‘This’ Assignment
THE CREATURE - M -BR - 10

Felipe Dagnond
Paris Canham

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Professor : Elio Bidinost

PART ONE

KEYWORDS

Exchange - Response - Anthropomorphism - Discourse - Relation - Provoke - Emotive - HCI (Human Computer Interaction) - Empathic - Projection

RESEARCH

Analog Sensors:

- Sharp Microelectronics GP2Y0A41SK0F
  - Proximity sensor
  - 5V
  - Sensing distance from 4 cm to 30 cm
  - https://www.mouser.ca/ProductDetail/Sharp-Microelectronics/GP2Y0A41SK0F?qs=sGAEpiMZZMs3uAJYYmvlK9tyT4OE25W%2fUZPRj8avh5MPuS0afNpDzw%3d%3d

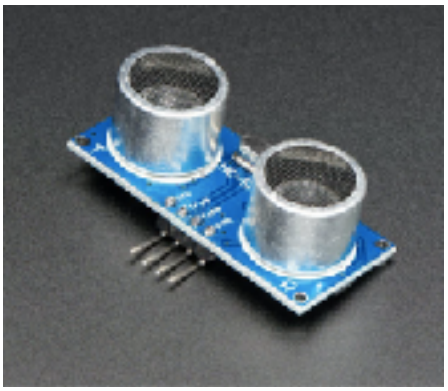
(This is the Analog Sensor we ultimately used in our project.)

- Pressure-Sensitive Conductive Sheet
  - Conductive material
  - pressure-sensitive: squeezing it will reduce the resistance
  - 28cm x 28cm
  - https://www.spikenzielabs.com/Catalog/index.php?main_page=product_info&cPath=122&products_id=1131

- Textile sensor examples: https://cdn-shop.adafruit.com/datasheets/HandcraftingSensors.pdf

Circuit Playground Classic by Adafruit

- 10 x mini NeoPixels, each one can display any color
- 1 x Motion sensor (LIS3DH triple-axis accelerometer with tap detection, free-fall detection)
- 1 x Temperature sensor (thermistor)
- 1 x Light sensor (phototransistor)
- 1 x Sound sensor (MEMS microphone)
- 1 x Mini speaker (magnetic buzzer)
- 2 x Push buttons, left and right
- 1 x Slide switch
- 8 x alligator-clip friendly input/output pins
- Very flexible sensor, has variety of uses
- Versatile
- https://www.youtube.com/watch?v=okD8DcfAMQI



Ultrasonic Sonar Distance Sensor

- Sensing distance from 2cm - 400cm
- Proximity sensor
- 5V
- Ultrasonic frequency 40 KHz
- 45.5 x 20 x 15.5mm
- https://www.adafruit.com/product/3942

EXPLAINING THE CHANGE

Our project portrays calculated human drives itself. It is programmed to ‘express’ itself in pre-calculated ways, and the evoke ‘telepathic’ powers to let you know how its feeling. This creature doesn’t assist in achieving human betterment other than serving as a touchstone provoking thought and discourse on what it means to be served by technology. It pokes fun at human-entitlement and self-inflated feelings of superiority. We create something and it must listen to us, correct? The coding for M - BR -10 even utilizes randomization of colours and sounds when your presence is not nearby, letting this creature ‘naturally’ go about its business.

This object doesn’t assist with apparent needs that we believe we have, it creates a space for its own, and develops it own category. Falling under the category of cute, mindless robots seen as “dim-witted”, “awkward” , and “brittle” by Rose, however this creation also falls under the category of thought provoking interactive art. That proposes new questions to an audience and is unconcerned with our response.

With the gradual proximity change towards the ‘eyes’ of M - BR - 10, recognition occurs and chaos ensues the ‘bothering’ of this thing. Technically, the speaker chirps in lower tones, and the RGB LED strip go from randomized colourful movement, to solid red light congruent in all LED’s, to , (when even closer) bright pink light.

