



IDEAS PRESENTATION

(for ILight)

GROUP 2

FOCUS: IDEA 1: CONSTELLATION

- Display :
 - The plastic bottles will be bound together and left to float on water
 - When the light sensors are triggered, the individual bottles will light up with a domino effect
 - The lights can be set up to form a message
- Light up the message with different colored lights (need to set up beforehand) - use cubes, different colors for different messages

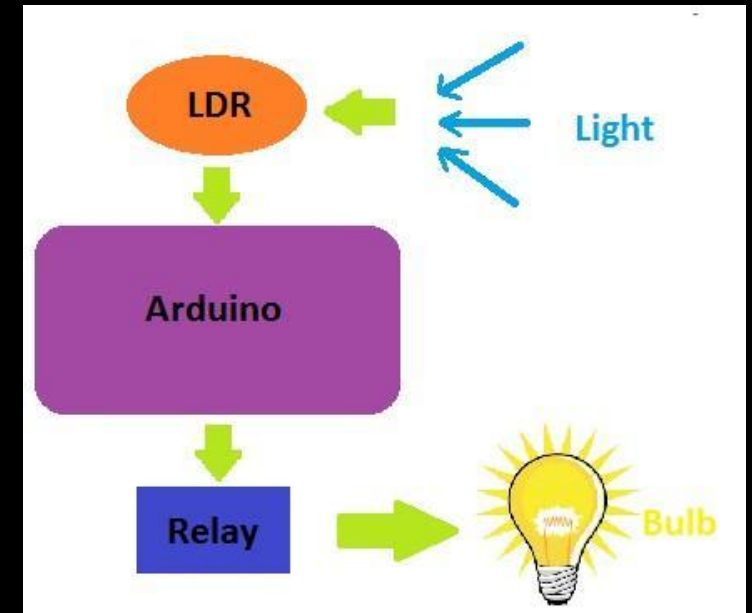


IDEA 1(TECHNICAL)

- Plastic bottles containing LEDs and light sensors
- Program such that there is a delay after the first light up
- Things we need to build this:
 1. LDR (light dependent resistor)
 2. Arduino
 3. Relay
 4. Wires
 5. Resistor

Resources:

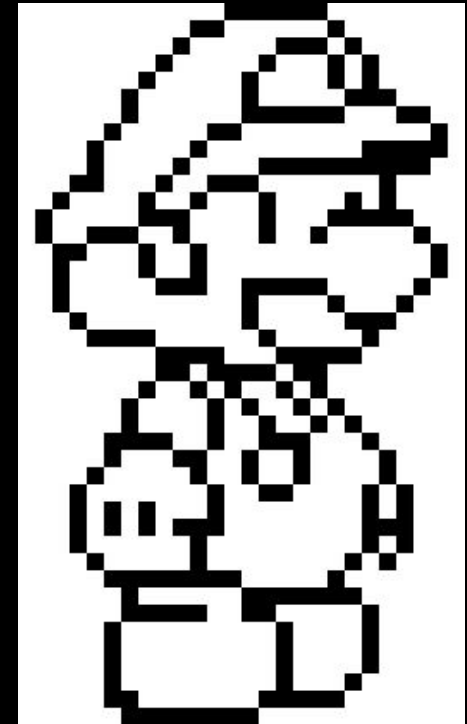
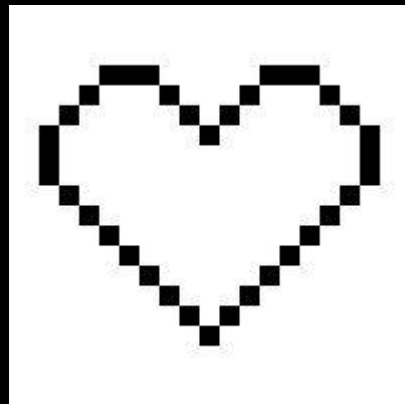
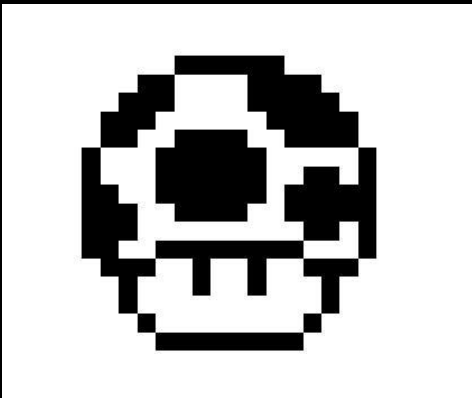
<https://diyhacking.com/arduino-ldr-sensor/>



- Advance level: Randomly triggering of messages

Ideas for display

- Pixelated pictures and alphabets (at least 2 different colours)
- Concerns: large-scaled for long messages



IDEA 2: MELTING ICEBERG

- Display:
 - 3D iceberg
 - Once pressure sensor is triggered, LED light starts to dim, implying the “melting” of the iceberg
- Display message - eg, do you know how much iceberg are melting each year? etc.

