DMSP Perception Final Report

Scent Experience

Although odor cannot be seen or heard, it is everywhere in our daily life. The smell of green grass in spring, the smell of freshly brewed coffee, the smell of sterile water in hospitals. Smell always evokes memories unconsciously. Different people have different life experiences at different ages. The theme of the project is "perception of smell", which links smell, image, and sound, allowing visitors to experience the whole life stage from multiple senses.

Concept Design

The difference between old and new

	Theme	Location	How it works	Significance and characteristics
OLD	Death Flashback	Huge dark room	• 5 screens • Light guide • Fragrance • Big mirror at end	Passive experience and unilateral information acceptance
NEW	Stage of Life	Sound lab, Alison House	• 5 screen for different stages • Light guide in different color • Voice guide • Non Player Character • Scene props • 5 fragrance diffuser for different stage • Souvenir sticker&fragrance	Users choose independently and experience different complete life by themselves

User journey map

Stage	born 〉	adult 〉	middle aged 〉	elderly 〉	death 〉	end
User action	1.The experimenter will be welcomed at the soundlab's main entrance. An NPC guide will introduce the game's instructions and lead the experimenter inside. 2.The first scene's LED lights will turn on, and the experimenter will follow them to their seat. After pressing a button on the table, the lights will change color. 3.The experimenter will use a mouse to make a selection, and an image will appear on the screen, sound from the speakers, and fragrance from a machine.					1. The experimenter will exit through the back door. 2. Souvenir-making process
Smell	Disinfectant, milk fragrance, soap, candy, leaves and grass	Cigarettes, alcohol, roses, chocolate	charcoal, fruity, tea, vanilla, caramel, cream	Rainwater, Sandalwood, Incense, Rosin, Peppermint	Disinfectant, blood, medicine, lily	

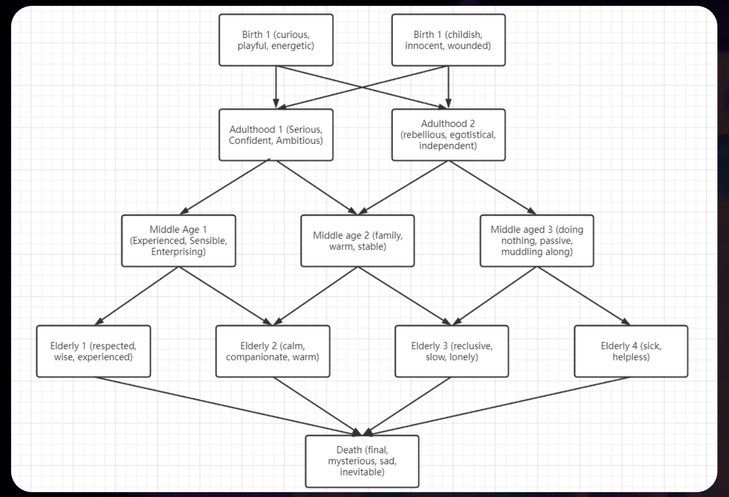
Process Design

	VIDEO	SMELL	LIGHT	PROPS
CHILD	•curious playful energetic •childish innocent wounded	•candy •milk •vanilla	pink	•candy •mushroom
TEEN	•serious confident ambitious •rebellious egotistical independent	•coffee •tobacco •flower	green	•book •pape
ADULT	•experienced sensible enterprising •family warm stable	•food •wood •laundry detergent	yellow	•food •tableware •sundries •receipt
OLD	•respected wise experienced •calm companionat warm •lonely helpless reclusive	•tea •wood •medicine •musty	blue	•medicine •old item •newspaper
DEATH	•final sad mysterious inevitable	•disinfectant •sour •tasteless	shing white	•medicine •old item •newspaper

https://docs.google.com/presentation/d/18ZcMHOGQnUIrbFMVx2c0CJNA62xzLCm5BC2HLzRF31s/edit#slide=id.p

Interaction

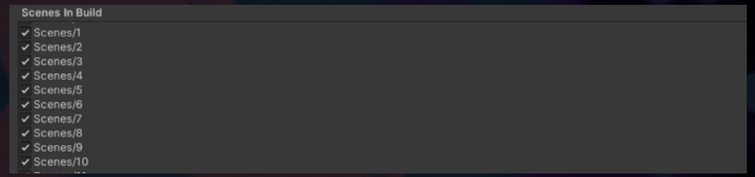
Life choice system



The Life choice system is a unique approach to enhancing the randomness of the entire exhibition system. With its carefully designed structure, it takes the audience on a journey through five stages of life, namely birth, adulthood, middle age, old age, and death. Each stage is accompanied by 1-4 videos (12 in total) providing different perspectives on a specific stage. After each video, the audience is presented with two options that lead to different outcomes. This structure provides a more interactive experience for the audience, allowing them to engage with the content and participate in the exhibition actively. By giving them the power to choose their own path, the exhibition becomes more personal, and the audience can gain a better understanding of the message being conveyed. Furthermore, the Life choice system increases the fun of the exhibition by offering different endings after each choice. This feature encourages the audience to make different decisions each time they visit the exhibition, leading to a unique experience every time.

