Submission 1_Presence

Background

Our group's project will aim to create an immersive experience focusing on thalassophobia and the journey towards calmness by using interactive installation. Participants will need to get through the various layers of thalassophobia to escape from the fear. The layers include:

- ➢ A dangerous deep-sea environment (the first layer).
- ➢ The deep-sea environment (the second layer) triggers the chaotic psychical and mental responses.
- ➢ The fear of the unknown (the third layer).

After successfully escaping from the three layers, participants will enter a state of calmness.

Research - https://blogs.ed.ac.uk/dmsp-presence24/2024/02/09/research/

Similar Artists' Works

- ➢ The Hidden Worlds of Noise and Voice - https://vimeo.com/17229647
- ➢ Wishing Wall - https://youtu.be/MX0Z6aHZYDw
- ➢ Audiovisual Environment Suite - https://www.flong.com/archive/projects/aves/index.html

Design - https://blogs.ed.ac.uk/dmsp-presence24/2024/02/11/design/

This section will present the ideas of our project design from four aspects, including sound design, composition, visual component and interaction installation.

Sound Effects

Regarding sound design, we created sound effects and ambiences by drawing from mythology and pictures of deep-sea environments to deliver a sense of thalassophobia. Some sounds are inspired by mythical sea monsters.

- ➢ Sound 1: Kraken - https://youtu.be/ylPAzM_PrmQ
- ➢ Sound 2: Sirens - https://youtu.be/fFS_q_P8_rM
- ➢ Sound 3: Leviathan - https://youtu.be/6hdcRlsmeiU
- ➢ Sound 4: Deep-sea Ambience - https://youtu.be/0CdP53ZbtMs
- ➢ Sound 5: Peaceful White Noise - https://youtu.be/WOrk4bnBU60

Composition

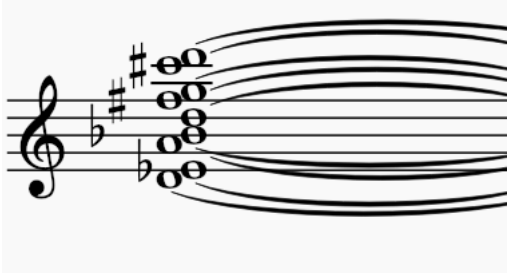
Two approaches are used in the harmonic construction, both influenced by deep sea themes. Mirror harmony, where intervals are reflected vertically in a chord, and a form of spectral harmony, where the harmonic content is based on the spectral analysis of different whale sounds (two from a blue whale, two from a chorus of whales).
https://www.youtube.com/watch?v=josZw74bjaA

- ➢ Sound 6: **Mirror Chord 1**
- ➢ Sound 7: **Mirror Chord 2**
- ➢ Sound 8: **Mirror Chord 3**
- ➢ Sound 9: **Mirror Chord 4**
- ➢ Sound 10: **Spectral Harmony (Blue Whale Chord 1)**
- ➢ Sound 11: **Spectral Harmony (Blue Whale Chord 2)**
- ➢ Sound 12: **Spectral Harmony (Whale Chorus Chord 1)**
- ➢ Sound 13: **Spectral Harmony (Whale Chorus Chord 2)**

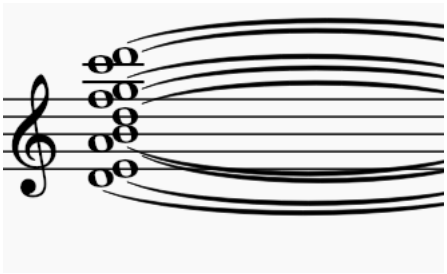
Composition.

Harmonies in score.

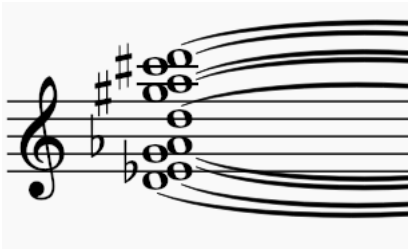
Mirror Chord 1.



