

PROJECT 2: WORLD

Teams of Four

The final project focuses on drawing computation out into the physical world. From the computer's perspective, the user is often nothing more than a pointer with eyes and ears.¹ It's time to change that.



The prompt for this project is *world*. Design a physical computing interface that is a manifestation of technology at the global scale, often called “crowd computing.” Think of services that integrate many users’ input – Wikipedia, Digg, Technorati, Yelp, Amazon Mechanical Turk, SlideShare, Citizen Journalism, and Games with a Purpose, for example. Today, all of these services live exclusively on a computer screen. What would a physical computing interface for visualizing and manipulating these kinds of services look like? What kind of opportunities does no longer being tied to the desktop open up for new designs at the global scale?

Your weapon of choice is Arduino, a hardware prototyping kit. Your group will get one Arduino board and a small variety of hardware to get started. You will need to purchase any additional hardware you want to use to build your prototype.

Deliverable Schedule:

- Tuesday, January 13th
 - o End of class: Choose a team name. Share five of the designs your group brainstormed in class.
- Wednesday, January 14th
 - o 7:30pm SHARP: E-mail 6964@csail.mit.edu two things: 1) Single-page sketch and description of your team’s chosen idea (scanned or photograph); 2) Parts list (part IDs and quantity) your team wants ordered from Digi-Key (www.digikey.com). Please do not order heavy items, as others in the class will have to pay for your increased shipping fee.
- Thursday, January 15th
 - o Beginning of class: bring cash or PayPal msbernst@mit.edu the total amount Michael responds to your parts request with. No money, no materials. (Sorry, I’m a Very Poor Student.)
- Friday, January 16th
 - o Beginning of class: demonstrate basic functionality of your prototype.
- Tuesday, January 20th
 - o Beginning of class: final prototypes due!

Last minute hardware vendors:

- You-Do-It Electronics (<http://www.youdoitelectronics.com>) in Needham. Their selection can be somewhat limited, so call ahead. Accessible by car, right off exit 19A of I-95, or about a 1.5 mile walk from the closest public transportation.
- Radio Shack in Central Square and Cambridgeside Galeria. Selection limited.
- Digi-key (www.digikey.com) is the best, but be prepared to pay through the nose for quick shipping.

¹ Igoe, T. and D. O'Sullivan, *Physical Computing*. Thomson Course Technology. 2004.