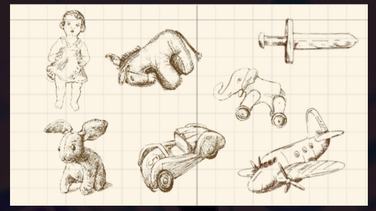
Game mechanics

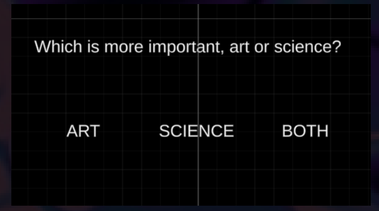
The Unity Project



The game designed for the entire Unity project is based on the concept of decision tree. A total of 20 scenes and 12 branching choices have been designed. Different choices lead to different results, which are reflected through positive or negative video and audio materials."Reset" buttons are included at the beginning and end.

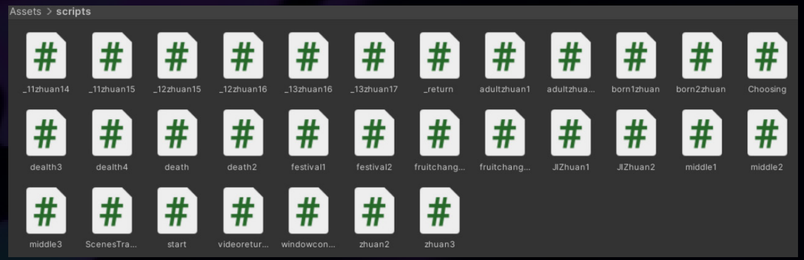
UI Design





The UI of Scene 1 uses materials created by Xiaotong and contains six types of toys, each symbolizing a different meaning that will lead to different choices. Substituted into childhood, children can't read text, so the options in childhood are retro images, and as they grow older, they have the ability to read, so the options in the next few stages are all text.

Script logic



The entire project uses a total of 31 scripts, mainly divided into two categories: one for scene transition and the other for button-triggered videos.

Scene Transication

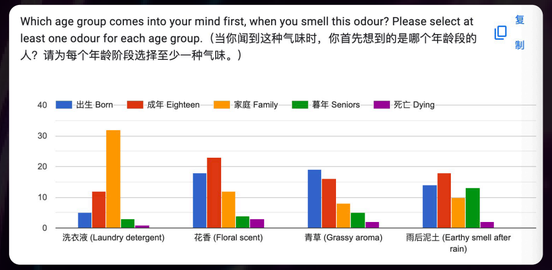
```
public class adultzhuan2 : MonoBehaviour
{
    public VideoPlayer videoPlayer;
    // Start is called before the first frame update
    void Start()
    {

    }

    // Update is called once per frame
    void Update()
    {
        Debug.Log("isPlaying: " + videoPlayer.isPlaying);
        Debug.Log("time: " + videoPlayer.time);
        if (!videoPlayer.isPlaying && videoPlayer.time >= 57)
        {
            // load the next scene
            Debug.Log("Video has finished playing!");
            SceneManager.LoadScene("7");
            Debug.Log("Next scene loaded!");
        }
    }
```

```
using System.Collections;
using System.Collections.Generic;
using UnityEngine;
using UnityEngine.SceneManagement;

public class fruitchange1 : MonoBehaviour
{
    public void Movie()
    {
        SceneManager.LoadScene(8);
    }

}
```

Check if the video is playing. If the video is playing, get the elapsed time. If the elapsed time is greater than or equal to the length of the video, then jump to the next page. Create a button in Unity. When the click event is triggered, jump to the corresponding result for the selected choice.

Odour Part

Inspiration



For the preliminary research on scent, the team members looked up literature, did online questionnaires to collect data, and conducted offline interviews with passers-by of different age groups. Based on this, we summarised people's impressions of odors in different age groups and selected the most representative 2-3 odors for each life stage.