PART TWO

CONCEPT

We created a creature that is relatable to ourselves. It is a personal machine, with anthropocentric emotional demonstrative qualities. When you get to close to the creature it gets aggravated; demonstrated by its loud tweeting coming from its internal speaker constituting a digital scream. Its lights turn red and and solid, in a representationally angry way. We wanted to create a tiny personality. A piece of technology that is just as inconvenienced by humans, as humans worry to be hindered by technology. Code that is upset with you.

This creative came into existence after a lot experimentation between several other ideas that explored discourse in public space, and the relationship humans have with one another. The project transformed into something that to opens discourse regarding our relationship with technology and our fetishization with annotating human characteristics unto technology that accompany us in our daily lives. We wanted to "explore human desire in its most basic forms." (Rose, 2014, 32). And create something playful, colourful and inviting at the same time.

The personality of this creature manifests itself in an assertive way. It is small and aggressively emotive, utilizing sound and visual signifiers. Inside of this plastic ball exists a small speaker, RGB LED strip and outside its body and forming it's 'eyes' is a proximity sensor that can detect up to 30 cm away from itself. It's 'view' is close range, and very near its 'face'. Accompanying this circuitry body is coding that below 28cm of distance from its sensor, it will react pseudo-emotionally, and after this distance (when you give this creature personal space) turns to randomized colouring again, and creates a more peaceful sound, colour and attitude. Giving code an attitude when provoke

The personality of this design is so connected to its physical form that it is easily recognized as a creature with eyes and a personality. Even the audio connected to this creature has a classical 'bot' noise that many side-kick bots made popular in Hollywood movies can attest to. (i.e R2D2, Wall.e, BMO).

Our design is intended to stimulate creative discourse, and spark constructive brainstorming on 'futuristic' outlooks on how AI's will be depicted in the future. Will they portray the uncanny valley effect, will they be so integrated into our daily lives that we barely notice them at all, or will they be depicted as 'cute' robots?

Ours was definitely the third suggestion.

