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Design Document - Idea Generation

Project 3 – Mapping physical interaction to and from the virtual (software + hardware)

For project 3, I will still be using the cars as the main theme as this is a topic, I am personally passionate about. In regard to how I will get the hardware to interact with the software, I intend to use 3 input devices, that being the LDR, the Button and a Potentiometer. In processing, the base state will show a car driving at a regular speed on the road, or through a city block.

When the [button] is pressed, I will include a sound file to replicate the horn of the car being pressed. Thus, each time the button is clicked, the car will horn.

When the [potentiometer] is adjusted, it will either increase or decrease the speed of the car. The acceleration and deceleration of the car will be reflected through the speed in which the background or surrounding moves in relative to the static car.

Lastly, the [LDR] will be used for the lights on the car. The LDR will reflect the brightness, or the time of day you will be driving the car. Thus, when the LDR is left unaffected, that will represent that the car is driving during daytime, and a covered LDR will indicate that the car will be driving during nighttime. This will also be reflected in processing through the headlights of the car.

During daytime (when the LDR is not covered), the headlights will remain off or dim. However, when the car is driving during nighttime (when the LDR is being covered), the headlights will turn on.