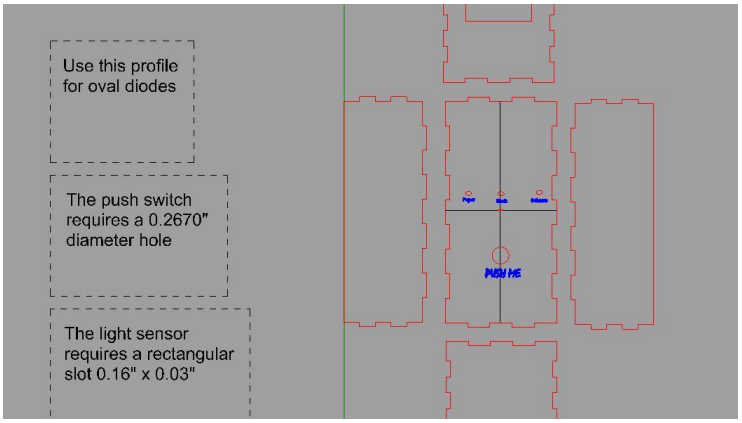
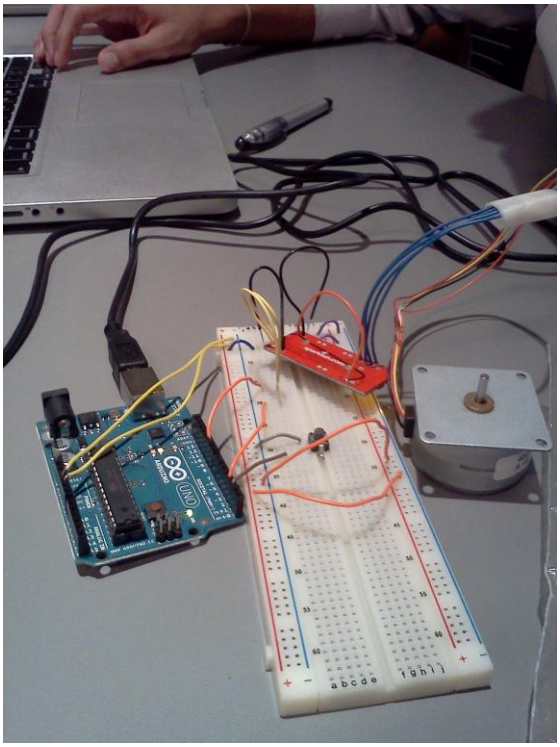


First and foremost, allow me to preface the rest of this reflection by saying that previous to this course, I had had no prior interaction with anything even remotely related to building, programming, fabricating, modeling, or coding, anything like what we have done throughout the course of this class. That being said, know that the wealth of the knowledge I have now on the subject has all been endowed on me through this course, and through the proficiencies gained in taking this course, I hope to improve my knowledge of how to create, build, program and overall design systems that may one day work to improve our everyday lives.

To begin, we must first understand the considerations we must take into account while designing and beginning to conceptualize a system. First, we must decide the overall concept and goal of the system. This goal, or desired outcome, is what is going to lead us to be able to decide exactly what type of system we design. It is important, in my opinion, to have a clear-cut idea of the goals of your project, because without them, you would not know how to make the most effective use of your system. For example, say I wanted to create a system that would encourage users to stop on the sidewalk and paint on the wall. It would not make sense for me to include a sensor that would require the user to don heavy equipment, or require a lot of time to set-up and interact with, because the overall idea is to have the user interact with the system fairly easily. Thus, we would work to create a system that would only require the user's touch in order to paint on the wall, because it would encourage pedestrians to stop and play, rather than asking them to become a heavily committed part of the system.

Because of the difference in how systems encourage users to interact, it is important for us to understand the fundamental differences in systems themselves, and the inherent

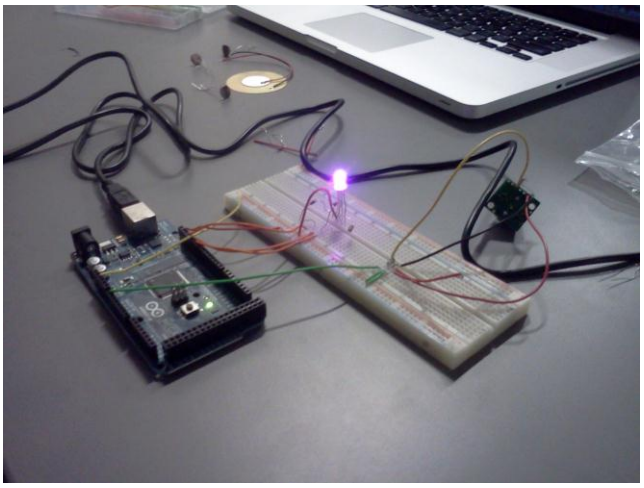
characteristics involved within each system. For example, for wearable technology systems, it is inherent that the user be very involved with the system, and because of this involvement, the user assumes the responsibility of wearing everything necessary for the system to become fully involved within the system. However, in ambient technologies, such as wall installations, it is important to keep in mind who your audience is, and how they will be using the technology. For example, the example we discussed at length in class, the ambient wall fixture that adjusts what information to display based upon the proximity of the user, is a perfect example of how to use your understanding of what your goals and desires are to use your technology in the most effective way possible. By determining that we wanted to have a smart technology that would be primarily based on user interaction, and uses that user interaction to determine what information to display, it made it that much easier to decide that an ambient, wall mounted system with sensors to detect user proximity would be the best and most effective use of our resources.



The good majority of the knowledge we gained during the course came from the weekly practical sessions, in which we took what we had learned either in lecture or in the readings, to construct our own system. Although we were given the designs for how to wire and construct the circuitry of the system, it took much skill in order to keep the idea in mind, and to know how

to wire something without looking at the model. For example, the ability to know how to solder, wire and complete a circuit using only an Arduino and a breadboard is a very useful skill, in order to be able to completely proficient in any of the Digital Culture disciplines.

Also, the skill involved in using both the Processing and Arduino programming environments is useful within other disciplines, as well as within most of the DC labs. As we progressed in the class, being that I was responsible for the coding for each practical while my partners were primarily focused on constructing the system, I feel I learned a lot about debugging a system, and using what I had learned the previous week, or even the previous module, to determine what pieces of a code were missing, what was overall detrimental to the system, and what needed to be adjusted to come up with the desired outcome.



Finally, through the design, construction, coding, and finally implementation of our last project, we learned how to completely construct a system from scratch, using only what we had learned throughout the course, and applying the knowledge we had gained in this course, as well as the various skills we brought from other courses (i.e., Chris' & I's skills with music/sonification) led us to the desired outcome. Our challenges included too much sensitivity in the coding, flaws in the wiring and construction, and overall non-functioning code that would work for an indeterminate amount of time, and then cease to work. Overall, I would say that for

being one who had no idea how to begin a project like this at the beginning of the semester, I became fairly proficient.