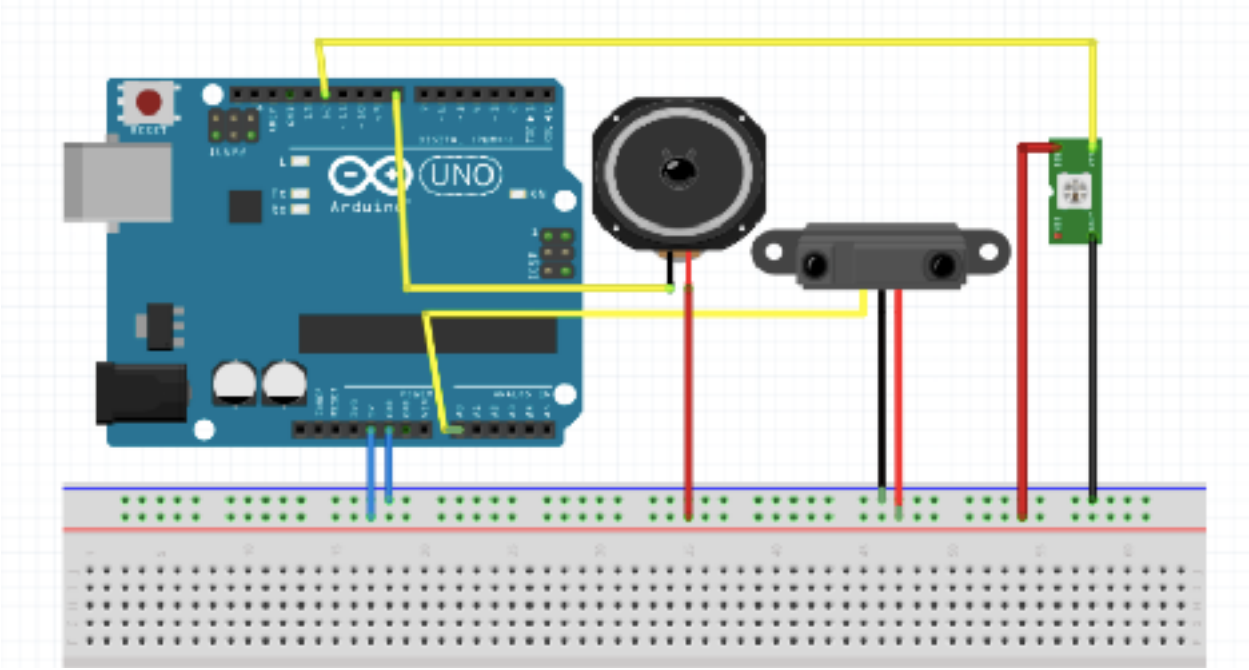
NAME

We named our creature M - BR - 10, a visual play on the word "embryo". This kitschy repositioning of the letters is a comment on all of the numbered/lettered code we witnessed throughout our research process in analog sensors. We gave our creature a name that reflects the emotionless culture of technological components found in an electronics catalogue, and used a play on words for the name. "Embryo", like a creation that we had borne, seemingly 'free" to change as it pleases and transform when pushed by its creators. Much like a life-like creation, and juxtaposing its mechanical nature to the natural formation of biotic embryos.

It is also very human of us to give a machine human characteristics, and a name.

