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EVERYWHERE PROPOSAL

Website: <https://github.com/alcho01/CART360/tree/main/EVERYWHERE>

PROPOSED IDEA

Before proposing my idea, I factored in elements of time management and the question, "Would I actually be able to create this based on my current knowledge?" Considering those factors, I want my project to be ambitious and somewhat challenging. I did more extensive research on some of the topics we can do for our final project, and the one that stuck out to me was responsive environments. I am fascinated by all types of installation art. They are immersive experiences that impact many of the senses. More importantly, an installation enables the viewer to be a part of the art.

For my project, I want to create a responsive environment that detects movement, followed by setting off a sound sensor and finally triggering a servo motor. The theme of this project consists of surveillance, panic, and serenity. The aesthetic part will include small round objects connected by a string and vertically placed beside one another. In their idle state, these objects will rotate in a relaxing manner. When the motion sensor detects movement from the user, a Piezo speaker will unleash a sound activating the sound sensor and prompting the servo motor to behave chaotically. As a result, the floating objects will rotate at much faster speeds.

Surveillance is more prominent now than before the introduction of technology. With social media and websites tending to our needs, we often forget that someone is on the receiving end of the information we input into these systems. I want to demonstrate surveillance in my project by capturing the user's movement and using it to impact another part of the system.

The theme of serenity activates whenever the system does not detect movement. When the environment has no exterior interactions, it transitions to an idling state of relaxation. Think of it this way it is easier to act like ourselves when nobody is watching. There are no precautions and moments where we need to censor our opinions.

The theme of panic activates whenever the system detects movement. When the environment reacts to user movement, it transitions to a state of panic. Opposite to being ourselves, now we have to act in a falsified manner because people are watching, inducing panic.

RESEARCH QUESTIONS

1- Think of a context and an environment where you would like to intervene. Where will you present your project? Who is it made for?

This project would work best in a room that is not too occupied to avoid constantly triggering the motion sensor. I would also need to factor in the distance that the sensor activates. Therefore, the room size is another element to consider. Realistically, the best and most accessible place to present and set up this project would be in my basement. It is spacious, and the ceilings are high enough to contain the environment. I would record the experience and present it in class. Ideally, I would like to make the project deconstructable and bring it to class to get an in-person experience. If I were to think large scale and an environment where I could intervene, I would choose a public space like a university. I would set up a room where students, one at a time, could enter for five to ten minutes to relieve stress and interact with "themselves" (The machine acts as their alter ego). I have catered this installation to reserved individuals like myself in hopes of opening up more. The secondary reasoning for its existence is to act as a therapeutic scene.

2- Think about the kind of relationship you wish to foster among and between your users and the artifact or installation. What will your project afford users and how would the experience make them reflect on themselves, their environment, society and your intentions?

I want the user to build a connection with the installation as if they are introducing one another. As they get closer, the user begins understanding the system's behaviour, while the environment starts learning the user's behaviour. The installation symbolizes a mirror contrasting a duality in behaviour, between panic and calmness. The project makes the user reflect upon their own human tendencies depending on their environment. This project affords critical engagement of oneself to gather a better understanding of self-consciousness.

3- Think about the notion of empowerment. Is your artifact really helping or challenging users?

The intention behind this project is more about engaging with the self rather than fully helping themselves. It is about realizing mood shifts in an individual through an abstract representation of human behaviour in a situation where they are being watched or not. Therefore, it is challenging the user to identify similarities or differences between the responsive environment and themselves. It may also

awaken the idea of being more careful about what we express on the Internet because we never know who and when they will see it. In a way, the installation helps the user think about the potential consequences of one's actions. However, ultimately the project challenges the user to understand what the environment is suggesting.

4- Think about how to successfully communicate your intentions - what Interaction Design Strategies will you employ? What are you trying to tell us?

