Health Craft
helping children craft personal health technologies

Objective
Over 30% of all children 2-19 are overweight or obese. Our goal is to shift the problem from treatment to prevention by helping children build their own health and wellness technologies. This not only gives children control over their environment but also enables creative and potentially expressive ideas of health.

Approach
1. Modular wearable device that wirelessly communicates with ambient visualization
   - Ambient visualization can be crafted using intelligent circuit blocks that actuate DC motors, buzzers, speakers, LEDs, etc.

2. Wearable wireless device that tracks UV exposure
   - Comprised of a wearable base and a swappable sensor
   - Low power and can run on a coin cell battery for weeks
   - Device can be crafted into daily wear or wearable accessories

3. Modular paper circuit blocks that can be used to create ambient health visualizations
   - Comprised of a microcontroller that is pre-programmed to actuate various feedback elements
   - Typically requires just three connections to function: power, ground, data

Using common craft materials and modular circuit blocks, children can build their own health visualizations. Sample visualizations from left to right include a lotus blossom that changes color, origami windmills that spin at different rates, cherry blossom tree that grows, and a water fountain that changes flow. All these visualizations respond to data from the wearable device.

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