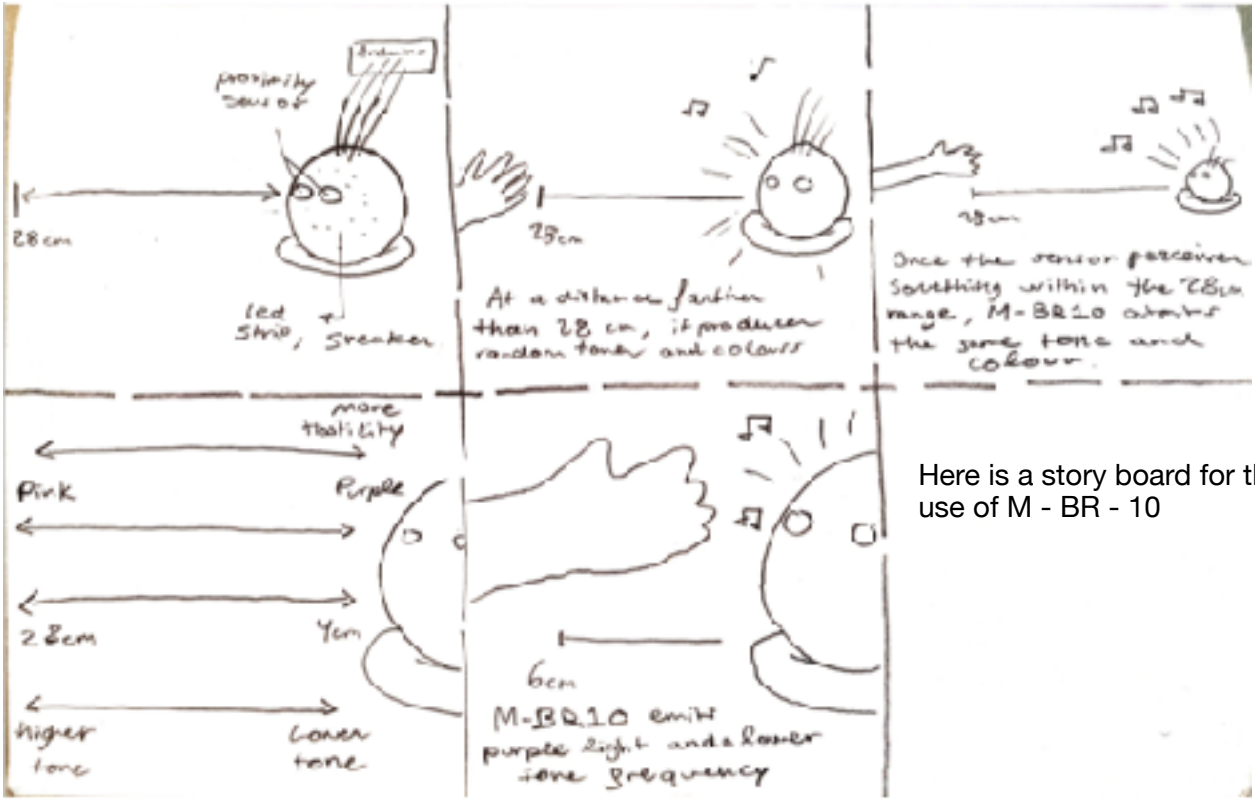
IMPLEMENTATION

Primary Unit: Proximity Sensor
Output Goal: To synthesize a visual and audio output that responds to external behaviour.

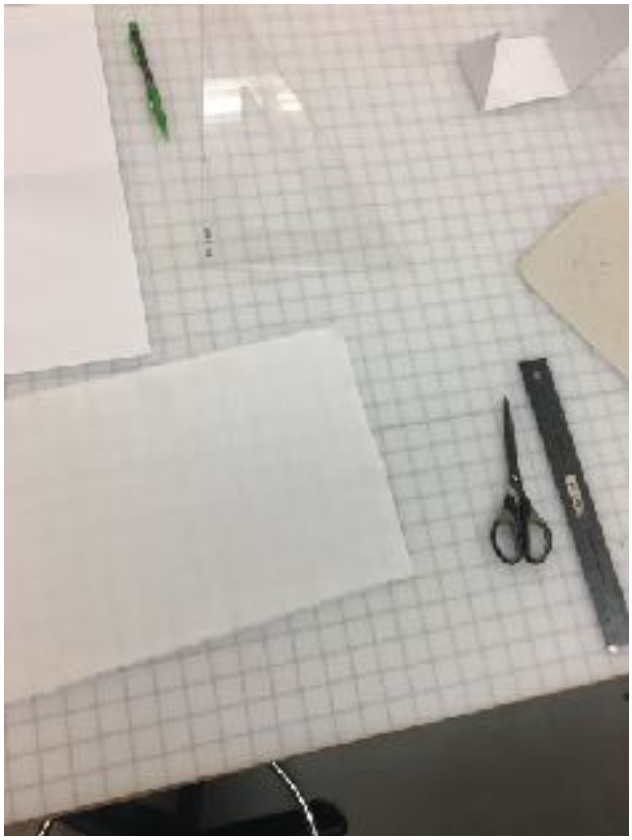


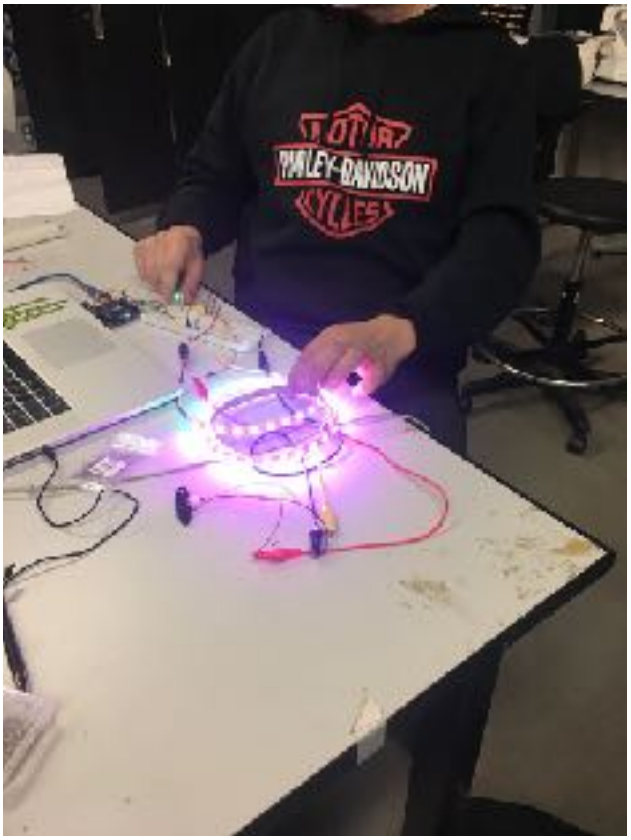
Fritzing Diagram of Circuit. Components sans wires from left to right Arduino Uno, Speaker, Sharp Infrared Proximity Sensor, and RGB LED strip.