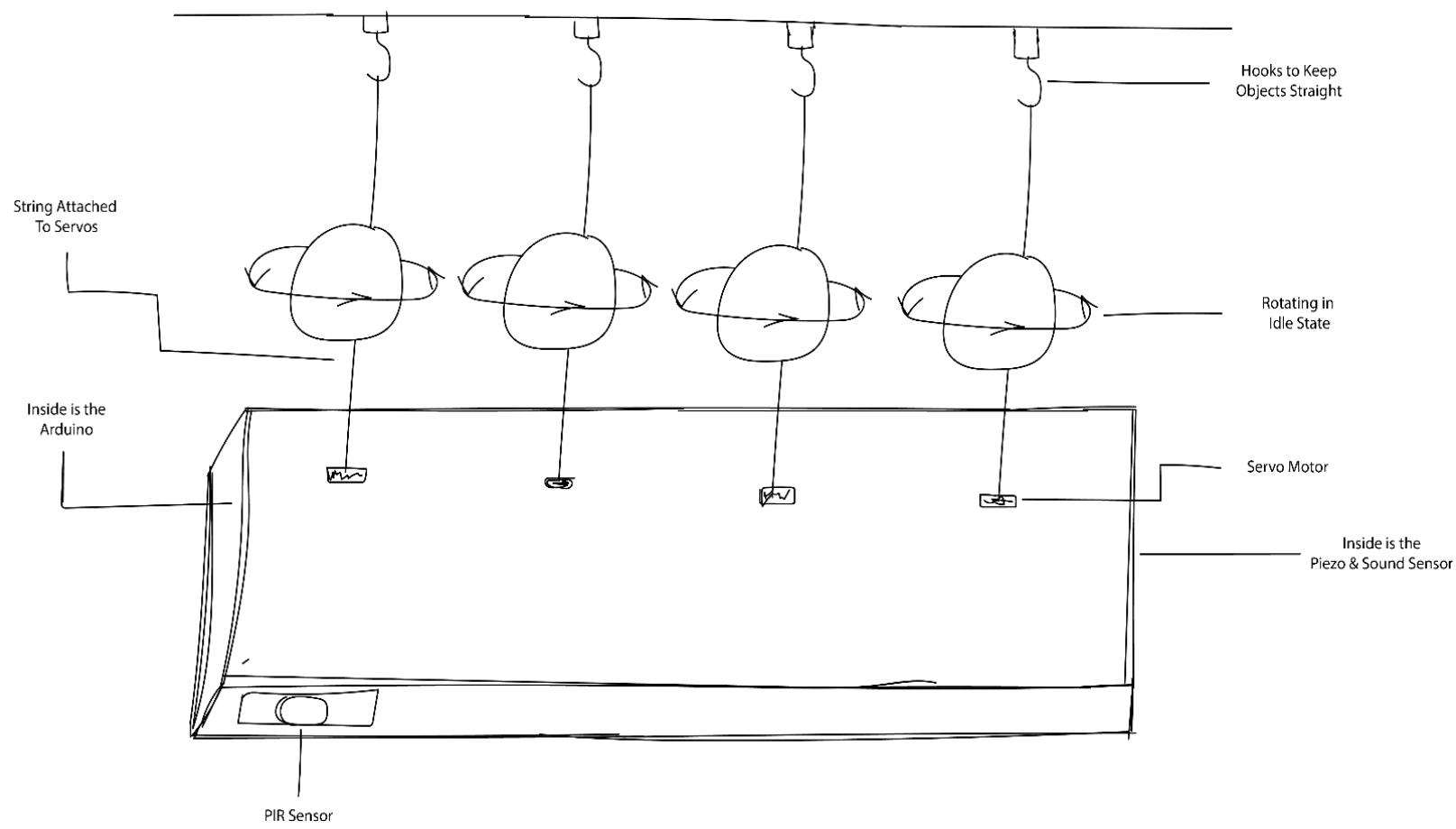
The abstract aesthetic might confuse the user about the meaning of the project. To successfully communicate my intention, the individual has to spend time in the environment. The dynamic between the user and the system will hopefully guide the user to understand the relevance of surveillance. More so, the idea of panopticism, being watched without knowing. Regarding interaction design strategies, I will use visual representation to guide the user's understanding of how the system functions. The system's behaviour acts through first and later second-order cybernetics. The system requires exterior phenomena like hand movements to commence activation (first-order). Once activated, the system's own internal organization will communicate with its given parts to produce interaction (second-order). See the storyboard for a more in-depth analysis of how information transfers.