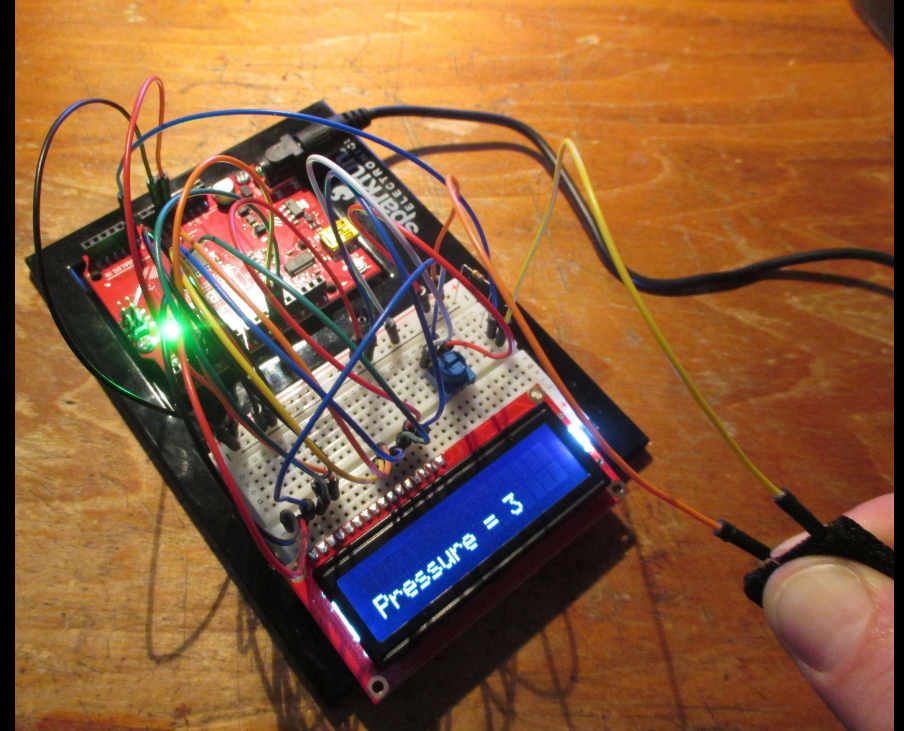


IDEA 2 (TECHNICAL)

- Uses pressure sensors, interactive LED display
- Things to build this:
 1. Arduino
 2. breadboard/the cover to insert the led light together
 3. Potentiometer
 4. Resistor
 5. Jumper Wires
 6. LEDs

Resources:

<http://www.instructables.com/id/LED-Pressure-Game/>



IDEA 2

Concerns:

- If too many people touch it for a prolonged period, it will be hard to show the “melting/freezing” (it will stay dark)

Possible solutions : “Take a step back”, crowd control by limiting no. of people near it

IDEA 3: HEAL THE GLOBE

- Same technical concept as the Melting Iceberg
- Display:
 - Can use sound, pressure, light sensor
 - Instead of dimming, the lights will light up when touched
 - The more people touching the globe, the brighter the globe shines
 - Represent group effort to protect the earth and its resources for future generations
 - Pros: Social interaction between the art piece and the people
 - Cons: Need a constant group of people touching it



IDEA 4: LED RAINBOW TUNNEL

- Display:
 - LED bridge, stepping on one area with pressure sensors, the area will light up, causing a light wave
 - The nearby areas will be fixed with light sensors
 - So stepping on any specific location will light up the other lights around it
 - Different segment will have different colours to form rainbow

Cons: Big-scaled, need a lot of resources and space



IDEA 4 (TECHNICAL)

- Uses pressure/light sensors
- Combines technical concepts of Melting Iceberg and Constellation
- Also can consider motion sensors to light up the LED display





IDEA 4

Advanced

- Advance level: Form black patches when stepped - “pollution”
 - Cool blue LED
 - Carbon footprint
- Concerns: How to make the prototype
 - Small-scaled tunnel, use fingers to “walk”



END OF PRESENTATION