consent form. I sign my parts.)

Thank you for your consent and just a reminder, you are allowed to withdraw from this activity at any time.

## **Task Instructions**



In this section, you are asked to play 4 different types of music. Please use any interaction you like to play with the ball and tell me which type of music do you mostly listen to or favourite when you are in the following moods. Please write down the number below.

- a. Energetic / Exuberant:
- b. Happy/ Contentment:
- c. Anxious/Sad:
- d. Calm:
- e. Angry/Frantic:
- f. Depression:

Please match the physical interaction modes with the functions in your preference:

- a. Touch the ball
- b. Shake the ball
- c. Hold the ball
- d. Throw the ball
- e. Squeeze the ball
- f. Roll the ball

- 1. Energetic / Exuberant
- 2. Calm
- 3. Happy/ Contentment
- 4. Angry/Frantic
- 5. Anxious/Sad
- 6. Depression

### Task notes

#### Roles

Facilitator	Ziyi Xu
Videoing of the Task	Ziyi Xu

Observations of the person & discussions	Ziyi Xu
Recording time and steps (interaction flow)	Ziyi Xu

### **Body Storming**

In this activity, You can write down any remarks/feelings on the paper or speak aloud when you interact with the ball and get music responses. I will record anything you provide for the device. Here is the link:

#### Other Questions

Finally, I want you to answer three questions for further investigation:

- 1. What's your general idea about Connection?
- 2. Where are you confused about or what do you think should be improved?
- 3. Do you consider *Connection* is helpful? Why?

# **Closing**

This is the end of the evaluation, thank you again for your participation and for providing valuable data. Please note you are free to withdraw anytime in the process of activities.

### **Bodystorming Observation Notes**

Participant	Date: 23/04/2021
Shelly	Observations

Reference:

https://sites.tufts.edu/eeseniordesignhandbook/2015/music-mood-classification/