

INDIVIDUAL PROJECT

UNTITLED

Emotions are fluid and complex, and they cannot be simply categorized or defined. Each person's emotions are unique, and they cannot be confined to labels.

Video Link <https://youtu.be/RYJhKvkJ-ME>

Project Summary

This project provides an emotional sanctuary for those who cry by transforming tears into a unique medium of emotional preservation and visualization. Centered on tear collection, the installation integrates the natural crystallization process with dynamic projection, turning emotions into visual art. Participants can encapsulate their tear crystals into resin keycaps, creating personalized mementos that deepen their connection to their emotions.

Time: 2024.6-2024.10

Size: 1.5* 2* 2 m. Adjustable

Medium: Interactive Installation

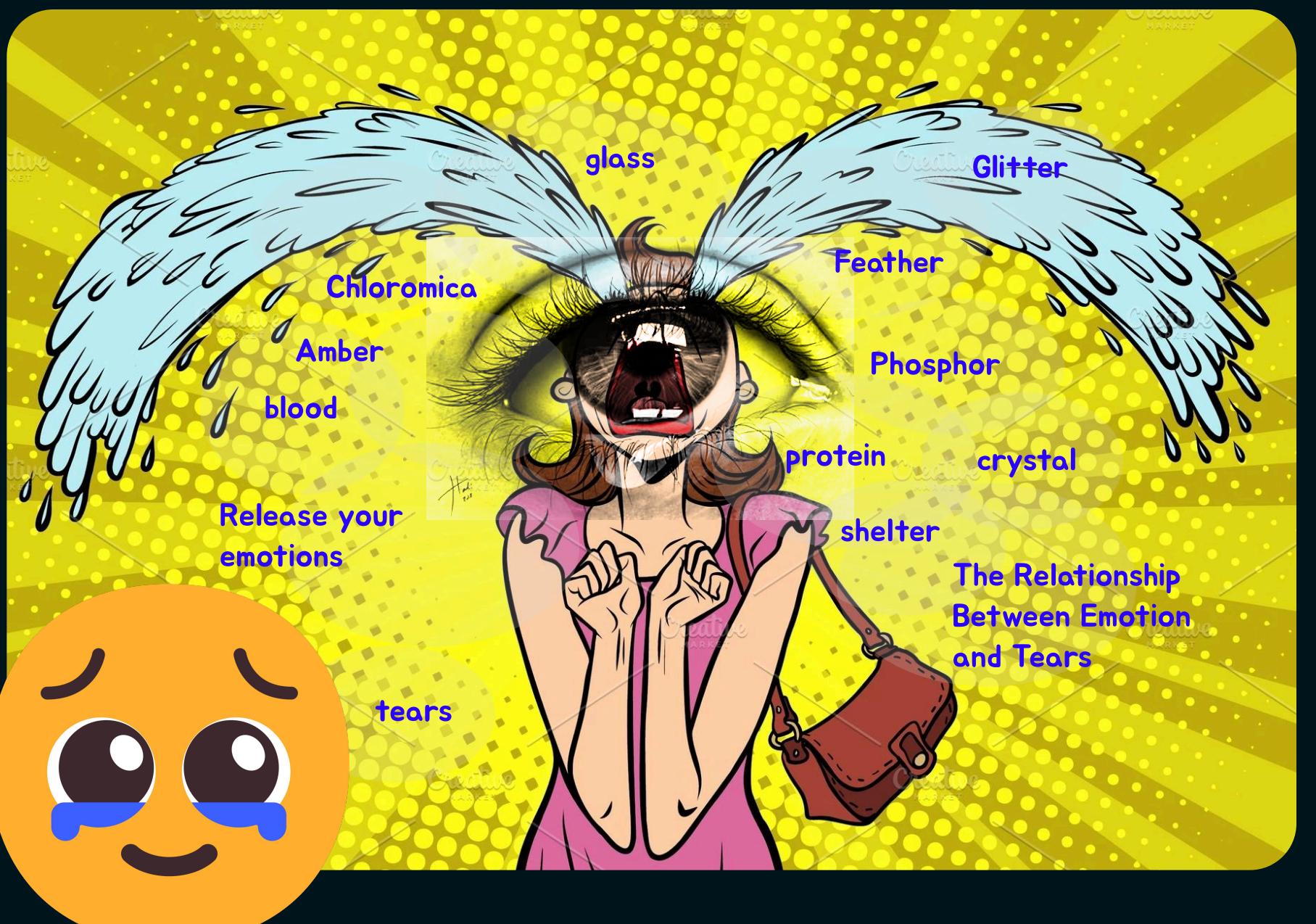
Design / Interactive design

Background



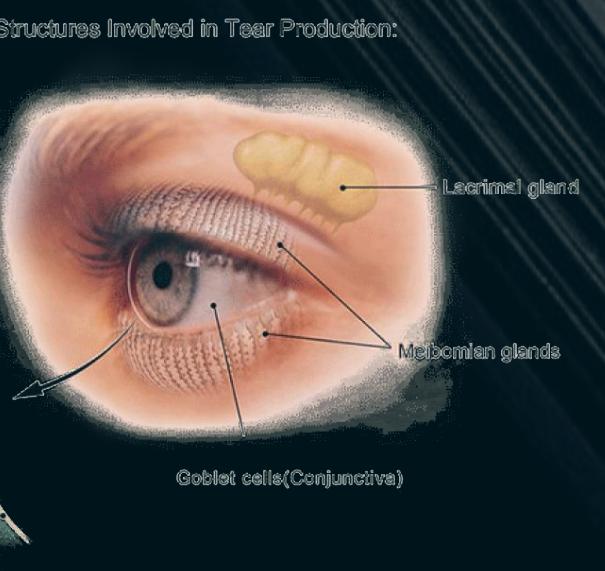
Every time you lower your head, there will be some tears dripping on the spectacle lenses. After a while, you will see some crystallization of tears.

Mind Map



Research How Are Tears Formed?

Image Source: National Institutes of Health (NIH)
Tears spread across the cornea every time you blink in a thin film (tear film). They form in the lacrimal glands above the eyes and flow into the tear ducts (tiny tubes in the inner corners of the eyes). Then they make their way down through the nose. After this exciting journey, tears are either reabsorbed or they evaporate. The harder you cry, the more you can overload the tear drainage system. When this happens, tears flow more rapidly out of your eyes and nose.