Flavours

	FRAGRANCE
CHILD	Sweet Soap+ Milk+Grass (3:2:1)
TEEN	Flower+Tea+Tobacco (3:2:1)
ADULT	Coffee+Raw Ginger+Lavender+Bitter Flavor (4:3:2:1)
OLD	Sandalwood+Mint (3:1)
DEATH	Antiseptic Solution+Bitter Flavor (3:1)

After identifying the representative scents for the different age groups, we started to purchase essential oils and perfumes. We went to essential oil shops and soap shops to experience the different scents for ourselves and to buy the ones we needed. At the same time, we also purchased some of the specified scents online. After receiving all the scents, we formulated a scent for each age group based on our previous research and recorded the ratios.
In the end, we formulated the scents for each of the five scenes, melted them in water, and used an aromatherapy machine to enable the scents to be dispersed.

Visualization Part

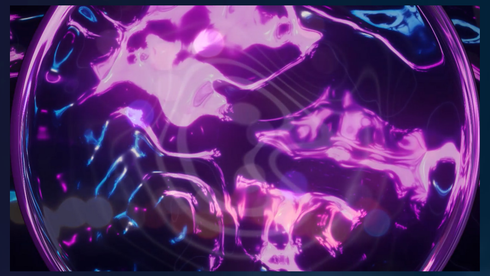
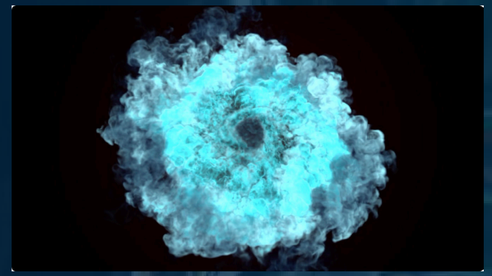
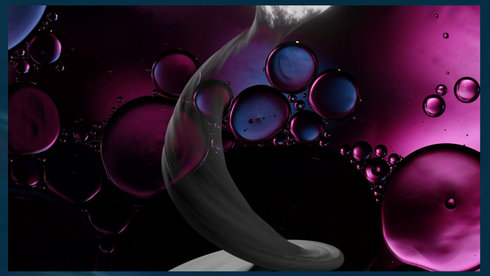
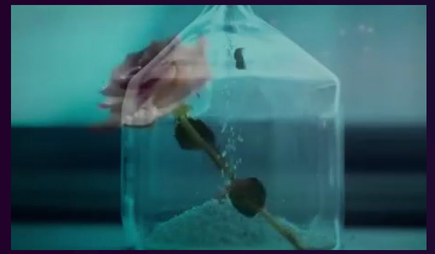
Poster Design

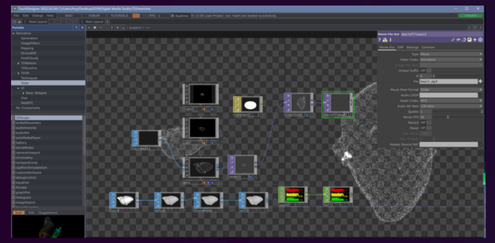
The theme of this poster is "STAGE OF LIFE", which is a trance and summary of people's life stages, so the picture reflects the sense of the future and mystery through the sacred, futuristic and religious landscape, the sun and the human scene. The poster also presents the theme meaning through colour transition changes, which gives the whole picture a sense of design and order.

Visualization Part

Video Design



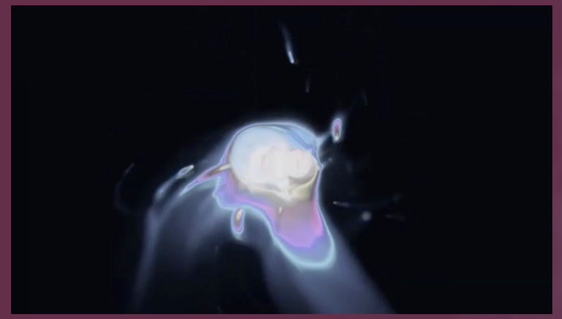






In the production part of the video, we have made separate videos for each stage of life. For example, there are two options for the childhood stage: happy and challenging. Most people who have a happy childhood have memories of toys, sweets and cakes. At the same time I noticed that when we are children we see the world from a naive point of view and the things we see are significantly bigger. Therefore, we enlarged the graphics of the elements and gave them bright and lively colours. Alternatively, there are some people who did not have such a good childhood. They may have been influenced by the background from their families and perhaps they would have been more mature and rational earlier. Therefore, in another childhood video I chose to reduce the overall saturation of the colour style and designed special effects such as crushing and cracking.
We used Processing and Touch Designer to create the video footage. The image footage and keywords were then superimposed on the same screen to give the video a certain narrative and introduce the experiencer to the experience of a life stage.

