Ok, so I've been doing software for about 14 years now. More than half my life. And all this time, its all been pure software. Yes I can see artifacts on the screen, but really its just virtual stuff. I want to be able to make something more mechanical, something tangible that I can hold. So this is my journey

Step one, was just getting some components together.

1. Arduino Nano Every
2. Some switches (normally on)
3. Servos
4. Jumper cables

At first I wanted to use a motor and step up gears to move something. But a servo basically handles this for me. And a simple start is easier than a difficult one. The motor setup would require me to use an H bridge or something similar to handle moving the gears backwards to reset motion.

So here’s the first clip. Its literally just a servo hooked up to the Arduino with some for loops to move the arm back and forth. Pretty simple, but it’s a start. When my items arrived, annoyingly my servos weren’t there. Everything on amazon said delivered. So I had to order them again, wait another day and file a refund for the ones that didn’t arrive before I got to put this all together.

So then I hooked up a switch to have this oscillate at my command. This is all still quite simple because all the connections and power comes straight from the Arduino. And then another clip where I screwed on a bit of paper to make it a bit more apparent whats going on.

Ok, so next thing to do is to have this hooked up to some power. Right now its getting the 5V straight from the Arduino, but this will only be sustainable for so long. As soon as I want more servos and lights and whatever else on here, it will not be a viable method. So here in this clip you can see how I’ve soldered together a USB cable’s hot and ground wires to the servo and the USB’s ground wire to the Arduino (for a common ground) (look up why I need this)

One thing to note. Whenever I used to watch videos like this I would always wonder why the creators don’t just keep a clean desk. I immediately understand why now. I have here what is possibly the most useless and simple contraption, and just look at how untidy my desk has become. Well anyway, I tried tidying everything up a bit and shot another video and you can see the solder job I did. Thanks to my mom for helping me by holding cables together while I solder at 11pm. I really need to get myself a soldering rig.

A price check up until now.

* Arduino: £14.06
* Jumper cables: £5.94
* Switches: £6.49
* Servos (didn’t arrive): £5.99
* Servos: £6.99
* Servo board: £5.99
* Soldering rig: £18.99

All in I’ve spent £64.45 to make something that doesn’t do anything… Although technically I should get £5.99 back from amazon for the servos that never arrived