tears and blood

Tears Are Produced In The Lacrimal Glands That Are In The Outer Corners Of Your Eyelids With Contributing Components Coming From The Meibomian Glands (Producing Oil) And Goblet Cells Within The Underside Of The Lid (Producing Mucin). These Glands Produce Tears From Your Blood Plasma, Selecting Some Components But Not Others.

Symbolic Meaning of Crystallized Tears

The crystallization process of tears symbolizes the "freezing" and preservation of emotions, as broken feelings gradually settle and solidify into a crystallized form. This process is both an emotional record and an opportunity for reflection and reevaluation of feelings.

Why It's Good To Shed A Few Tears

The Experiment Conducted By American Biochemist William Frey II Found That The Protein Content In Emotional Tears Is 24% Higher Than That In Other Types Of Tears. These Proteins Also Contain Substances With Effects Similar To "Natural Painkillers." Additionally, Emotional Tears Contain A Large Amount Of Hormones, Such As Adrenocorticotropic Hormone And Encephalins, Which Are "Happy Hormones" That Can Help Alleviate Physical And Emotional Discomfort To Some Extent. Moreover, Crying Is An Unusual Activity That Involves Multiple Systems In The Body, Including The Respiratory, Circulatory, And Nervous Systems. It Helps Relax Emotions And Muscles, Thus Calming The Body And Stabilizing Emotions.