Background Music

Inspiration



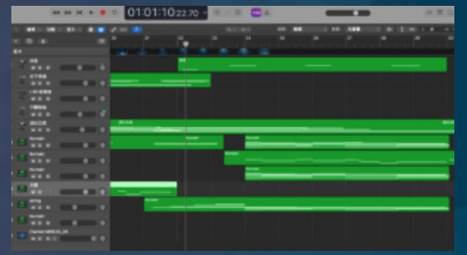
Music is an important part of our integrated arts. It acts as a bridge between scent and vision, helping to convey to participants the unique emotion and atmosphere of each life decision. There are 12 different life choices in our Life Stage project, giving you the opportunity to explore a range of different musical styles and aesthetics. Jingrui used Logic Pro X to create a number of music tracks of the different emotions and styles.
I have used many different real instruments, synthesizer sounds as instruments in my work, but have also had the opportunity to record live instruments and will deal with the musical aspects of sound. Taking the music further to new levels of dramatic subtlety is possible. More styles and genres can also be explored to suit the different artistic designs and emotional intentions of each stage.

Process

For the recording part:
We recorded some ambient sounds outdoors. Current sounds, urban ambient sounds, water.

Live recording of the music part

Materials: Grand Piano



Featuring piano playing and plucked strings

A unique musical experience is created through the fusion of melody and interactivity. In this installation, participants will be able to explore and recall their own life experiences through each emotional choice that makes the melody richer, and while receiving different feedback.
The music itself is centred on a melody, and that melody will reappear in different forms in the soundtrack of the art installation with a sense of superimposition depending on the mood of the participants' choices, each of which unfolds with the previous stage in mind. One of the keys to the cohesive nature of the soundtrack, I hope, is to establish a strong consistency in the players' minds and to add to the theme in a sonic way.
The musical soundtrack is an important part of the installation, incorporating the emotions and memories of the participants by way of sound. Each selection unfolds in the music in a different overlay, creating a unique musical experience for the participants. This musical coherence and cohesion will help participants to create a strong emotional connection within the installation and to experience the emotional world of life's memories in depth.
Through their connection to the music, participants will be able to explore and recall their own life experiences. Each emotional choice will have an impact on the interpretation of the music, resulting in the creation of a unique musical piece of their own. This interactive musical experience will guide participants to express and experience their own emotions and memories through the language of music.
In keeping with our artistic theme, we decided that the sound of this game would basically consist of real ambient sounds with some synthesized sound effects and music.

Output

Jingrui Han have made categories in his musical compositions according to the different stages of age and identity:

The first category is based on the theme of 'silence' and features an emotionally charged atmosphere through lush strings and warm orchestral and piano instruments. The melodies are smooth and touching, with varied harmonic colours, leading participants to recall their own life experiences.

The second category features an 'adventure' theme, featuring strong rhythms and magnificent arrangements that inspire participants to take risks. The energetic melodies and epic musical atmosphere will lead participants to explore different life choices.

The third category features the theme of 'Lost', featuring soft synths and ambient sounds to create a calm and serene atmosphere. Through simple melodies, participants can immerse themselves in their own inner worlds and reminisce about their past.

The fourth category theme, "Exciting Moments", features popular electronic rhythms and dynamic arrangements to provide participants with an exciting and enjoyable experience. The energetic melodies and rhythms will guide participants to recall those moments in their lives that are full of passion and energy.

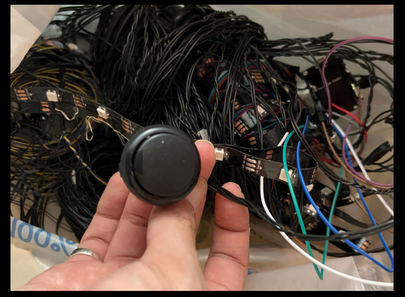
The fifth theme is 'Back in Time', featuring folk-inspired guitars and warm ambient sounds, bringing participants a sense of nostalgia and sentimentality. The melodious tunes lead participants back in time to memories and emotions from the past.

