

# FAST FASHION INSTALLATION

DESN 2010 – Saf, Arthur, Helen & Bryn

## CRITICAL INTERVENTION – FAST FASHION & SOCIAL MEDIA

- Our installation is designed to illuminate issues around fast fashion such as the large-scale waste resulting from the cheap availability of fashion items and peer pressure to keep up with rapidly changing fashions, particularly from social media.
- We tried hitting upon the reality of people's need to buy new clothes to keep up with trends so that they can be perceived as “popular” and “cool” on social media.
- For more on our critical intervention check Saf's short essay:  
<https://sites.google.com/view/desn2010-saf-blog/weekly-projects/gratification-culture?authuser=0>

# INITIAL IDEAS

- Idea #1
  - The work is intended to engage with the viewer dramatically through the large-scale installation and dumped clothing and subtlety through the movement of the garments by a fan/servo tied with cotton string.
  - Activation with the artwork is by the viewer's body entering the space and once a body presence is sensed, garments subtly move and mean girl mocking laughter can be heard. The subtle movement engages the viewer to notice and think about the garments.
  - The activation of the work is a surprise to the viewer and does not require any cognitive or physical effort/engagement on their part - which relates to contemporary use of fast fashion where people don't really think about their choices.
- Idea #2
  - Is a replica of a shop stand where the viewer can actively select "like" or "dislike" through a button input and the resulting choice either turns on a fan to make the clothing move or drops the hanger into the bin below. It is a clear link between dislike and discard of the clothing.

# INSTALLATION

- For the installation we decided to go for wire racks with the clothes that were sourced from Vinnies.
- One installation, *Judgement*, has the clothes strung up between the racks with computer wires, with sound and movement making a connection between the internet and fast fashion.
- The second installation, *Like/Dislike*, has interactive aspect that lets the viewer choose whether they like/dislike the clothes. Disliked clothes are thrown in the trash.
- We made sure to spread the clothes that weren't part of the installation along the ground to signify the waste that comes from the problem of trying to keep up with the ever-changing fashion trends
- The range and variety from the Vinnies bag highlights the systematic and now endemic nature of fast fashion, on all socio-economic levels of society, ages, genders and across all cultures.



## ELEMENT 1: “JUDGEMENT”

- This piece uses the bodies of the people around the exhibition space to trigger its actuator elements.
- There is a laughter sound effect, triggered by movement. The laughter sound effect increases in volume relative to the amount of movement detected. When there is no movement, the laughter volume will taper off until it is silent.
  - This element represents how by interacting within social media spaces users contribute to the environment of peer pressure and judgement, and how users on social media are often bystanders to cyber bullying.
- There is a fan, which is triggered by proximity. When a person (or object) is detected within range, the fan turns on for a set amount of time.
  - The movement brings the person's attention to the clothes, and goes towards representing their participation within the system by being an actor within it.





## ELEMENT 2: “LIKE/DISLIKE”

- The user is invited to indicate whether they like or dislike a clothing item. A liked clothing item is blown by a fan. A disliked item is immediately dumped in the trash, no matter how much it has been liked in the past. Eventually, all of the clothing items are destined to land in the trash.
- This represents users’ direct participation within the system of social media, on both the part of uploaders and viewers of content, and how it contributes to clothing waste.
- This also provides a more directly interactive element for the installation.

# INSTALLATION DEVELOPMENT

- The installation was developed in stages where we slowly decided upon and changed how we saw fit throughout the weeks
- The first stage that we went through was to decide how we wanted to set up our installation, we had to choose between the black wire racks or regular clothing racks. We ended up going with the black wire racks as it made it easier for us to install our Arduinos while also helping us portray our critical intervention.
- The second stage was where and how we wanted to set up the black wire racks, we originally had all 5 spread out in random places which we found to be a little inconvenient, so instead we decided to have 3 racks in the middle and have people walk around it. This helped with spacing and also allowed the viewer to move more freely.
- Finally we needed to add a bit more technology to our display so we decided to go for the like/dislike display as well, this didn't fit too well within the 3 racks in the middle so we decided to separate the other two racks off to the side. This allowed the viewer to freely roam the main showcase of the 3 racks in the middle while also allowing them to interact directly with the like/dislike installation off to the side.



# INSPIRATION AND SIMILAR WORKS

# CLOTHING TORNADO

Benjamin Von Wong, 2018

- Made using clothing in the abandoned Tak Fat garment factory.
- When the factory went bankrupt in 2009, large amounts of clothing were literally left to rot.
- Illustrates the scale of clothing waste from fast fashion by using the old clothing to build sets for photographic works.





## ALL THE KING'S MEN

Fiona Hall, 2015

- Soldier uniforms from many different countries, knitted to form heads.
- Commentary on futility of war
- Haunting and challenging, somewhat scary
- Makes novel usage of recycled fabric



# FOLLOW THE LEADER

Guerra de la Paz, 2011

- Colourful discarded clothing making up a procession of figures
- Comments on fashion cycles and how they lead to clothing waste



Follow the Leader, by Guerra de la Paz, 2011 (From the collection of Art Works for Change)



## Drink Up Fountain

"The fountain talks to you...."

*Chatty Fountain Sets Out to Encourage Everyone to Drink More Water More Often*

The Drink Up Fountain dispenses entertaining greetings and compliments intended to entice the drinker to continue sipping. When a drinker's lips touch the water, the fountain "talks," completing a circuit and activating speakers. When the drinker pulls his or her head away and stops drinking, the circuit breaks and the fountain stops talking. With hidden cameras set up, Drink Up caught unsuspecting individuals using the fountain in New York City's Brooklyn Bridge Park. See the video [here](#).

Drink Up, a collaboration to encourage everyone to drink more water, was formed in September 2013 among the Partnership for a Healthier America – which works with the private sector and PHA Honorary Chair First Lady Michelle Obama, dedicated to encouraging people to drink more water more often. You are what you drink, and when you drink water you drink up!