3 Types Of Tears



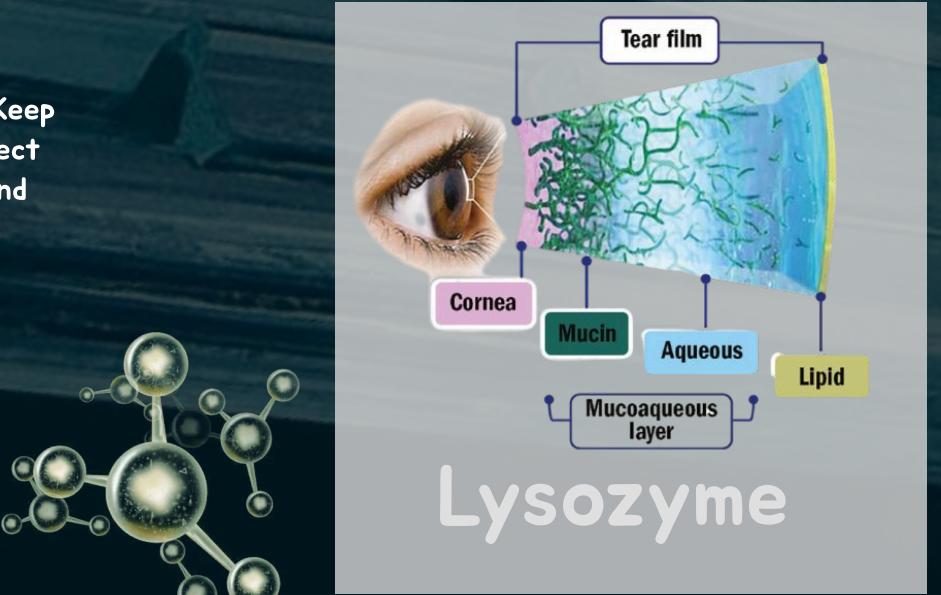
Composition Of Tears

Water	98-99%
Lipid	1%
Electrolyte	0.9%
Enzyme	0.1%-0.2%
Metabolites	trace amounts
Mucin And Other Proteins	trace amounts

the composition of basal tears and role in eye health

Tears Play An Important Role In Keeping Us Healthy. Tears Keep The Surface Of Our Eyeballs Clean And Moist And Help Protect Our Eyes From Damage. Tears Are Made Of Mucus, Water, And Oil, And Each Component Plays A Role In The Eye.

Our Tears Also Contain Natural Antibiotics Called Lysozymes. Lysozymes Help To Keep The Surface Of The Eye Healthy By Fighting Off Bacteria And Viruses.



How To Hack Your Happy Hormones

- | | |
|--|--|
| DOPAMINE
The Reward Chemical | OXYTOCIN
The Love Hormone |
| - Eating Food | - Socialising |
| - Achieving a Goal | - Physical Touch |
| - Complete a Task | - Petting Animals |
| - Self-Care Activities | - Helping Others |
| ENDORPHINS
The Painkiller | SEROTONIN
The Mood Stabilizers |
| - Exercising | - Sun Exposure |
| - Listen to Music | - Be with Nature |
| - Watch a Movie | - Mindfulness |
| - Laughter | - Meditation |

Conclusion

Thoughts Bubble

The shape of each person's tear lump is different

With tears as the market currency,
Where are the most valuable tears

Every tear can be spliced together,
As you add up,
You can make a big one

Symbolism Of Tears

Sealing The Tears Into Keycaps Preserves These Emotional Fragments In A Way That Remains Accessible And Integrates Them Into Daily Life.

Development

Different Crystalline Modeling Matrices



Tears Of Farewell



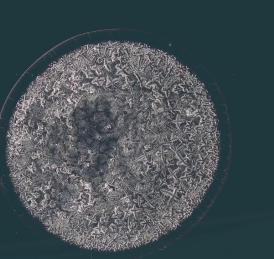
Tears Of Deep Despair



Tears Of Pain



Tears From Eating Hot Peppers



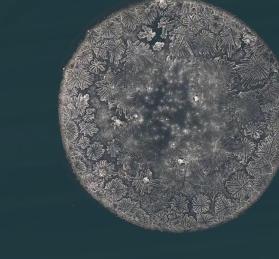
Tears While Looking At The Ventilator



The Mint Oil Stimulates The Tears That Flow Out.



Tears Shed While Cutting White Onions



Tears Left After Staring At A Fan For A Few Minutes.



Tears Of Sorrow



3Dmodel



Using 3D Modeling Technology, I Have Brought The Form Of Tear Crystals To Life, Presenting Them In A Unique Geometric Structure That Symbolizes The Transparency And Purity Of Tears While Also Reflecting The Complexity Of Emotions. The Delicate And Beautiful Crystalline Structure Transforms Tears From A Fragile, Fleeting Substance Into An Artistic Medium That Can Be Preserved And Contemplated For A Long Time.

Emotional Interaction Between Tears And The Keyboard



Tears Crystallized In Keycaps



The Keyboard Is A Vital Tool For Expression And Communication. And Keycaps Embedded With Tears Symbolize The Emotional Weight Carried With Each Keystroke.

The Encapsulated Tears Represent Past Emotions, While Typing Transforms These Feelings Into A Source Of Creative Energy. This Makes The Act Of Using The Keyboard Deeply Personal And Emotionally Meaningful.