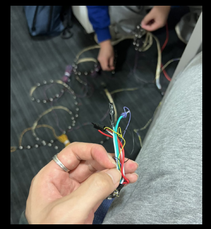
Sound Effects

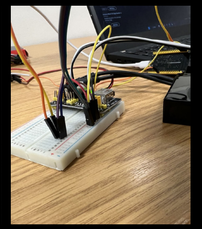
Based on the production of videos that are more 'abstract', the sound design plays a supporting and enhancing role in the video content.
1. In some clips of graphic changes, the sound is distorted and shifted to reflect a sense of kneading. It is used in the childhood, death and old age stages.
2. superimposed on similar, identical sound elements to give a more layered and spatial feel to the sound (e.g. the car tracks in the death phase)
3. adding transitions to important text occurrences for emphasis
4. overlay important points with multiple sound elements, e.g. at the end of the death phase, use two explosions, glass breaking and low frequencies to create a powerful sense of explosion and enhance the end effect.
5. Ambient sounds are used to create atmosphere. For example, use the sound of rain to accentuate a quiet, melancholic atmosphere (as in the childhood phase). Or the sound of burning flames to create a sense of domestic warmth, with the sound of burning flames made by kneading plastic paper to foley the sound. Or the sound of running water from a clear spring combined with the chirping of birds in a natural forest to create a natural, happy atmosphere. (Family stage)
Before each choice in each scene, there is a voiceover. For example, in childhood scenes, the voiceover is a child describing the problem. The voiceover is added to help the experiencer come up with some inspiration when facing difficult choices, and to tell them to perceive the smell in the environment. Since each scene represents a different age group, different VST plugins were used to process the sound during sound design, adjusting the EQ, pitch, and setting different sound layers to achieve the desired effect. To make the sound more interesting, different tones were used, such as whispering, to create a more immersive experience for the experiencer. In addition, some delays were also set to make the sound appear unexpectedly.

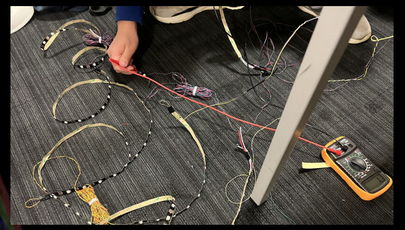
Arduino Part

Research&Idea





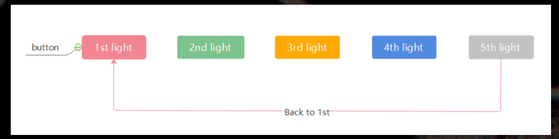




The initial plan was to use infrared sensors, which would be connected to the main control chip through soldering and placed in the scene. The infrared sensor data would be transmitted back to the computer to monitor whether the experiencer entered the scene. By changing the value, the lighting would change accordingly. However, in the seventh week of implementation, it was found that the infrared sensor was very insensitive and could not stably control the brightness of the light in actual experience. Later, the original plan was changed to using physical buttons. When the experiencer enters the scene, by pressing the button on the table, the white LED breathing light will change to adapt to the scene's color. Then it will turn off, and immediately the second scene's previously unlit breathing light will emit white light to guide the experiencer to the next scene. There are 5 of these buttons, forming a closed loop.

To light up the LED lights, three wires are needed, which are braided together. After the wires are combined, one end is connected to the circuit board and the other end is connected to the input of the LED lights. The connection is made using a soldering iron and solder. The five LED light strips are connected in series. To calculate the length of the wires needed, the space information of the entire sound lab was measured, and the total length of the LED light strips is approximately 100 meters.
For the button part, two wires are needed, one for the positive and one for the negative connection. The button wires also need to be braided together to increase stability. They are then soldered onto the circuit board in the same way.
After the soldering was completed, the LED strips were unable to function properly for a long time. The picture shows the use of a voltmeter to measure whether each interface is short-circuited to troubleshoot the problem.

Software part




```
#define NUM_LEDS 10

// for led chips like WS2812, which have a data line, ground, and power, you just
// need to define DATA_PIN.  For led chipsets that are SPI based (four wires - data, clock,
// ground, and power), like the LPD8806 define both DATA_PIN and CLOCK_PIN
// Clock pin only needed for SPI based chipsets when not using hardware SPI
#define DATA_PIN 12  //需要连接12号引脚，在板子上 你
#define CLOCK_PIN 13

CRGB leds[NUM_LEDS];

int time_period = 1000; // 1000ms
// 刷新值
#define time_num  30
int led_values[time_num] = {0,1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,14,13,12,11,10,9,8,7,6,5,4,3,2,1};

// define variables
long duration;
int distance,distance_last;

// define mode array
// 0 is off, 1 is breathe, 2 is specific color
int led_mode[5] = {1,0,0,0,0};
int time_m, time_last;
int time_j = 0;
void setup() {
  // initialize serial communication
```