### Credits:

Produced in collaboration with creative agencies - Y&R, New York VML, New York and Partnership for a Healthier America YesYesNo Team:

[Zach Lieberman](#)

[Molmol Kuo](#)

[Marcela Godoy](#)

Custom Fabrication:

[olollo LLC](#)

### Relevant Links:

[Presenting the Drink Up Fountain](#)

## DRINK UP FOUNTAIN

YesYesNo Team, 2013

- Completes a circuit when the drinker's lips touch the water
- plays on 'usual behaviour' of drinker, then surprises them with sound
- adds a public health message
- interaction is effective because it is surprising.

Inspired our use of sound to reflect peer pressure and fast fashion.





Xcube Interaction – the elements are moved by nearby pedestrians

- they are the centre of the motion
- use of large numbers of servos to move panels
- facade with mirrors for people to try to see themselves
- movement in response to the presence of people

CLIENT: URAIQAT ARCHITECTS  
VENUE: AMMAN DESIGN WEEK

## XCUBE

Moushira Elamrawy, 2013

- The idea is to get people to stop and reflect on themselves and on living in a city by using a mirrored facade that moves and stops to make you see yourself.
- The piece showed that people's interest in taking photos was stronger than their desire to reflect

**Inspiration for “Judgement” which had simple movement of the clothes and very subtle acknowledge of human's presence**

**BUT catches attention and hopefully causes people to stop and think about what is moving and catching their attention.**

**The movement prompts realisation that it is a piece of clothing in a chaos of clothes, which coupled with the giggling, causes reflection**



How the Xcube interaction project was made and what the setup looks like

- The interaction is made up of many mirrors that move when someone comes near allowing them to see themselves in the mirror, making viewers see themselves for who they are and try and catch people out for trying to be what they are not.



# FLUTTER OF BUTTERFLIES

teamLab, 2018

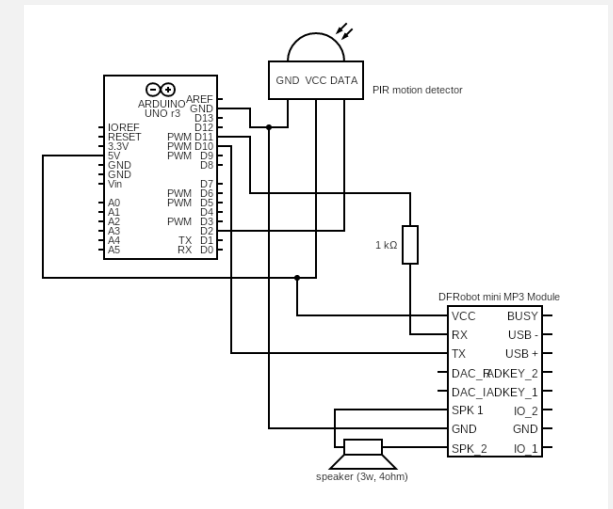
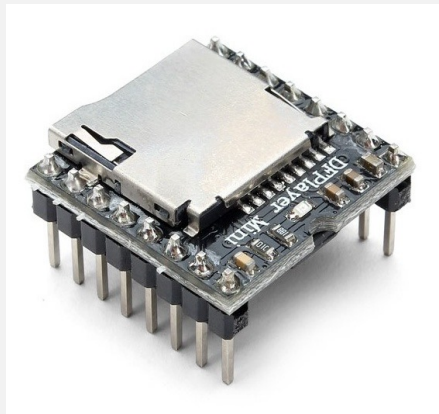
- This is a digital art space which makes use of projections
- When a person is detected, butterflies appear on them
- This piece was inspiration to the passive interaction part of the installation. The viewer interacts by the piece by existing within it, which in the case of flutter of butterflies makes a statement about peoples' existence as part of nature.
- In the context of our work, we used the presence of people as a way of representing how people interact in a passive way on social media on a systemic, anonymous level.