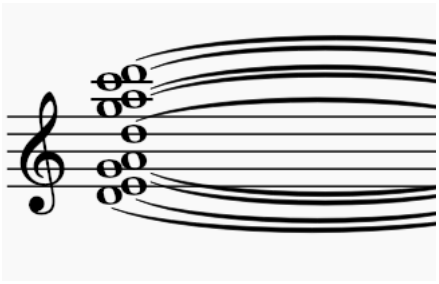
Mirror Chord 2.



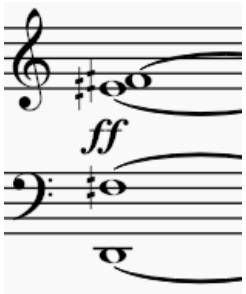
Mirror Chord 3.



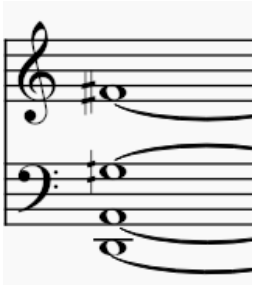
Mirror Chord 4.



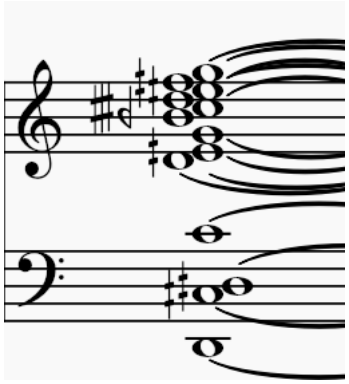
Spectral Chord (Blue Whale 1).



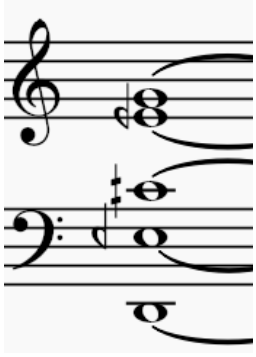
Spectral Chord (Blue Whale 2).



Spectral Chord (Whale Chorus 1).

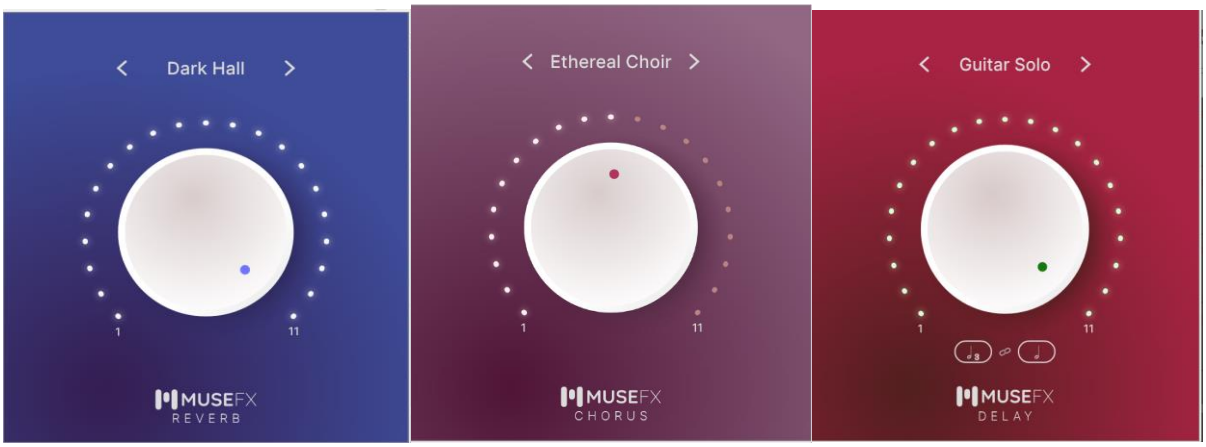


Spectral Chord (Whale Chorus 2.)