Material



Feather



Phosphor



Amber



Ice Crack Pattern



Blood



Glass



Glitter

STORYBOARD



Collecting Tears



Project the tears onto the wall using a projector, allowing people to observe and experience them.



Store them for preservation.



Drip the tears onto a microscope slide using a pipette.

Interactive Design

Materials Experiments

Ultraviolet Lamp

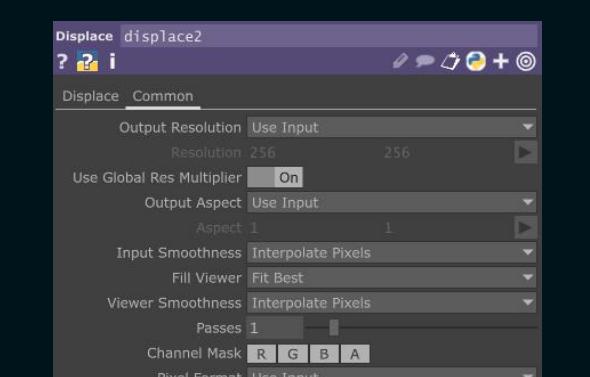


UV Glue

Keycaps

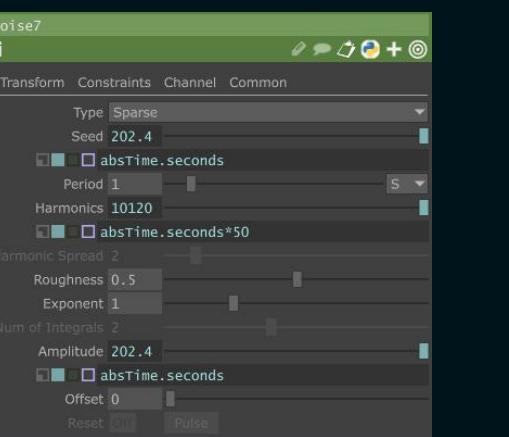
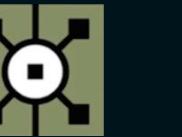
Mold

