

Assignment 04 (due: 11/30/09)

The Switch

In this assignment I ask you to create a very simple system in which a sensor input triggers content (audio, visual or both) on the computer in real-time. We will work with the Arduino USB interface board and connect it to custom Processing software sketches. Please start with ideas that work with the technically simplest sensor: the ON/OFF switch and try to find interesting/surprising/humorous ways that people could interact with it.

It is important that you think of a design for the new sensor interface, which you are going to develop. Consider how the overall form, shape and visual qualities of your interface can contribute to the user interaction and how the form and function of your new computer interface relates to the digital content that it manipulates/creates/transforms. This content can be: still images, moving images, texts or sounds or any combination of these.

Points to remember:

- Start with your idea first. Take especially into consideration the very limited function of the computer interface (ON/OFF commands) and how to work with it. This is in no way a limiting restriction but rather a creative constraint, which should stimulate your imagination and at the same time keep the level of technical complexity relatively low.
- Be prepared to describe the idea behind your project in class during your presentation and submit a one page project description.
- It is important that there is a consistent conceptual and/or visual relationship between the content on the computer side and the interface which influences it. How do both relate to each other? What does this relationship mean?

Goals:

- Understand better the relationships between content on the computer and how to manipulate it through events outside of the computer.
- Lose your respect for the computer – you can shape it to fit your ideas and extend it way beyond the keyboard and mouse!
- Practice conceptual skills, the idea behind your project is very important!
- Learn very basic programming skills.
- Apply all the skills and knowledge you have gained in this class so far to the realization of this project (for example you might want to control a stop frame animation with your sensor or start and stop sounds).
- Explore the possibilities of a new concept: responsiveness and interactivity.