# ARDUINO COMPONENTS

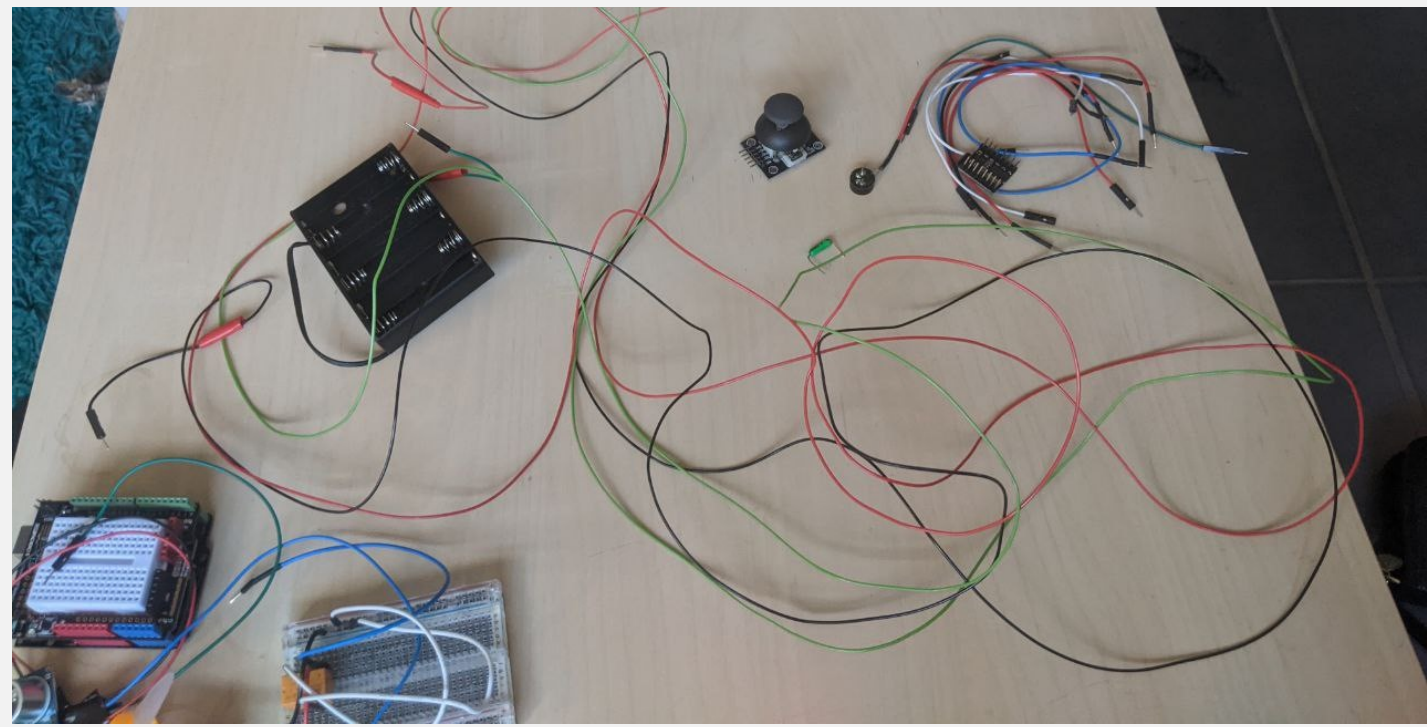
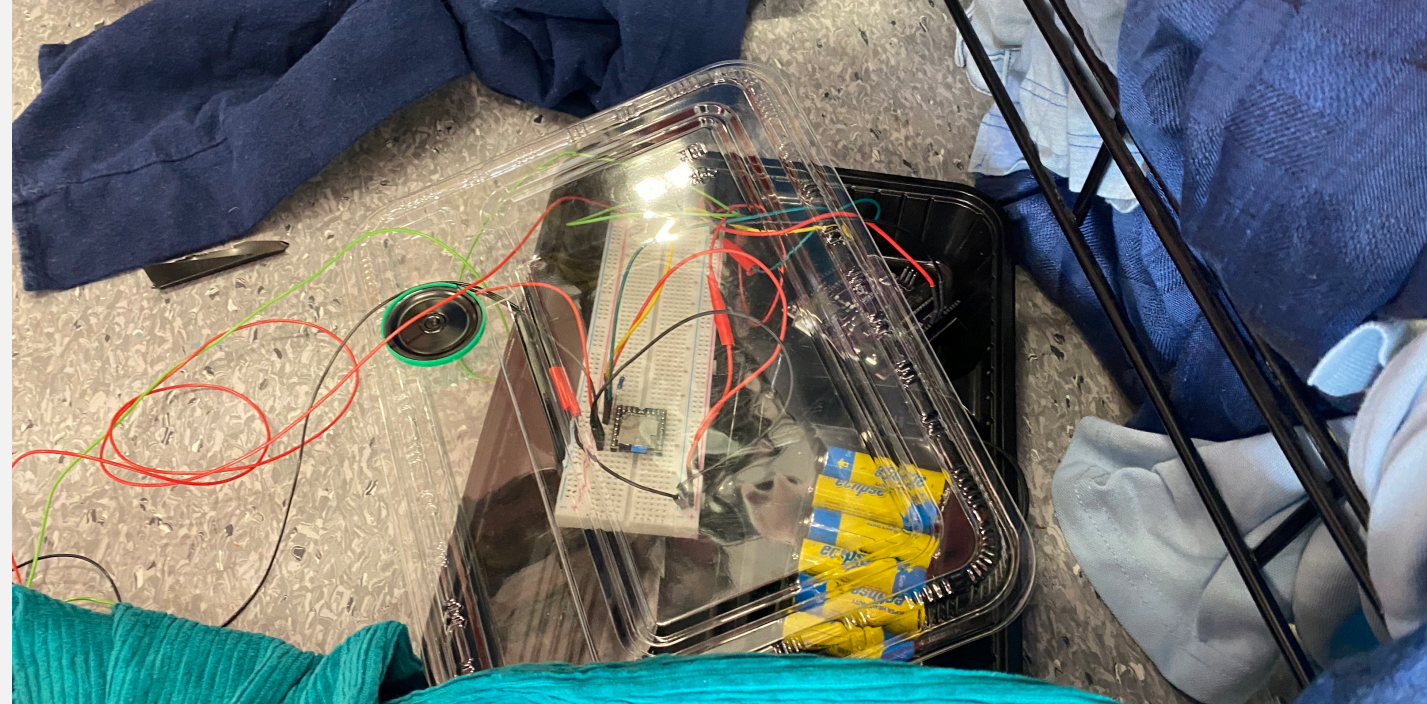
# COMPONENT #1 : MOTION TO SOUND

- For our first component we have a PIR Motion sensor that is hooked up to a speaker that plays a mean girl laughing sound effect to create a feeling of the judgmental culture that is ever present on social media. This is played from a SD card slotted into a DFplayer mini which comes through the speaker.

