

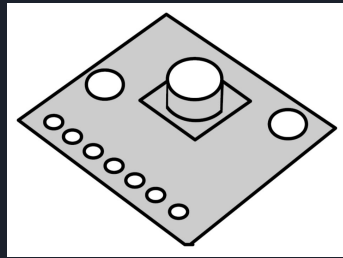


Team 01

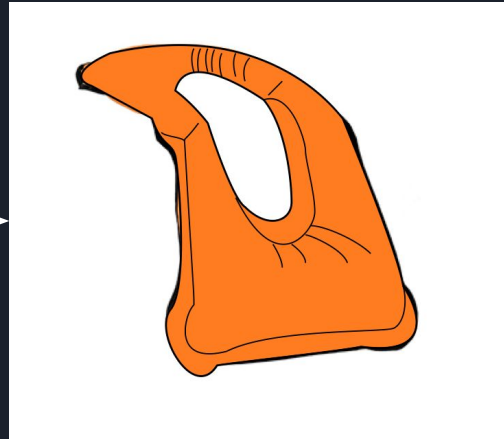
Leon Cheng & Daniel Hong

Final Presentation

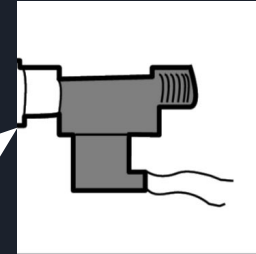
Adapty Floaty



Water pressure
sensor



Inflatable Life
Vest

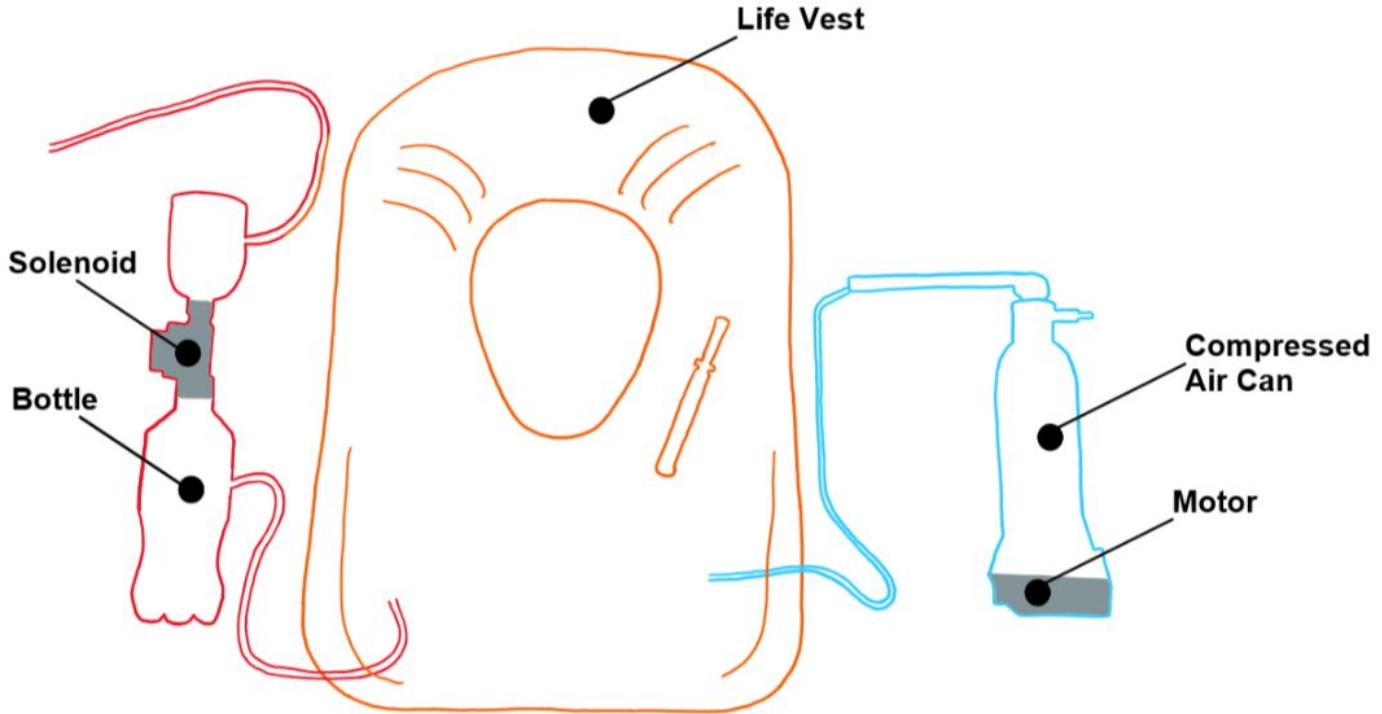


Solenoid Valve



Refillable
Compressed Air Can

Full Rotoscope

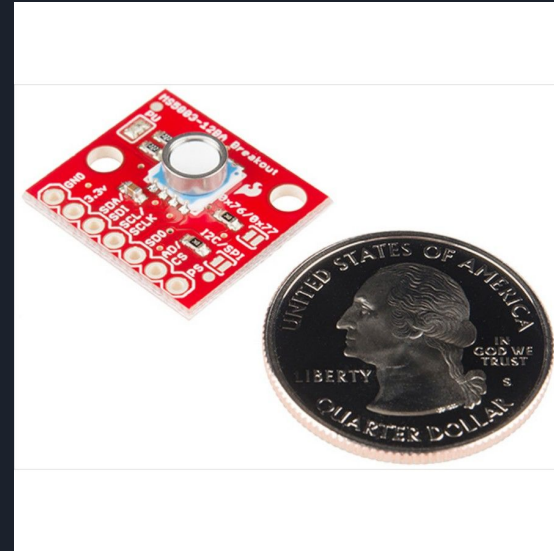


Sensors

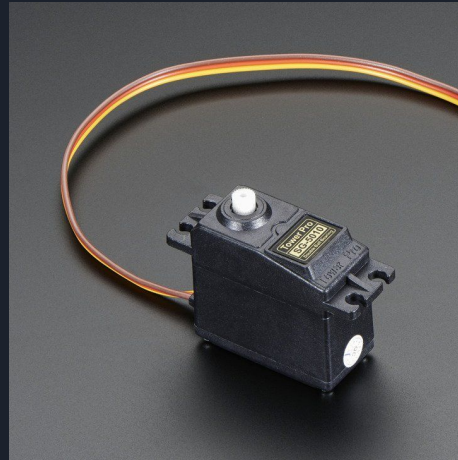