EVALUATION OF SENSORS

The sensors I plan on using for this project include the PIR sensor and a sound sensor. I also anticipate utilizing servo motors and a piezo buzzer, but these do not qualify as sensors. The PIR sensor affords for sensing whether the user is nearby or not. I will have to play around with the sensor to see the most beneficial placement. I imagine it needs to be visible for it to activate. Therefore, I plan on making a slit in the box containing the circuit to have the PIR sensor poking out. The sound sensor activates after a potential delay of two to three seconds once the PIR sensor detects movement. The Piezo buzzer will sound off, alerting the sensor to calculate the generated sound. If the sound reaches the desired threshold, it will activate the servo motors to rotate more rapidly. The majority of the interaction occurs within the system. The user is only responsible for beginning the machine. To summarize, the two types of interaction include motion sensing and sound detection leading to communication with the buzzer and motor.

ILLUSTRATIONS

Diagram illustrating a simplified version of the functionality



Storyboard demonstrating a more in depth illustration of the functionality

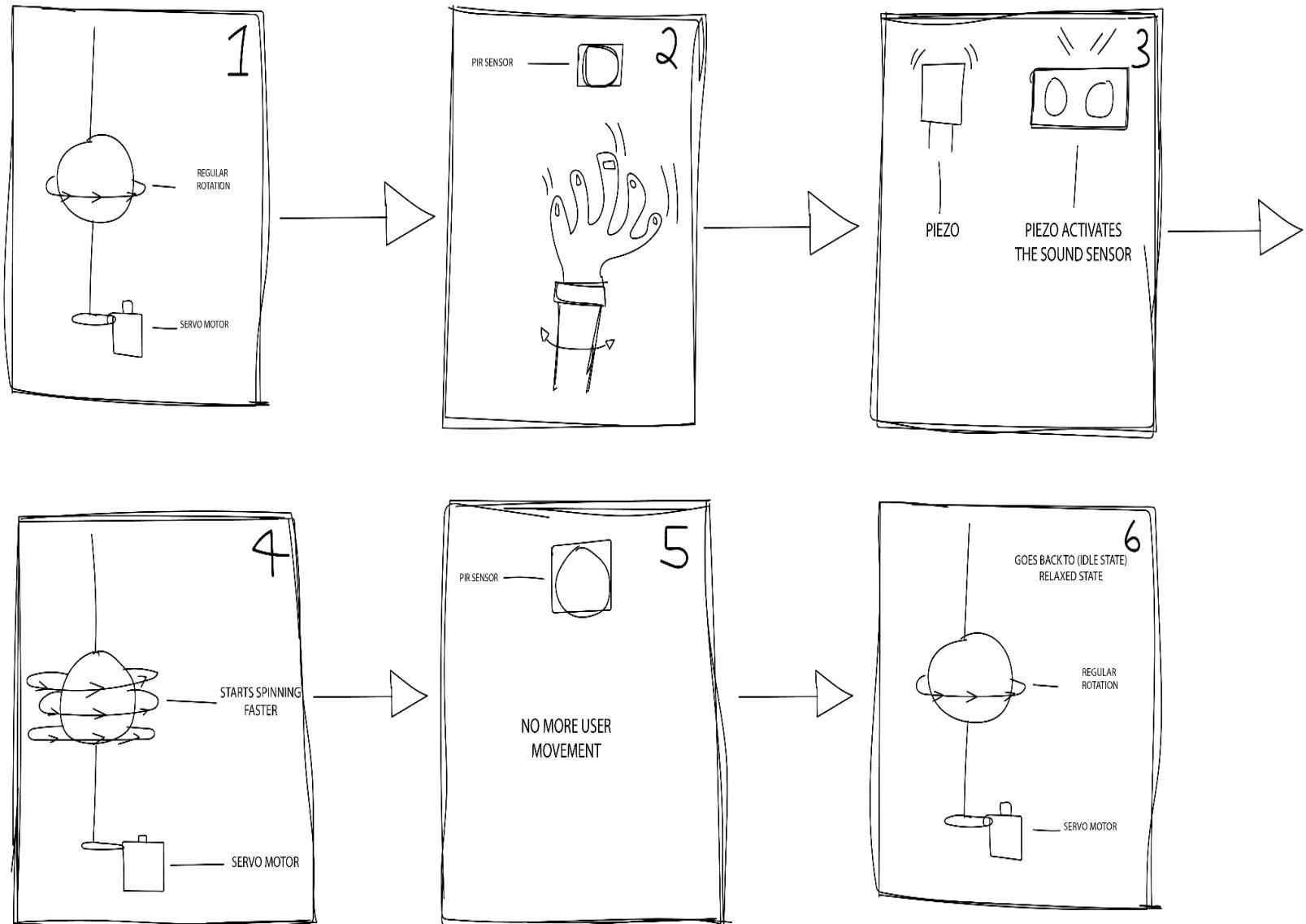
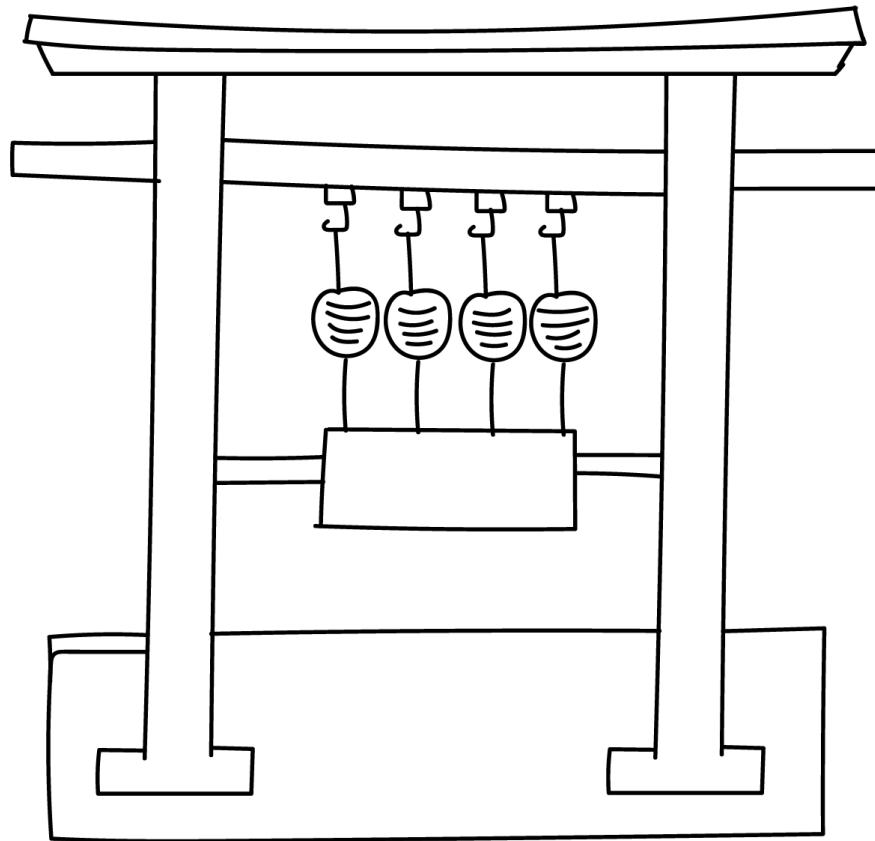