Logical Decision To Switch The Tear Pattern

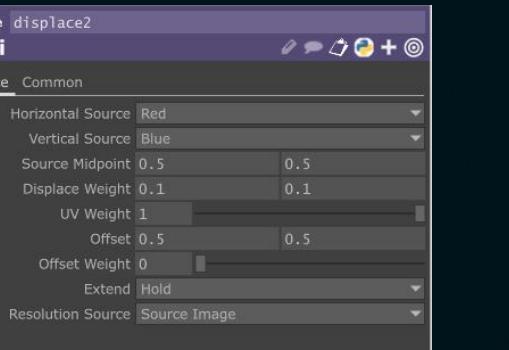


Add Texture To The Tears

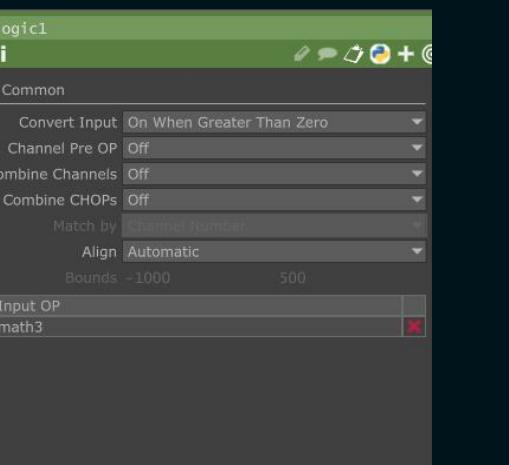
Touchdesigner



Make Tears Dynamic And Noisy



Let The Tear Pattern Have A Concave And Convex Three-Dimensional Effect

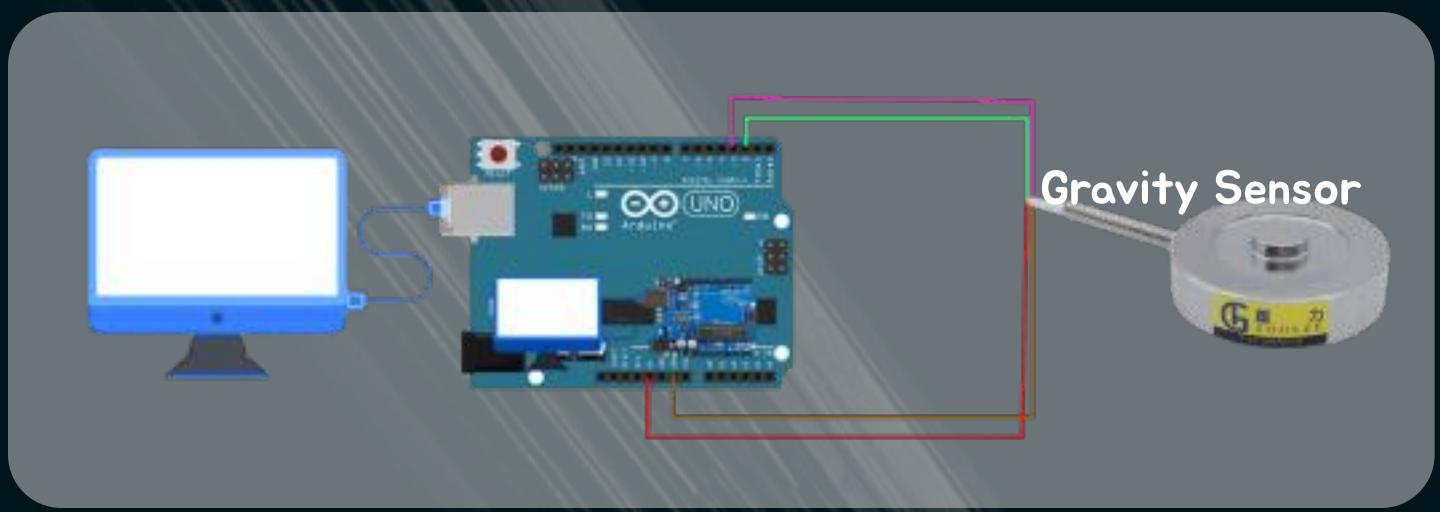


Capture The Signal From The Gravity Sensor

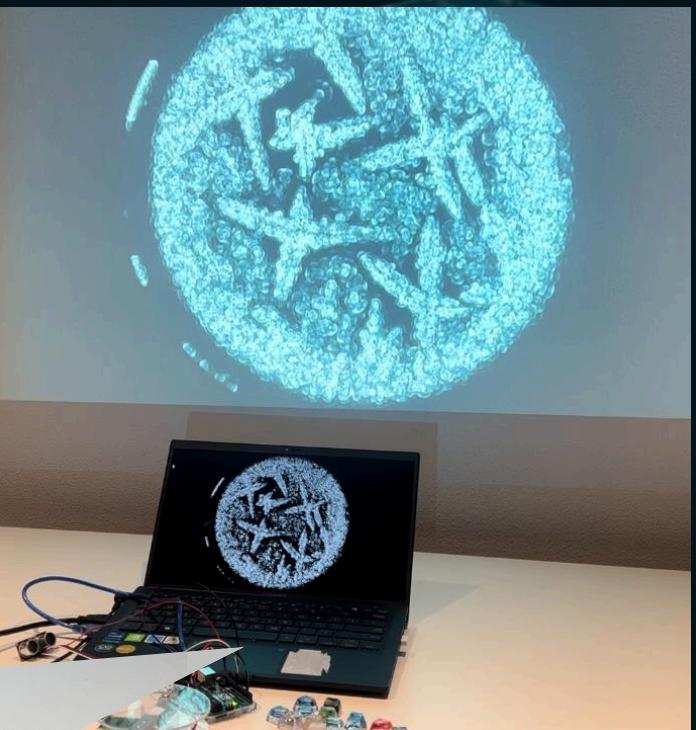