Water Pressure Sensor

Detects changes in depth

Very tiny



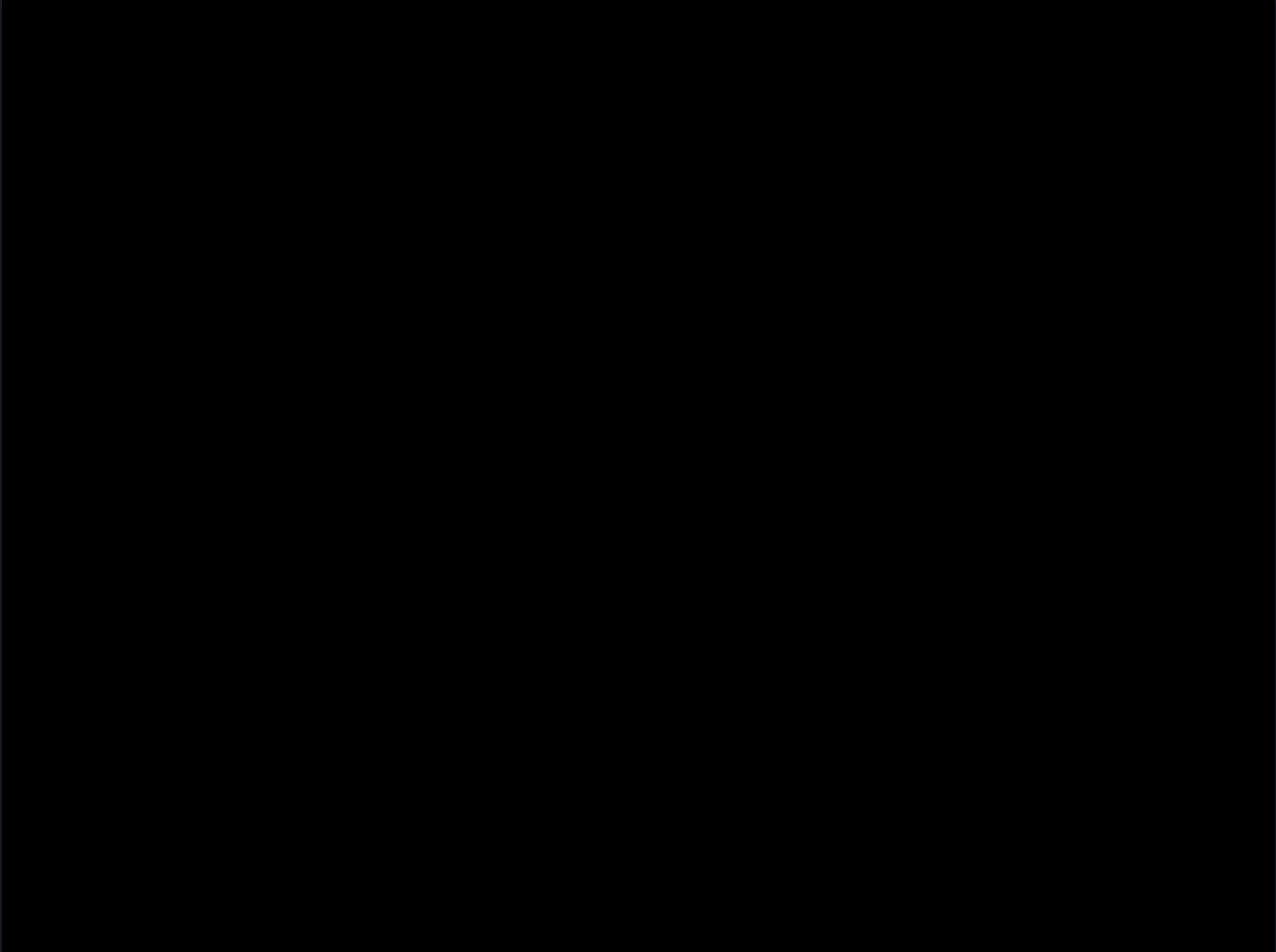
Actuators



- Solenoid (for deflating) - Motor (for inflating) - Compressed Air Can -

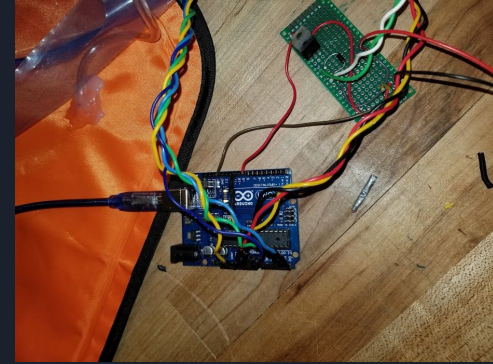


**3d
viz
video**



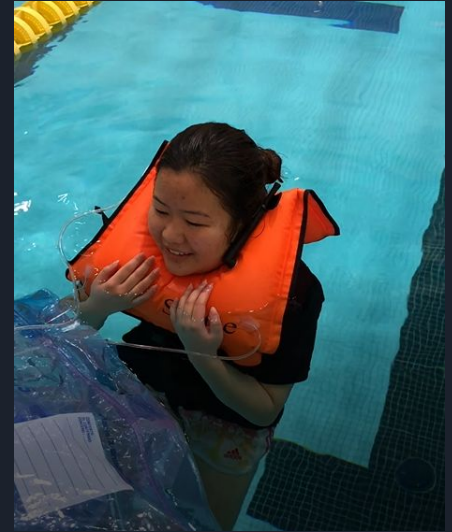
Implementation challenges

- Connecting all wires and centralizing controls
- Securely soldering wires together
- Waterproofing ziploc bag with hot glue



User Study

- Was it useful: 3.0/5
- Was it fun: 4.7/5
- Would you do it again: 3.0/5
- Comment: “Didn’t expect it to make treading water that much easier.”
- Comment: “Strap could be more comfortable.”
- Quote: “Parents will love it!”



Learnings

- Do Differently
 - Use stronger material that does not melt or leak
- Future Work
 - Waterproof fully
 - More comfortable for humans to wear