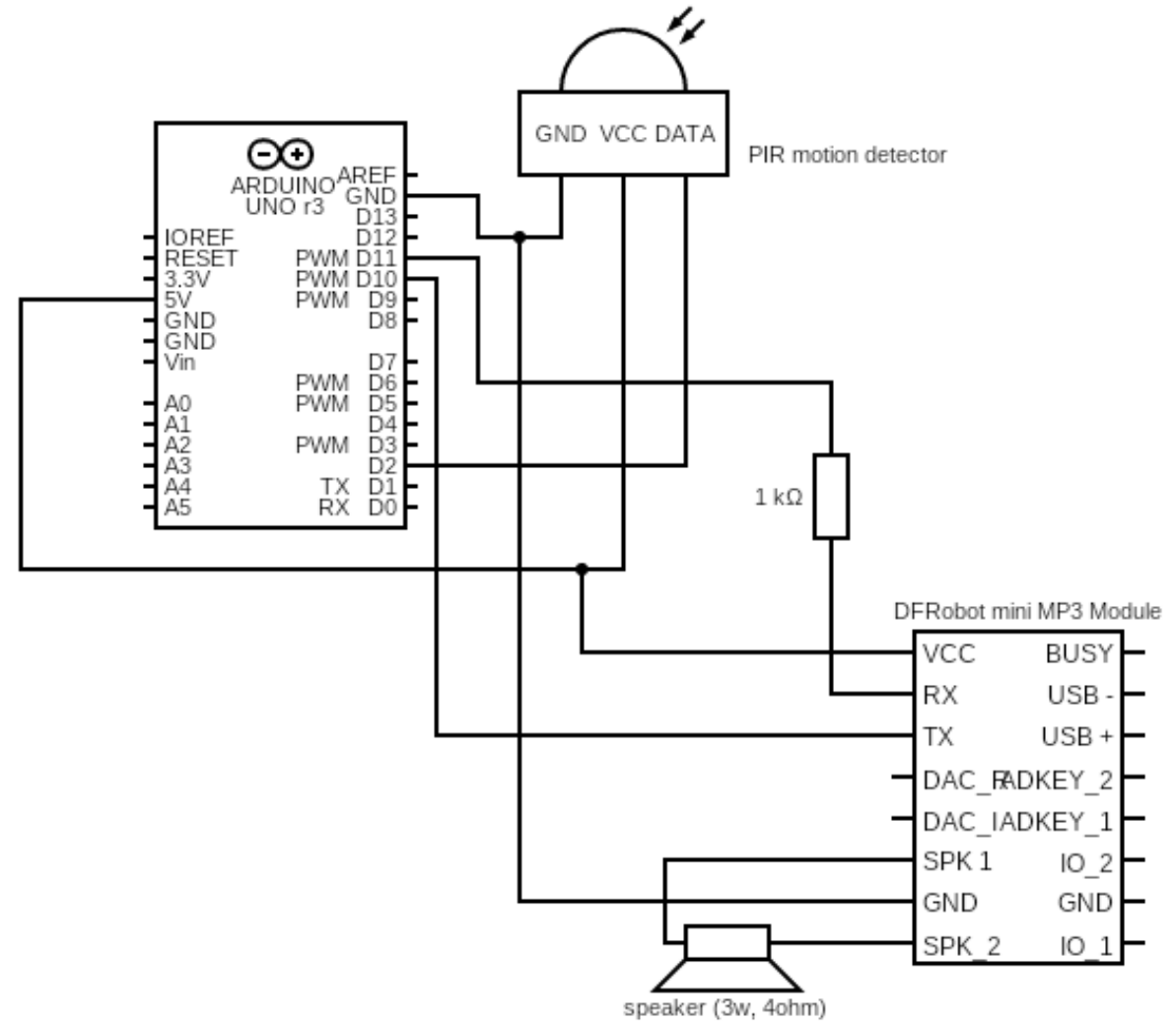


# MOTION TO SOUND DEVELOPMENT

- Initially, this was a motion to servo component which was intended to move the clothing – the servo would be connected to a stick, and the stick wired to the clothing. Movement would cause a detection meter would fill up, causing the servo to move faster.
  - This version of the program can be found here:  
[https://github.com/saff-b/DESN2010/blob/main/week-9/motion\\_to\\_servo/motion\\_to\\_servo.ino](https://github.com/saff-b/DESN2010/blob/main/week-9/motion_to_servo/motion_to_servo.ino)
- It was found that the small servo did not have enough power to move the clothing. However, we were able to reuse the detection meter element.
- For the installation, longer cords were needed for the motion detector. These were soldered in the makerspace.
- The component was housed in a used sushi container – this protected the electrical components from the surrounding clothing while continuing the project's use of recycled and discarded materials.

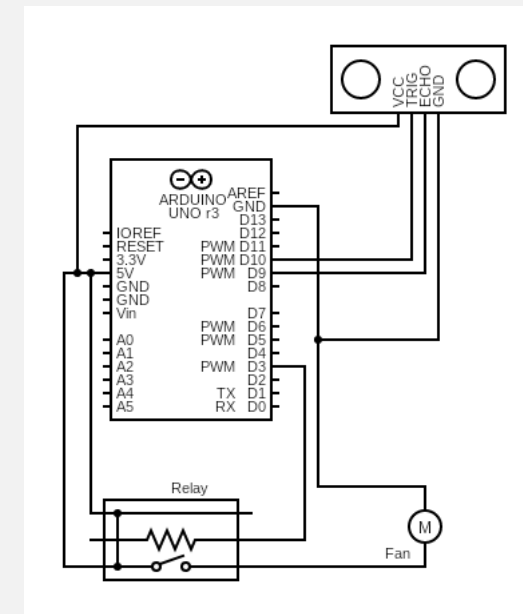
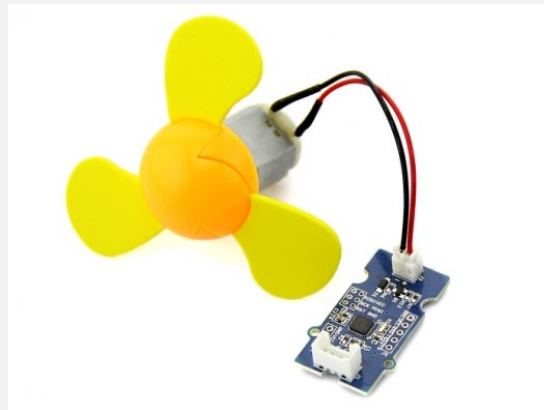