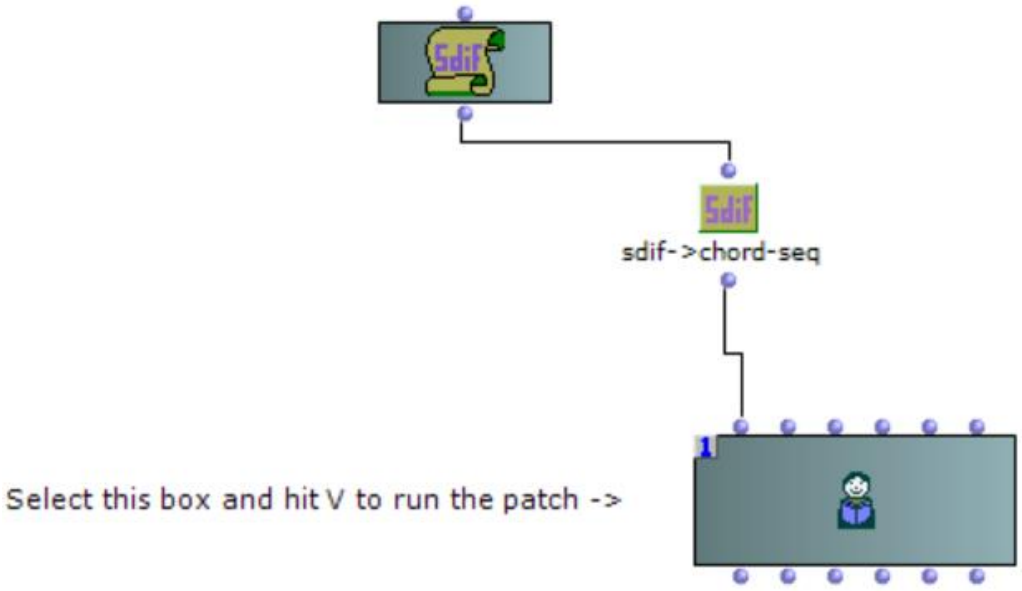


Technology used.

Effects used on the chords:



Openmusic converting SPEAR files into staff notation.



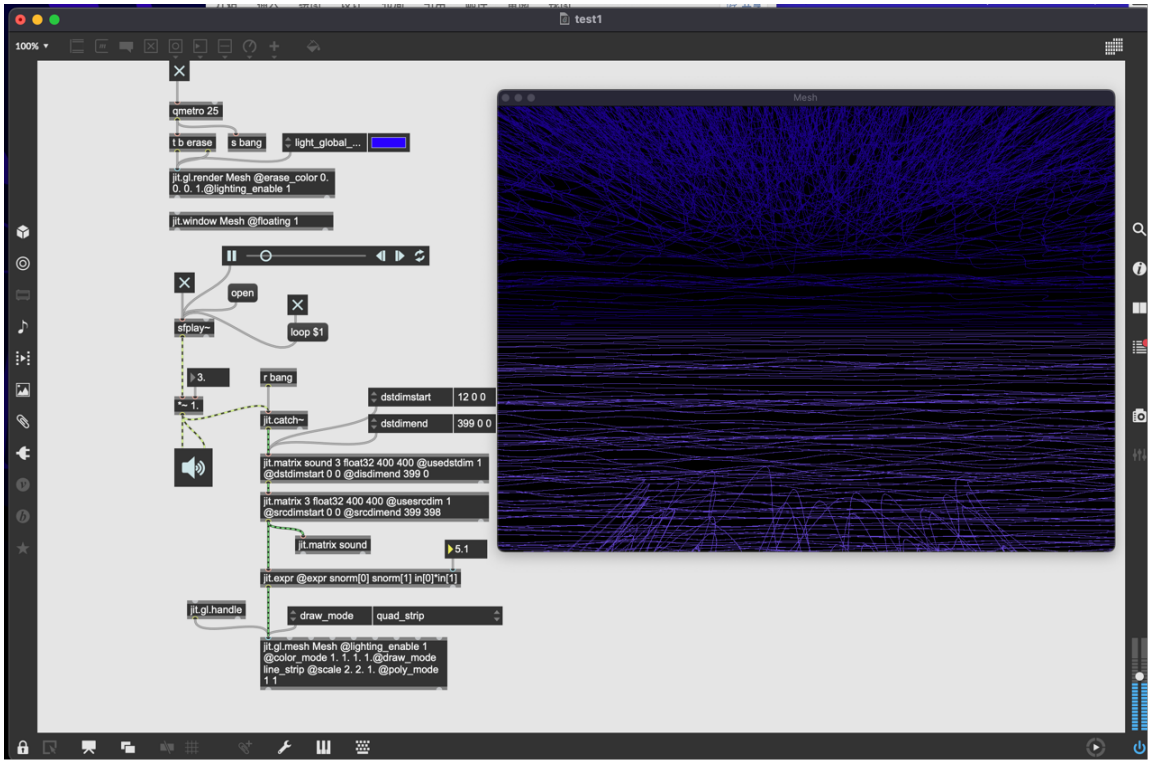
Mirror harmony uses a reversed MIDI vibraphone sound.