Illustration of the overall aesthetic and necessary materials.



Materials for aesthetics

3-5 Chinese Lanterns

String or Steel Wire

3-5 Hooks

Wood or Material to construct sturdy beams, and arch.

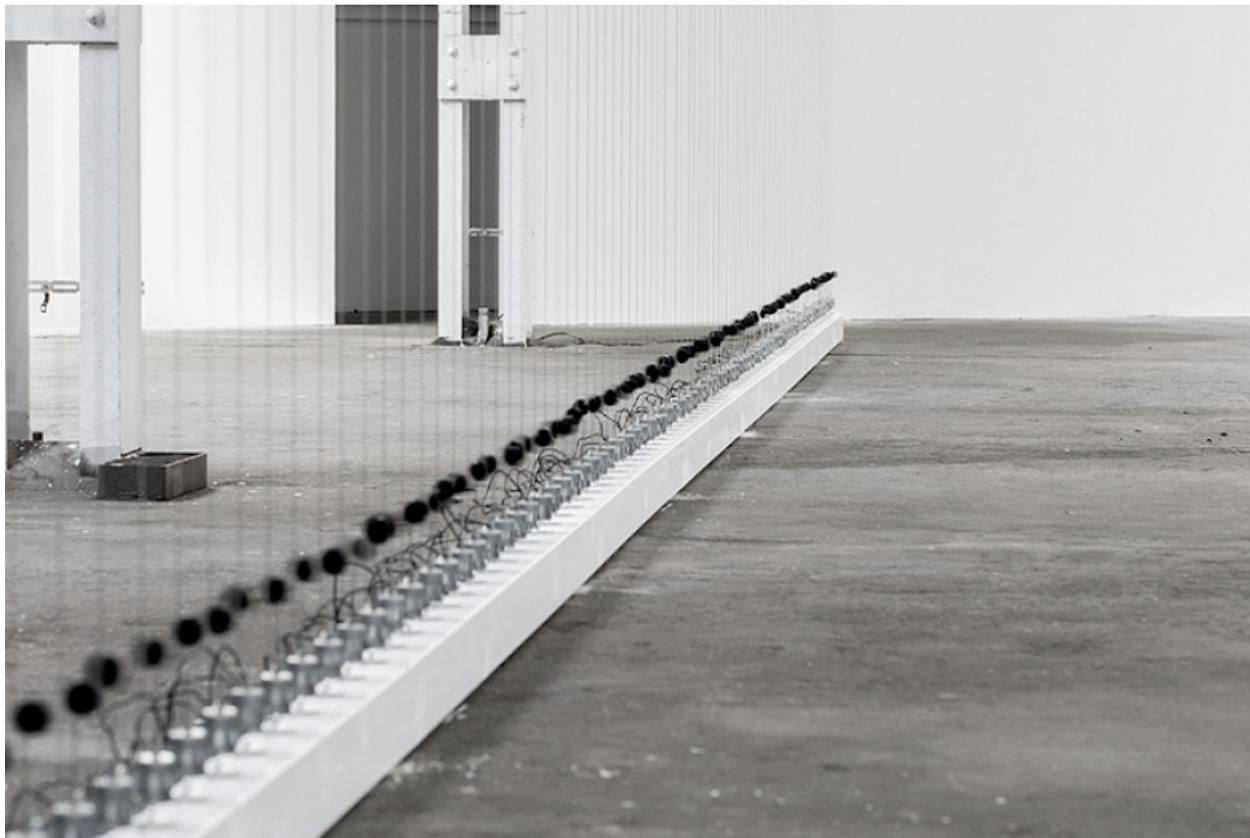
Artificial Grass*

String Lights*

INSPIRATIONS

Zimoun

The first project that inspired me was one by the artist Zimoun. His works are not titled, but all involve the utilization of motors and simple materials to create ambient sound in immersive environments. I am interested in the structure and conceptualization of his projects. He has an installation where he uses felt balls, steel wire, and dc motors that create a vibrating tone. I enjoy the simplicity of the aesthetic and the concept of repeating the same entity multiple times.



Random International

The second project inspiring me is by the postdigital art group Random International. They are well known for their interactive installations involving sound, motion sensing, and sculptures. "Audience" is one of their installations, providing a lot of inspiration. It is an environment of mirrors that interact with movement. When approached by a person, the mirrors all turn to face the individual. I believe this work

revolves around the theme of individuality and self-identity, ideas closely relating to the narrative I am trying to portray.



Leandro Erlich

The third project I took inspiration from is Leandro Erlich's artwork, "The Cloud." It is a mesmerizing art piece that intrigues an audience. Erlich paints on multiple sheets of glass stacked one behind another, giving the illusion of a cloud contained within a glass box. This work inspired me because it showcases how art can be deceptive in a good way. I also get a serene sensation from glancing at it.



How will these works differentiate from mine?

Zimoun's work shares a similar aesthetic I am going for, while Random International and Leandro Erlich inspire my ideas for telling a narrative or story through the environment. The difference between these works and my own stems from the different sensors I will include. The meaning behind the creation is also unique to this piece. I take the idea of repetitiveness and abstraction from Zimoun, the functionality of sensors of Random International, and the framing of an art piece from Leandro Erlich. Together, these ideas will help establish the foundation of my responsive environment, making it its own entity.

This project provides impact by expressing an individual's inner voice. As mentioned previously, I want to touch on aspects of human behaviour and individuality. This project can connect with those who feel the same emotions the system portrays in hopes of feeling more immersed or attached to the environment.

REFERENCES

Artsology, and Joey M. "Artsology." The Artsology Blog, May 11, 2019.
<https://artsology.com/blog/2013/07/a-cloud-in-a-box-by-leandro-erlich/>.

"Random International." RANDOM INTERNATIONAL. Accessed October 1, 2022.
<https://www.random-international.com/>.

Zimoun. Accessed October 1, 2022. <https://www.zimoun.net/>.