Aquarium Project

Week#12

Tian Xie

Final Project – Major Studio

Proposed Title: Aquarium TV Show

How to transfer this piece of furniture into a real installation?

- The interactive part:

  Since the old TV set aquarium looked like a piece of furniture last week, more interactive elements should be put in it.

1) Give up "a real fish in water";
2) Give up the tracking of the real fish by color, it is too random without a factitious control.
3) Settle different colors of LED lights in the aquarium, and try to use the buttons of the old TV set as the on-off switch of those LED lights.
4) All the same color LED lights will be turned on in the same time. All RED LED lights/ all YELLOW/ all BLUE/ all GREEN/ all WHITE.
5) Connect this object to a computer, and begin the PROCESSING part.
6) In the processing part, the interface screen will show an E-aquarium as the same appearance and shape of the real one.
7) Use the motion eye to catch the color of the LED lights. Then processing can get a command to do the next step. Each different color holds a different command to processing interface.

LED Lights Color Control

- WHITE – NORMAL STATUS: the fake fish is swimming in the E-aquarium

- RED – FEED: some fish food will drop from the top of the E-aquarium

- YELLOW – PLAY WITH THE FISH: the fake fish will swim a little bit fast with a short music

- BLUE – CHANGE THE WATER: many bubbles will be full of the E-aquarium

- GREEN – DO CLEANING: some shiny stars will blink on the screen

- TURN OFF ALL THE LIGHTS – SLEEP: the fake fish will stop swim and make "z z z z"
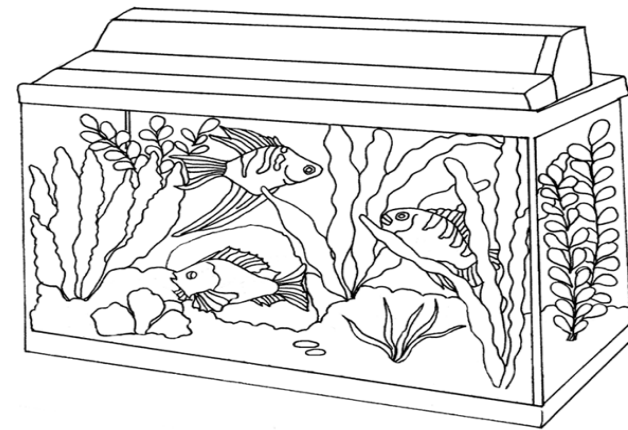
Prototyping and Constructing

- LED lights on-off switch testing. (Arduino part)
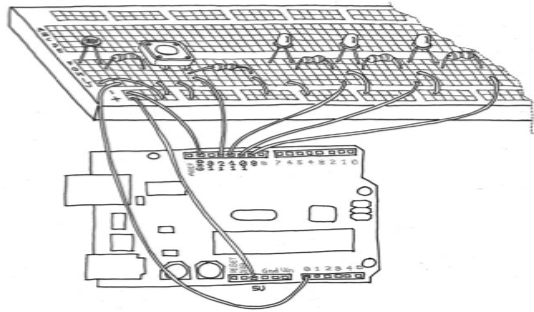
- Color tracking testing. (Processing part)
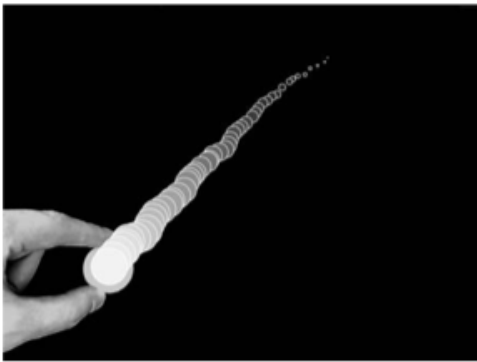
- Build the aquarium in the old TV set.

- How to settle the group of LED lights?

- Where to settle the group of LED lights in the aquarium?

- Consider about how to insulate water and the LED lights.

The Schedule

- Week#12 Nov. 14th -20th

  Compare all the materials, the old TV set/ aquarium/ interior decoration/ LED lights/ buttons

- Week#13 Nov. 21st -27th

  Prototype1, the Arduino part/ Prototype 2, the processing part

- Week#14 Nov. 28th -Dec.3rd

  Try to combine the parts together, build the whole installation and do the regulating

- Week#15 Dec. 4th -11th

  Finish the whole project, and also the paper

SWOT

- Strength: colorful visual/ interesting

- Weakness: the audience is limited/ not easy to carry and install

- Opportunities: attract children's interest

- Threaten: other interface games, for instance, E-pet

What the project is?

- It is an installation with two part,

  aquarium construction+ processing interfacing.

- It is a game.

- It can help you get a new behavior with your E-pet.

- It can appease the people whose fish died before.

- It is still a furniture, a interior decoration.

How it is used?

Two parts：

1) Press buttons to control all the LED lights.

2) Connect to a computer, and do the interface controlling part.

Who typically uses it.

- People whose fish died before.
- Busy students and office workers , who do not have enough time to take care of a real pet.
- Children.

Where it is used?

- As it is an installation, it can be settled outside or in a lobby, every passenger can play it.

- It can be settled in home/ in a classroom/ kids garden.

- Location Weakness, it is an installation, not easy to carry it everywhere, people can not feed and play with their fish all times and places.

Thank you!