DEVELOPMENT



Here is a story board for the use of M - BR - 10

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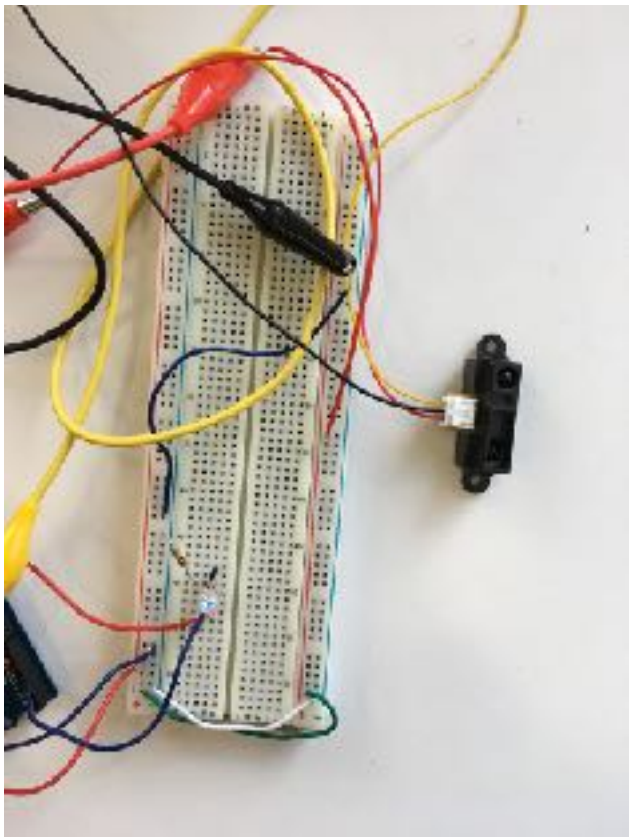