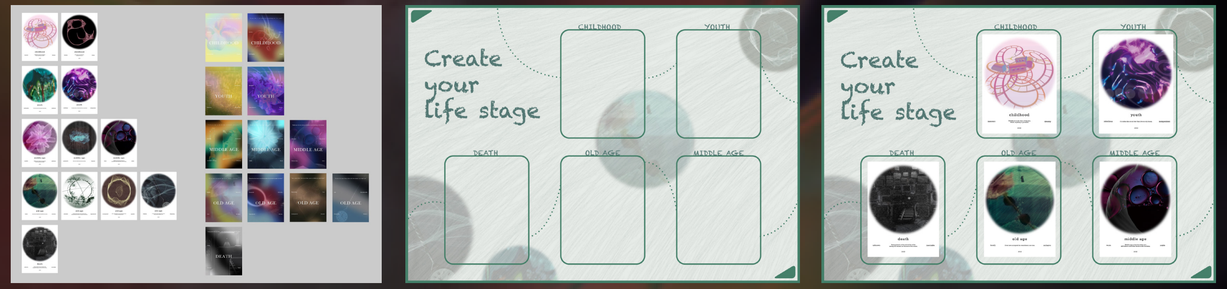
This code is used to control an LED strip, and primarily uses the FastLED library. Firstly, the number of LEDs on the strip, data pin, and clock pin information is defined. Then, some variables are defined, such as the breathing light cycle time and the LED strip color value array. In the setup() function, some initialization operations are performed, such as initializing serial communication and setting input/output pins. In the loop() function, the switch state is sampled first, and then the current LED strip mode is determined. The LED strip's brightness and color are controlled based on different modes. Finally, the LED strip's status is updated using the FastLED.show() function.

Souvenir Design

Inspiration

For the souvenir stickers, we chose a screenshot of the video as the main motif and overlaid it with some colors and textures. We also chose some words that describe the qualities of the life stage. Two versions of the sticker were created and we finally chose one of them. For the souvenir card design, we set up an area for each life stage to put stickers on. Once visitors have chosen the stickers for each stage, they can stick them in the corresponding area.

Production process



After experiencing the entire exhibition, visitors can come to the souvenir area to make their own life stage card. First, visitors can pick up a blank life stage card. Then choose a sticker for each life stage and stick them in the corresponding area. Finally, visitors can choose one or several scents of perfume and use a dropper to put them on their cards. After completing the whole process, visitors can take away their personally made card as a souvenir.

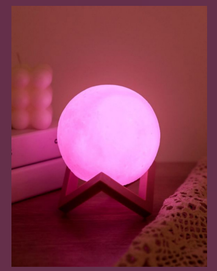
Outcome

Each visitor makes a card that is unique, whether it is an image or a scent, chosen by them personally. When visitors see the cards again in the future, they will recall the thoughts they had about their own lives when they visited the exhibition, even if it was just a few fragments, a few moments.