The Spectral harmony/'whalesong chords' uses a reversed playback of the 'Soft Piano' in Muse Hub. This is because of Musescores surprisingly high-quality playback, as well as the ability to play back quarter-tones, which MIDI can't do as easily.

Visual Component

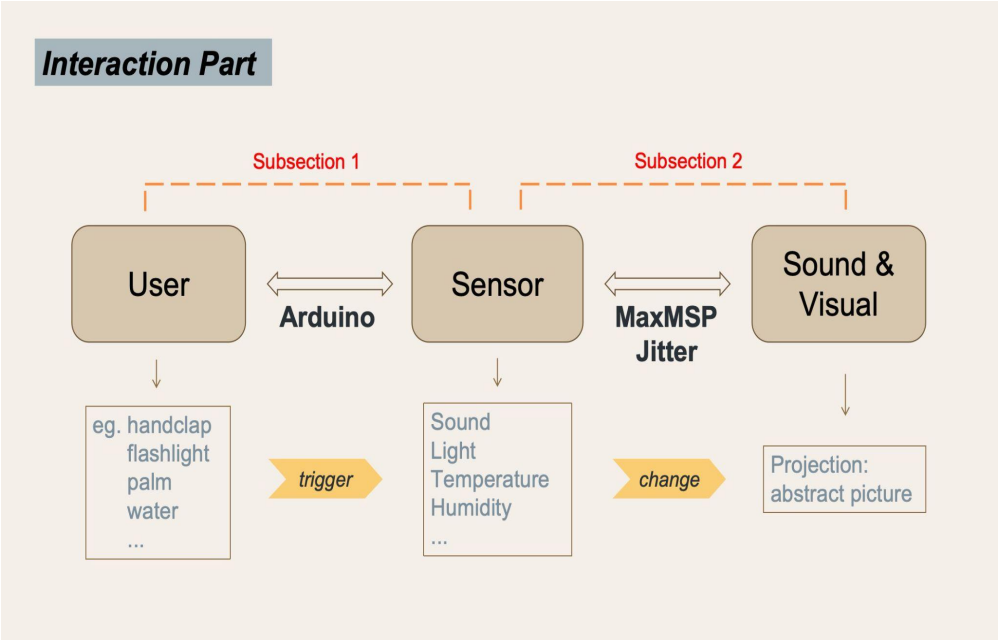
According to our theme of thalassophobia, thinking about the darkness and depth of the deep sea environment will make people feel fearful, so the visual part mainly uses abstract lines, waveforms or patterns to depict this emotion and allow people to use their imagination.

