

I wrote codes in flextouch.h, flextouch.c, flexmotor.h, flexmotor.c and main.c to using the IDE called MPLAB-X to program the Amazing Ball System(ABS). The final functionality that I achieve is similar to the following video: <https://www.youtube.com/watch?v=Hd0ItooPKwM> However, my code can do even more. Instead of balancing the ball at the center, it can move and balance the ball at any setpoint set by the user using a joystick. It took me around 2 months to learn all the relevant material and finish coding.