# MOTION TO SOUND CIRCUIT DIAGRAM (DETAIL)



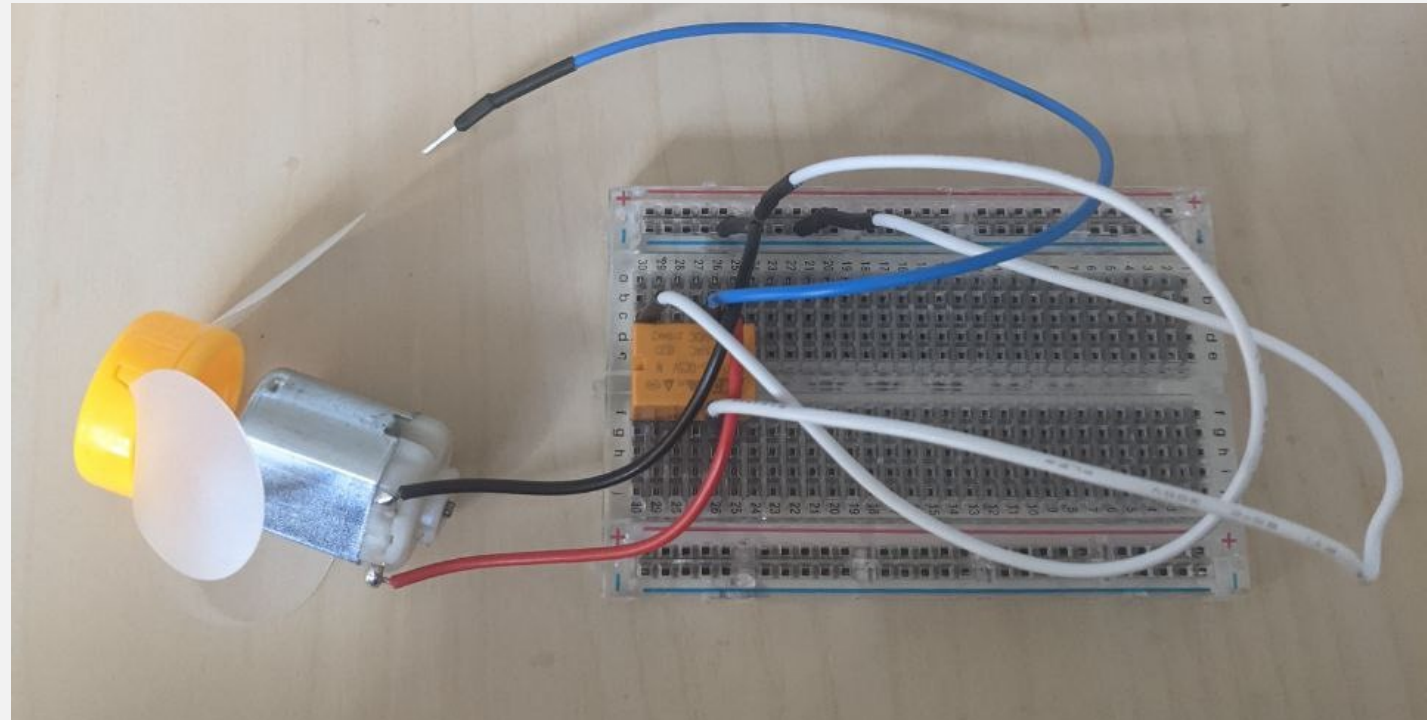
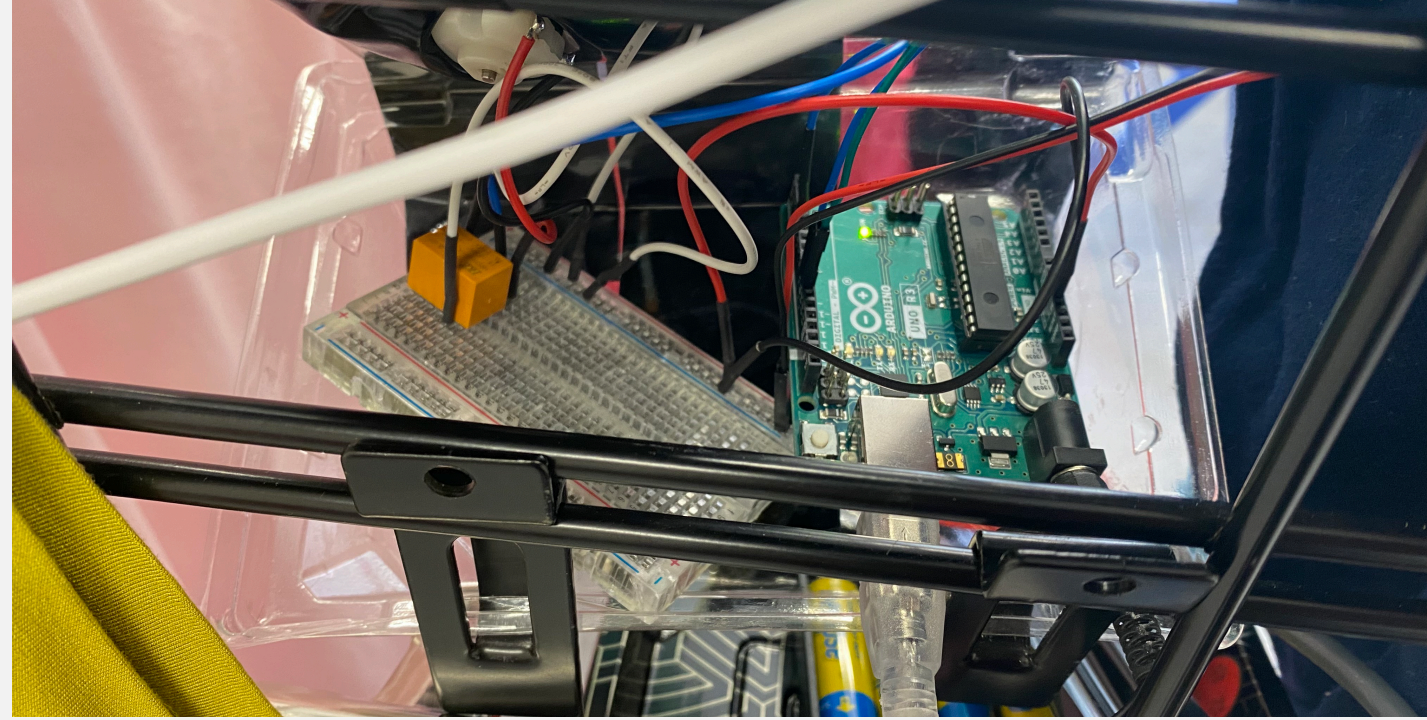
## COMPONENT #2 : PROXIMITY FAN