The building of Stage of Life

Interior Design

Inspiration

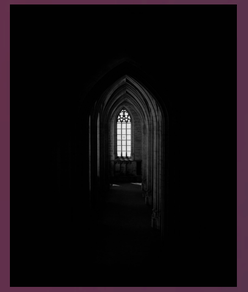



CHILD
Light: Pink
Items: Toys/Candies/Mushroom(In Huge Size)
Plush Carpet

TEEN
Light: Bright(Sunshine)
Items: Book/Sports equipment
Turf Carpet

ADULT
Light: Warm
Items: Household products/
Office Supplies

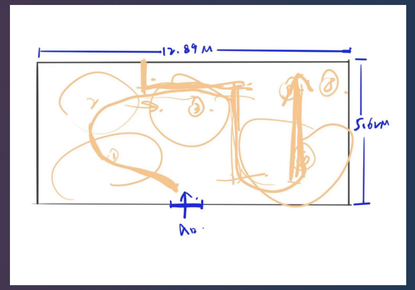

OLD
Light: Weak Warm(Flashing)
Items: Medicine/Old TV



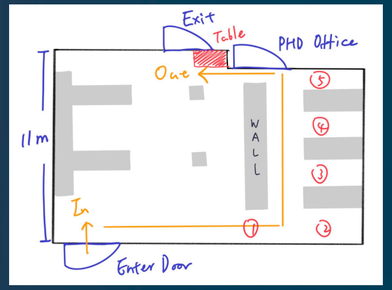
DEATH
Light: Dark

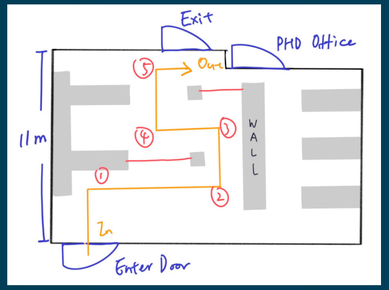
Draft

Plan A: Sound Lab

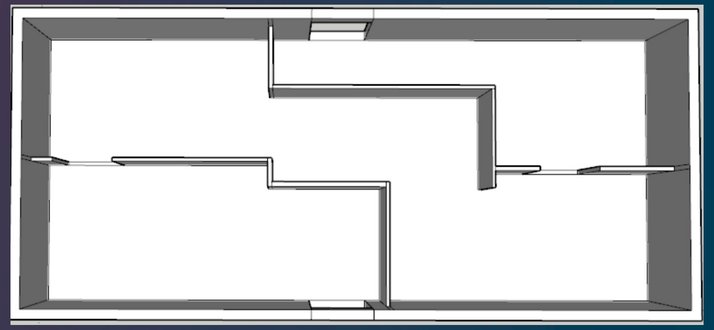


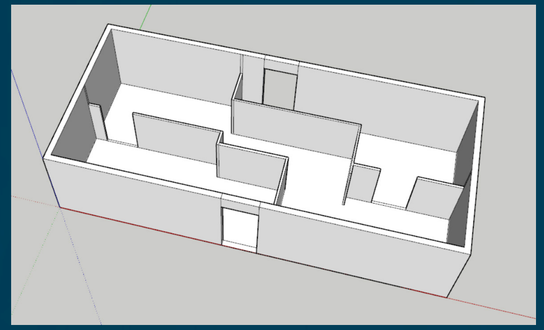
Plan B: Micro Lab





Modeling





The current interior design is based on a sound laboratory and a microcomputer laboratory.The sound laboratory is the main option, and the microcomputer experiment is the alternative.According to the interactive logic of the installation, the interior design creates a narrative space. From the entrance to the exit, the whole room is divided into five small spaces by two sets of partitions to prepare for five life stages.Each small space chooses different lights and different props according to the different building concepts.

The building of Stage of Life

Display and sound

The display section uses one main control computer, five auxiliary computers, and five displays. The main control computer uses screen casting to project to each auxiliary computer, which then connects to each scene's display through an HDMI cable. Originally, the plan was to use one main control computer to connect to five displays. However, during the actual operation, it was discovered that the HDMI cables were not long enough to meet our scene requirements.

For the audio part, two Sound Lab speakers were used and connected to the sound card via XLR cables, and then to the computer. Two microphones were placed in the center of the entire room to achieve the best effect.
We have prepared the M5 stack as another interactive input device. Build the M5 stack into an art object. In the final scene, as long as the experimenter shakes the object with M5, a virtual shadow will appear in the video image, which is the image of other life stages in the past. However, due to the inability of MAX on several computers to communicate with WiFi during the final setup of the environment, it was not successfully implemented.

Scene construction

The original intention for the division of the scene was to use curtain fabric or a dark fabric fixed to the ceiling that would hang naturally. However, due to the lack of support from the ceiling, the space was divided up with a baffle and a bookcase instead. We used scrap paper, paper tubes and red and white paint to create two giant mushrooms, and placed sweets and toys on the table to set the scene for the childhood phase. LED lights were an important part of the set-up.
We spent a lot of time in the process of setting up the scene, including making and collecting some representative items that match the keywords of the relevant life stages. In the process of setting up the scene, the cooperation between software and hardware and the scene also took us a lot of time, because the scene takes up a lot of space, we need to use very long wires to connect each part. The cause of the circuit failure, it needs countless times to improve the direction of the line, in order to ensure the stable realization of the final effect.
During the experiment, due to the limitation of the site, we had to abandon many original ideas, and improved the original ideas and plans step by step to the current state. In the end, we divided the overall space into five parts, adopted the method of area separation, and used light strips to guide the movement of visitors.

Reflection&Feedback

•The Comments of User

This event was a very interactive experience. The guidance from the staff was very gentle and reassuring. The overall experience was very nifty. The options were set up in a way that required thinking, whilst not difficult to make decisions. They are not that superficial or make the outcome of it predictable simply by seeing it. Noteworthy are the sound effects, which have a very good narrative effect. Complementing the visuals - those abstract images - made me feel more connected. I also noticed that the designers had made some special displays on the tabletop, unfortunately, I couldn't see these details very clearly due to the illumination. If these had been added I think the experience would have been fascinating. The final part, the souvenir, was very special in that it allowed me to make my own card based on those options I had made and offered a variety of perfumes, which was fun as it prompted me to think back carefully about how I felt about the various stages.

•Arduino Part

Leyao:When using Arduino, we used wires to connect buttons and LED light strips. This was a time-consuming process, and any mistake made during any step could negate previous efforts. For example, wire cracks, miscalculated resistances, interface connection errors, or prolonged use leading to circuit aging. These issues could result in a short circuit that would cause a catastrophic failure of the hardware. A better solution is to independently connect the lights and buttons of each scene to their own circuit board and then use WiFi and Bluetooth modules to achieve interconnection and interaction. This is more stable and efficient compared to traditional circuit connections.

•About whole project

Leyao: I think the most important thing in the whole project is to spark everyone's interest and get them involved. When faced with something that you can't solve, it's important to assign tasks to others in a timely manner.