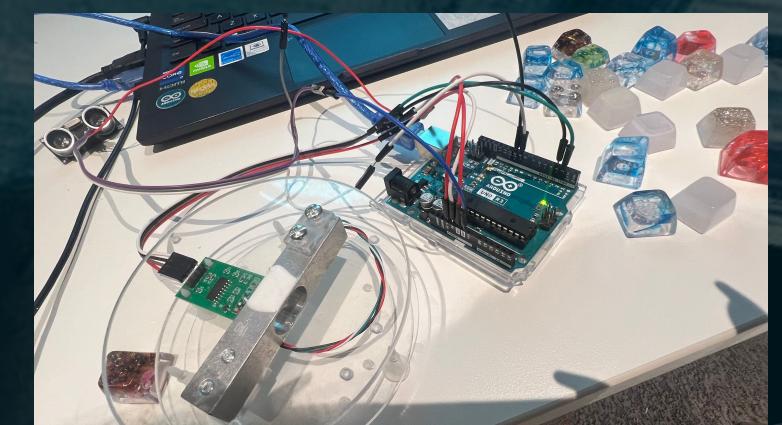
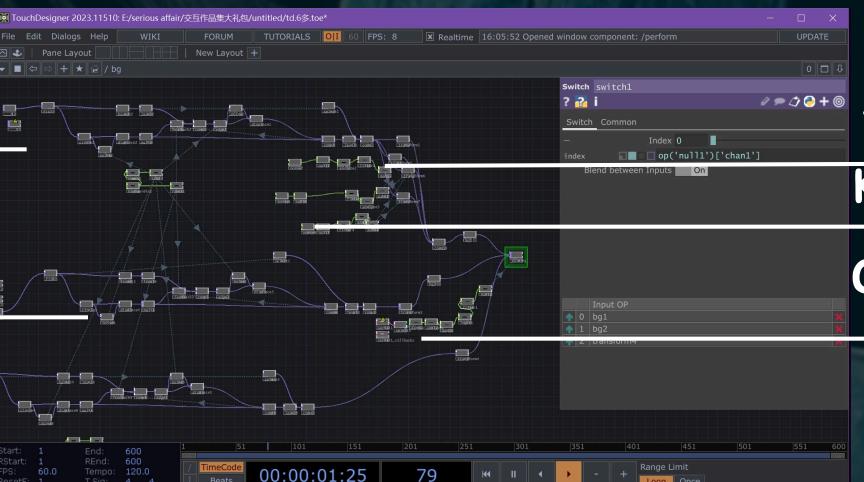
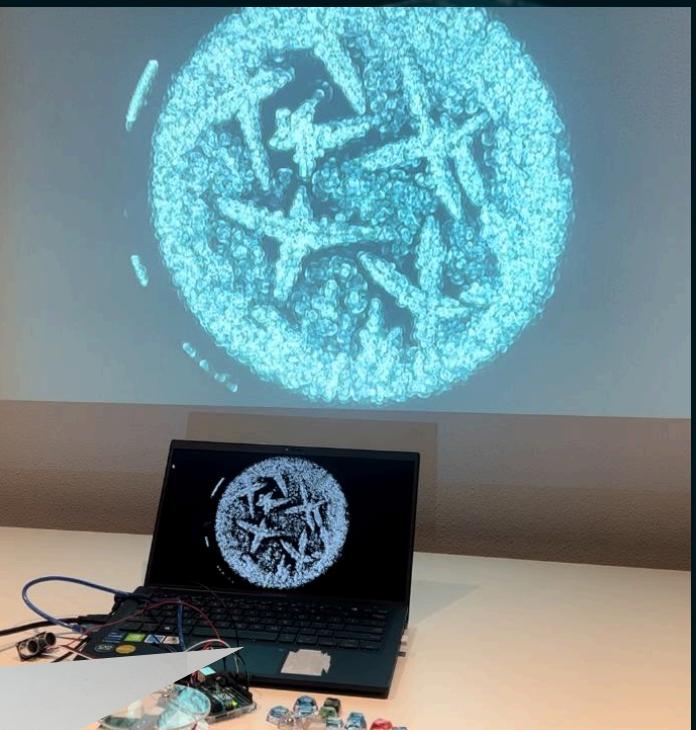
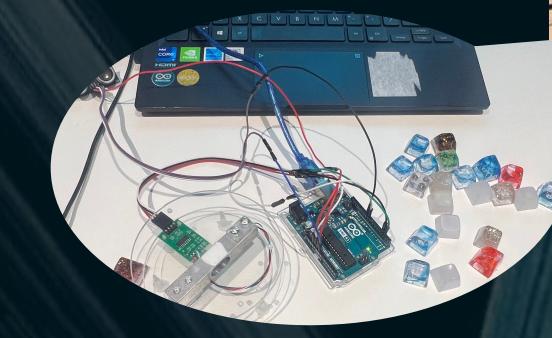


The Signal Transmitted By The Gravity Sensor To The TD Affects The Size Of The Object

Gravity Sensor



Gravity Sensor



Transfer
Keyboard Start

Connect Arduio

Picture

Add Noise

Performance

Audience Test