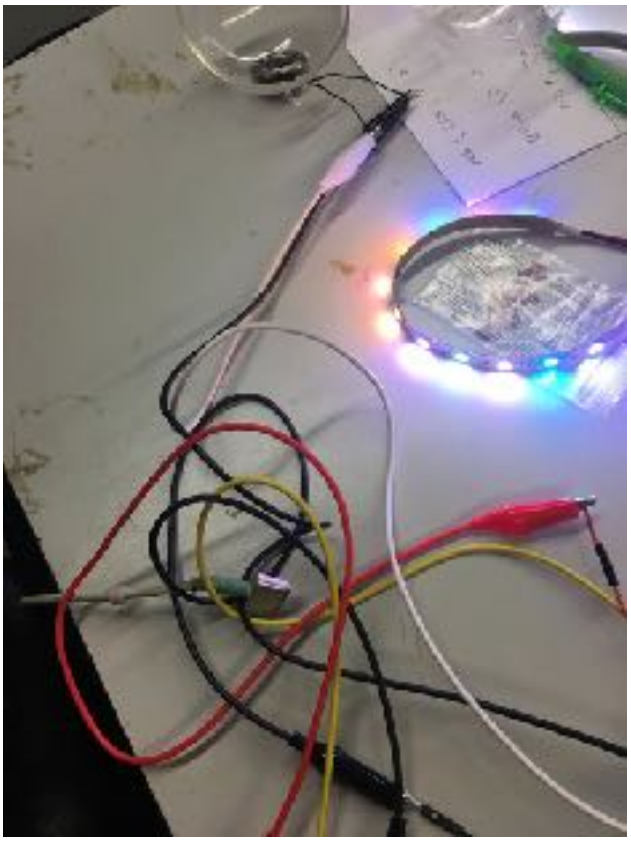

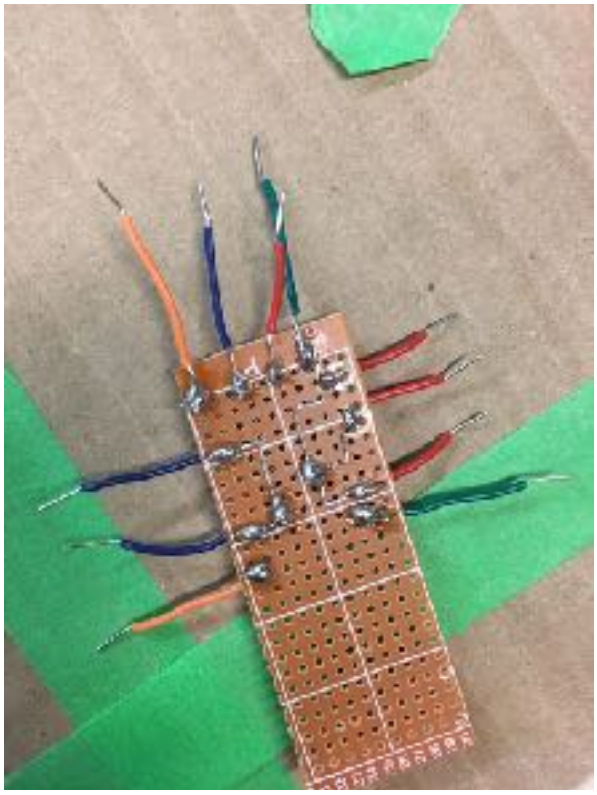

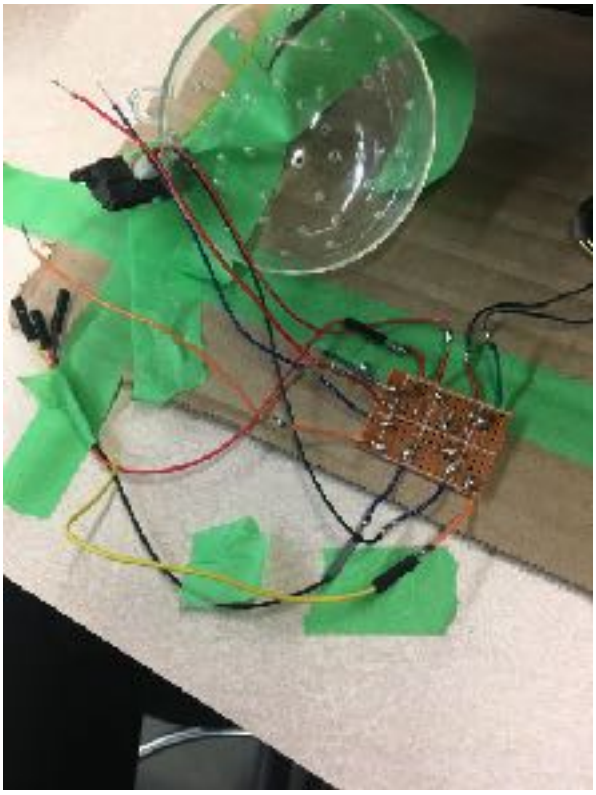

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Rose, David. *Enchanted Objects: Design, Human Desire, and the Internet of Things*. Scribner, 2014.

Images found from:

Sharp Microelectronics Proximity Sensor
http://www.easybib.com/mla8/website-citation/search?q=https%3A%2F%2Fwww.pololu.com%2Fproduct%2F136

Ultrasonic Sonar Distance Sensor
https://www.adafruit.com/product/3942

INSPIRING THINGS ALSO FOUND IN RESEARCH

Mar, Alex. “Are We Ready for Intimacy With Androids?” *Wired*, Conde Nast, 5 Mar. 2018

- robots that switch between the uncanny valley, versus being cute approachable, versus integrated components among us
- Creating things in our own image, or warped versions of the conceptual human image