- For another component we used an ultrasonic distance sensor hooked up to a fan, when someone comes within the range of the sensor the subtle movement created by the fan gets the viewer to notice and think about the clothing.



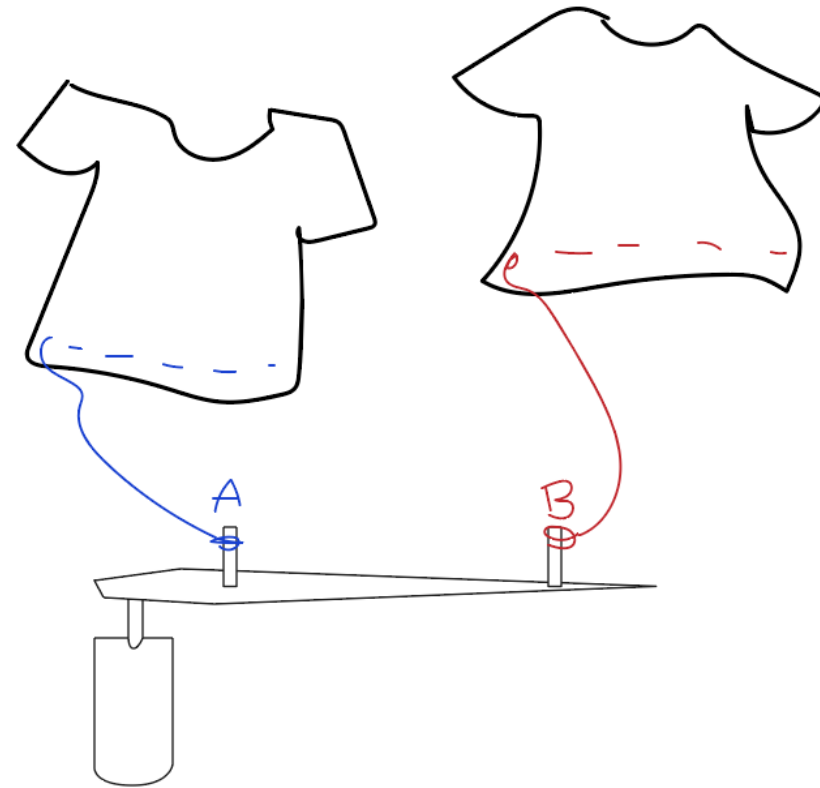
# PROXIMITY FAN DEVELOPMENT

- It was found during the initial testing phase that fans could produce a good amount of movement on clothing. We still wanted movement as part of the piece.
- Since the other installation was using one fan already, we only had one fan we could use. This fan also required an electrical relay component in order to be controlled.
- The fan only affected the clothing on maximum power, so instead of using a mapping based on distance, the fan turns on for 20 seconds when a person is detected within range.
- The components were taped to the inside of the installation inside sushi boxes. A wire was run down to the computer that was used to power it.