➢ Screenshot from MaxMSP

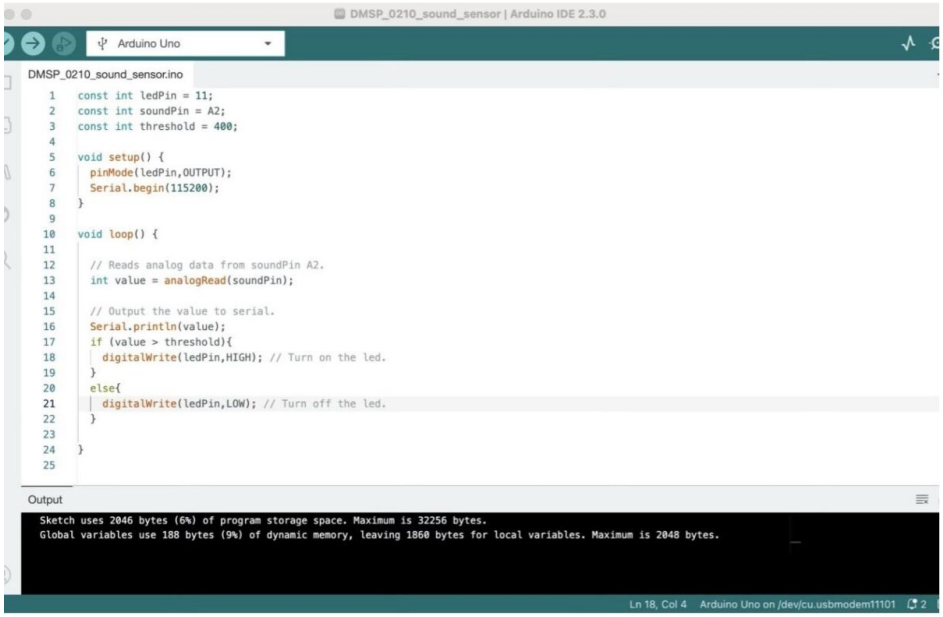


Interactive Installation

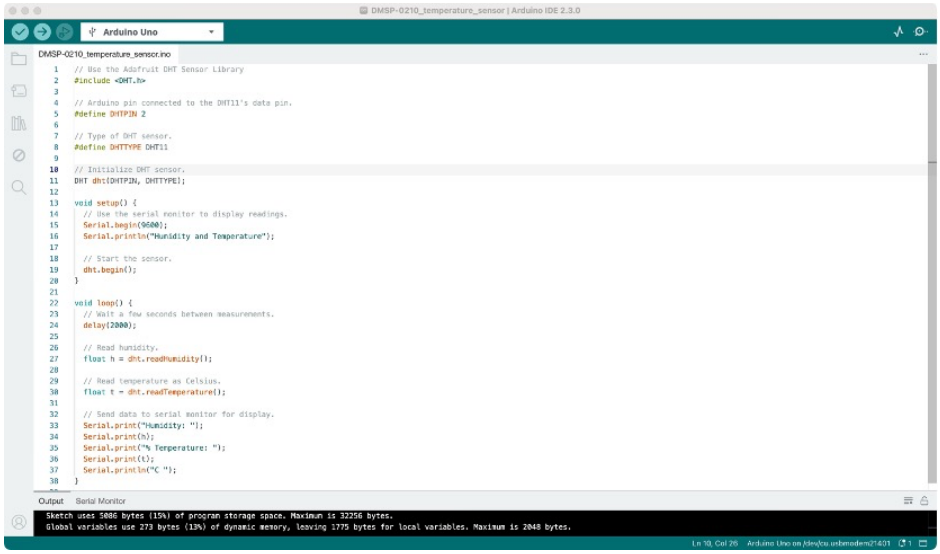
The interactive installation consists of four components: the user, the sensor, the sound, and the visual projection. This setup can be divided into two subsections: first, the user triggers the sensor, and then the sensor communicates with the visuals and sounds.



➢ Sound Sensor from Arduino



➢ Temperature & Humidity Sensor from Arduino



Prototype

In this video, we show how we use our existing technology to realize our project, including the connection of sensors and the construction of visual effects from MaxMSP jitter.

https://www.youtube.com/watch?v=ahYoyamt32w&t=82s

Venue and Setting -

The presentation format for our project involves creating an immersive installation that encourages user interaction. Thus, certain considerations have been taken in selecting the venue and equipment. Our main focus lies on immersion, projections, speakers and sensors.

https://blogs.ed.ac.uk/dmsp-presence24/2024/02/11/venue-and-setting/