Jingrui: I think the most important aspect of the whole project is the use of scent as a thread to inspire memories and choices through integrated art. In practice only one person can enter at a time because of the interplay that exists between music and scent. This gives a great experience but also affects efficiency.

Xiya: I think the most important thing about the whole project was the integration and unification of music, scents, images, and set dressing. Due to the lack of time for the set and the lack of knowledge of the venue, there was not enough time to prepare and experiment, so the final result was a bit off from the ideal.

Xiaoyun: I think the starting point and inspiration for the whole project was creative and we tried to give the experience a close blend of scent, sound, image and scene. We didn't control the blend of scents and the experience was affected by the lack of air circulation in the enclosed room. The souvenirs were designed in such a way that we wanted people to be able to find their own life stage identity, but the images on the stickers were not linked closely enough to the visual video, which is something we would like to improve.

Xiaotong: Firstly, the pre-direction of the project was not chosen correctly. The odor can be used as an auxiliary part of the project, not the main factor. The way the odor was emitted was not repeatedly practiced, and the amount was not well controlled, which led to a confusing smell in the room later. In addition, many of the interactive aspects arranged in the preliminary plan were not realized, and there was not enough time to set up the exhibition and rehearse it several times, so there were many shortcomings in the final presentation.

Jingxian: After completing the exhibition that used scent as a clue to depict the stages of life, I was left feeling both amazed and inspired. It was my first time participating in such a project, and I was thrilled by how well the team had managed to divide the labour, with each member contributing their unique skills to create a cohesive and impactful exhibit. The use of scent to represent each stage of life was truly innovative and immersive, and it triggered a synesthetic experience where our senses of sight, hearing, and smell all came together to create a truly unforgettable experience.

Dan: This is my first time to participate in such a team activity, which makes me fully feel the importance of cooperation. Brainstorm ideas together in the early stages of the project. The process of finding bugs and improving upon different solutions is very important. In the middle of the project, everyone finishes their own part and the whole project becomes full step by step. In the later stage, we will arrange exhibitions together, prepare materials, and figure out ways to deal with unexpected problems. These are all valuable experiences I have learned in this project!

Moshan: In this project, all the students in the group have put in a lot of hard work. I think what's great about us is that we combine scents with life stages, giving different colors and flavors to different life

Due to site and technical constraints, we did not implement the lottery mode using the M5 sensor in the last part. In the original idea, the interaction of the fifth scene is interesting because visitors can interact with the screen pattern by shaking the lottery box in their hands. When you shake the lottery harder, the image will be clearer. When reaching a When the extreme value (bamboo stick is shaken out), the final state of the visitor's life will be fixed. Although the above code has been verified to be feasible, unfortunately, due to the failure of the interconnection of software and hardware, we did not realize this step in the final exhibition.

Groupmember & Roles

- **Group Manager** (Xiaotong H, Leyao Z)
- **Visualization Part** (Xiaotong H, Xiaoyun W, Xiya W, Jingxian L, Moshan C)
- **Souvenir Part** (Xiaotong H, Xiaoyun W, Xiya W)
- **Music Part** (Jingrui H)
- **Sound Part** (Leyao Z, Dan D)
- **Arduino Part** (Leyao Z, Jingxian L, Moshan C)
- **Equipment** (Leyao Z, Xiaotong H, Xiaoyun W, Dan D,Moshan C)
- **Exhibition Work** (Backend control: Leyao Z, Guide: Xiaotong H, Souvenir guide: Xiaoyun W, Xiya W, Reception&Videographer: Moshan C)
- **Dismantling Work** (Xiaotong H, Xiaoyun W, Xiya W, Leyao Z, Jingrui H, Moshan C)
- **Final Video** (Xiaotong H)
- **Interview Photographer (**Xiaoyun W)
- **Interview Video Editor (**Xiaoyun W, Xiya W)
- **Report Output** (Xiaotong H, Xiaoyun W)

Reference

Arduino Code

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Music Source

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https://blogs.ed.ac.uk/dmsp-perception23/wp-admin/post.php?post=338&action=edit
https://blogs.ed.ac.uk/dmsp-perception23/wp-admin/post.php?post=310&action=edit
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https://blogs.ed.ac.uk/dmsp-perception23/wp-admin/post.php?post=259&action=edit

Sound Source

https://voicemaker.in/
https://www.youtube.com/watch?v=9NFqZDXNUjU
https://blogs.ed.ac.uk/dmsp-perception23/2023/04/21/sound-source/

Visualization Source

https://openprocessing.org/
https://processing.org/reference/saveFrame_.html
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