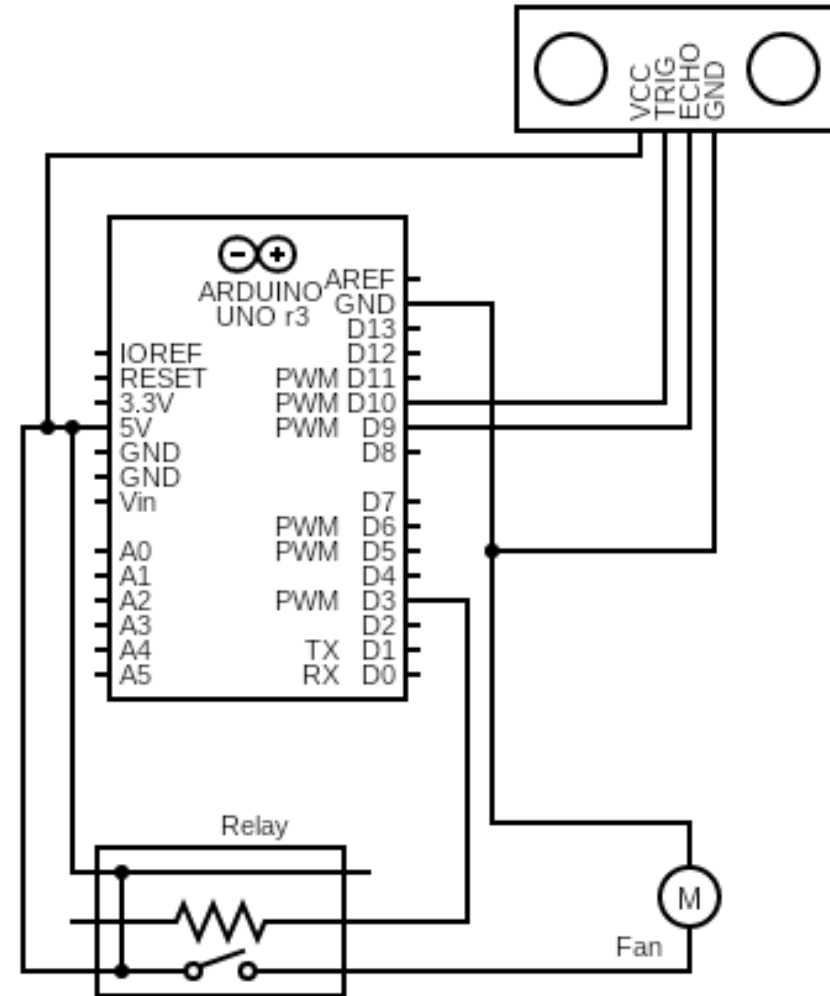


## SUCCESS OF THE PROXIMITY FAN?

- In the final piece, it was found that the fan did not have as much of an effect on the clothing as the initial tests indicated. It was also prone to faults, as the weak fan would stop moving if it touched anything.
- Additionally, even though the fan was weak, the power supply we had on hand was not enough to power the circuit. It required a laptop to be plugged in to it in order to run.
- Ultimately, this element was not a success. Had we more time (and money) we would rework the motion activated servo idea with a more powerful motor and an appropriately beefy power supply. We could map the distance detected by the distance sensor to the speed of the motor's movement – the closer the person detected, the faster the movement.
- Something good to try would be attaching a longer stick to the end of the motor. The closer to the end of the stick, the more the attached clothes would move. In the diagram here, B would move significantly more than A.

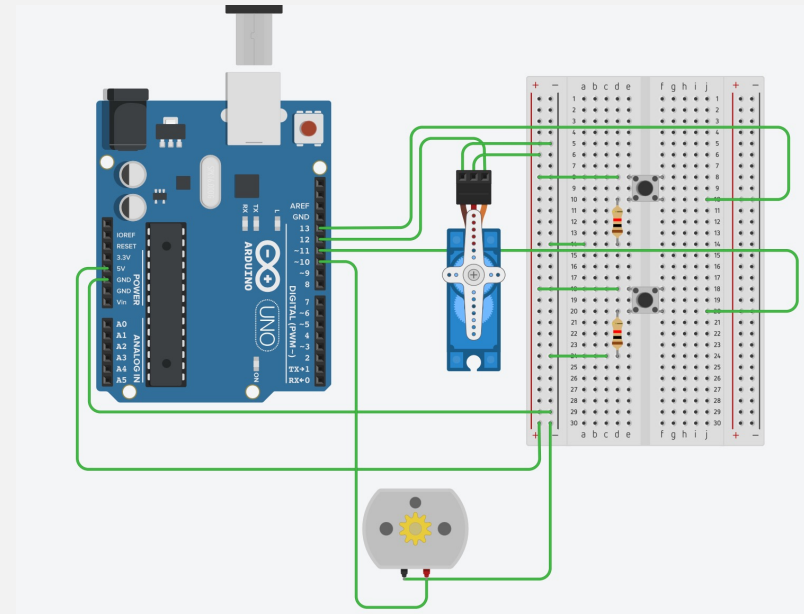
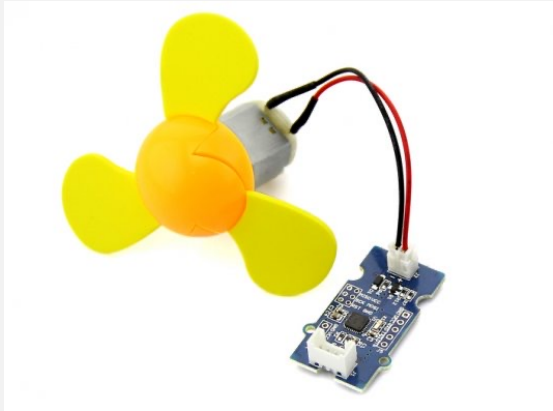


# PROXIMITY FAN CIRCUIT DIAGRAM (DETAIL)



## COMPONENT #3 : LIKE/DISLIKE

- For our final component we also wanted to have an interactive aspect to our installation, so we made a Like/Dislike component where the viewer interacts with the installation. This results in either a fan blowing the clothes (like), or the clothes being dropped by a servo motor (dislike)



# VIDEOS

[https://anu365-my.sharepoint.com/personal/u6945378\\_anu\\_edu\\_au/\\_layouts/15/onedrive.aspx?id=%2Fpersonal%2Fu6945378%5Fanu%5Fedu%5Fau%2FDocuments%2FCritical%20Intervention%20%2D%20Videos](https://anu365-my.sharepoint.com/personal/u6945378_anu_edu_au/_layouts/15/onedrive.aspx?id=%2Fpersonal%2Fu6945378%5Fanu%5Fedu%5Fau%2FDocuments%2FCritical%20Intervention%20%2D%20Videos)

## CODE LINKS

- Component 1 (Motion Based Sound): [https://github.com/saff-b/DESN2010/blob/main/a2/motion\\_to\\_sound/motion\\_to\\_sound.ino](https://github.com/saff-b/DESN2010/blob/main/a2/motion_to_sound/motion_to_sound.ino)
- Component 2 (Proximity Fan): [https://github.com/saff-b/DESN2010/blob/main/a2/distance\\_to\\_fan/distance\\_to\\_fan.ino](https://github.com/saff-b/DESN2010/blob/main/a2/distance_to_fan/distance_to_fan.ino)
- Component 3 (Like/Dislike): <https://github.com/arth-zhao/DESN2010-code/blob/main/interactive%20closet%20code.ino>

