

Idea One – Pong in a box

The prototype plays a game of pong with collision and win detection. They interact by moving the paddle in pong left and right with buttons on the box. This makes use of electronics through both LEDs and buttons, and makes use of laser cutting to build the enclosure. 3D printing or laser cutting could be used to build nice enclosure for buttons that look aesthetically pleasing. It would be evaluated by deciding if it can play a game of pong in a proper manner. The cost of components is rather low only requiring a microchip, a few dozen LEDs, possibly multiplexers, and buttons.

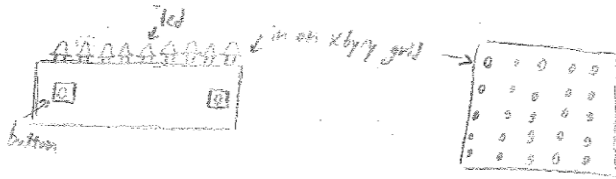
Idea Two – Reminder to be quiet

This project would just be a box or other shape that uses LEDs or sound to remind individuals to be quiet. It would take in sound as in input using a mic, and allow the threshold to be changed using a potentiometer. This project would make use of a laser cut enclosure and would probably require a cone of some sort to be made so the mic can capture more sound. The project would be evaluated on if it does properly notify an individual that they are being too loud and should quiet down. It makes sparing use of electronics and material so it would probably be rather cheap to construct. It could be tested by individuals during the symposium because the threshold is variable.

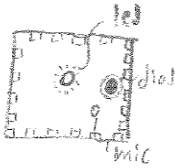
Idea Three – Antitheft Tool

This project is just two boxes that can be clipped onto keychains or other items. When one loses the radio signal from the other it emits a noise to tell it has either been left behind or someone attempted to take it. They could interact with it by moving the two boxes apart and seeing that at a certain distance one of the two will emit a noise. It would be evaluated based on if it functions at all and if the distance can be varied using a trimmer. It could also be evaluated by if the enclosure is both aesthetically pleasing and functional. There are not many components to the project and they are all together rather small.

Idea 1 - Pong in a box



Idea 2 - Reminder to be quiet



Idea 3 - Anti-theft tool