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- Elamrawy M., 2017. *X Cube Interaction Scenarios \_ Amman Design Week 2017*. Online video. Available: <https://www.youtube.com/watch?v=-F4z7zbxYzE> (accessed 12/05/22)
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- Yesyesno, 2013. *Drink Up Fountain*. Online, available: <http://www.yesyesno.com/drink-up-fountain> (accessed 12/05/22)

# EXTERNAL IMAGE SOURCES

- Slide 10: Von Wong, B, 2019. *Where are your clothes born?* <https://blog.vonwong.com/fastfashion/>
- Slide 11: Fairly, G., 2015. *A peek at what Fiona Hall is taking to Venice.* <https://www.artshub.com.au/news/news/a-peek-at-what-fiona-hall-is-taking-to-venice-247526-2347774/>; Hall, Fiona. *All the King's Men.* <https://images.roslynxley9.com.au/Ay/Go/efa4755f-0501-4a96-9873-33ab7cdf51ec/hero-960.jpg>
- Slide 12: de la Paz, G. 2015. *Follow the Leader.* [https://artsandculture.google.com/asset/follow-the-leader-guerra-de-la-paz/kQFX8dx1e\\_YYpA?hl=en](https://artsandculture.google.com/asset/follow-the-leader-guerra-de-la-paz/kQFX8dx1e_YYpA?hl=en)
- Slide 13: Yesyesno, 2013. *Drink Up Fountain.* [https://images.squarespace-cdn.com/content/v1/52f8f4a0e4b0c2f2c1efab46/1411411833915-ALA7BQECC8J28OBHFTBS/IMG\\_7761.JPG?format=1500w](https://images.squarespace-cdn.com/content/v1/52f8f4a0e4b0c2f2c1efab46/1411411833915-ALA7BQECC8J28OBHFTBS/IMG_7761.JPG?format=1500w); Yesyesno, 2013. *Drink Up Fountain.* [https://images.squarespace-cdn.com/content/v1/52f8f4a0e4b0c2f2c1efab46/1411411897298-RX0VWON74D7BO46IV2RD/DrinkUp\\_Fountain\\_2.jpg?format=1500w](https://images.squarespace-cdn.com/content/v1/52f8f4a0e4b0c2f2c1efab46/1411411897298-RX0VWON74D7BO46IV2RD/DrinkUp_Fountain_2.jpg?format=1500w)
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- Slide 15: Elamrawy, M., 2017. *In Servo We Trust!* © MIT. Online [https://hackster.imgix.net/uploads/attachments/379602/alignmotor\\_AKemkVWQlo.jpg?auto=compress%2Cformat&w=680&h=510&fit=max](https://hackster.imgix.net/uploads/attachments/379602/alignmotor_AKemkVWQlo.jpg?auto=compress%2Cformat&w=680&h=510&fit=max); Elamrawy, M., 2017. *In Servo We Trust!* © MIT [https://hackster.imgix.net/uploads/attachments/379603/lineofmotors\\_2ri6InWsqe.jpg?auto=compress%2Cformat&w=680&h=510&fit=max](https://hackster.imgix.net/uploads/attachments/379603/lineofmotors_2ri6InWsqe.jpg?auto=compress%2Cformat&w=680&h=510&fit=max)
- Slide 16: teamLab, 2018. *Flutter of Butterflies Beyond Borders, Ephemeral Life Born from People.* Online, available: <https://borderless.teamlab.art/images/pc-l/15087>
- Slide 18: Unknown, DNA, *Passive Infrared Sensor*, <https://ars.els-cdn.com/content/image/3-s2.0-B9780128236949000190-f08-05-9780128236949.jpg>; Unknown, DNA, *DFRobot MP3 player Module*, <https://www.electronics-lab.com/wp-content/uploads/2018/03/mp3-player-module-dfplayer-mini-e1522051316373.jpg>; Unknown, DNA, *Speaker - 3" Diameter - 8 Ohm 1 Watt* <https://core-electronics.com.au/media/catalog/product/cache/4/a2263c5481b3476b48a815d30ee1f0/1/3/1313-00.jpg>
- Slide 21: Unknown, DNA, *Ultrasonic Sensor*, [https://hackster.imgix.net/uploads/attachments/1110572/\\_yN0cJOpsQ9.blob?auto=compress%2Cformat&w=900&h=675&fit=min](https://hackster.imgix.net/uploads/attachments/1110572/_yN0cJOpsQ9.blob?auto=compress%2Cformat&w=900&h=675&fit=min); Unknown, DNA, *GRV M FAN*, [https://cdn-reichert.de/bilder/web/artikel\\_ws/A300/105020004\\_1.jpg](https://cdn-reichert.de/bilder/web/artikel_ws/A300/105020004_1.jpg)
- Slide 25: Unknown, DNA, *GRV M FAN*, [https://cdn-reichert.de/bilder/web/artikel\\_ws/A300/105020004\\_1.jpg](https://cdn-reichert.de/bilder/web/artikel_ws/A300/105020004_1.jpg); Unknown, DNA, *PULSADOR PEQUEÑO 4 PINES*, <https://apmelectronica.com/wp-content/uploads/2019/05/PULSADOR-PEQUENIO-4-PINES.jpg>; Unknown, DNA. *Micro Servo Motor* <https://images.tokopedia.net/img/cache/900/VqbcmM/2021/1/13/2f858a41-9a40-4825-8cf6-005a6e1b9048.jpg>
- Saf's circuit diagrams (slides 18, 20, 21, 24) made using Online Circuit Diagram Editor (<https://www.circuit-diagram.org/editor/>)
- Arthur's circuit diagram (slide 25) made using Tinkercad (<https://www.tinkercad.com>)

## CODE & SOUND EFFECTS USED

### Sound Effects

- SFX, 2019. *Laughing Female Sound Effect*. Available here: <https://www.youtube.com/watch?v=K3FcQuu7UFE>. Patreon available here: <https://www.patreon.com/user?u=56712031>

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