\* Delsey Sabu

#include <project.h>

#include <stdlib.h>

uint8 motor = 0x04;

int main()

{ CyGlobalIntEnable; /\* Enable global interrupts. \*/

//start everything

capSense\_Start();

PWMled\_Start();

PWMservo\_Start();

PWMmotor\_Start();

SPIM\_Start();

capSense\_InitializeAllBaselines();

capSense\_EnableWidget(capSense\_LINEARSLIDER0\_\_LS);

pioneerISR\_Start();

pioneerISR\_ClearPending();

en3\_Write(1);

SPIM\_WriteTxData(motor);

CyDelay(100);

transfer\_Write(1);

transfer\_Write(0);

en3\_Write(0);

uint16 awesome = 0; //input from capsense goes here

uint16 angle = 0; //for the servo motor

for(;;)

{

capSense\_UpdateEnabledBaselines();

capSense\_ScanEnabledWidgets();

while (capSense\_IsBusy());

awesome = capSense\_GetCentroidPos(capSense\_LINEARSLIDER0\_\_LS); //capsense input

if(awesome <=100){

angle = awesome/5;

PWMled\_WriteCompare(awesome); //to led

PWMmotor\_WriteCompare(awesome); //to DC motor

PWMservo\_WriteCompare(angle); //to servo

}

}

}

/\* [] END OF FILE \*/

#include <project.h>

extern uint8 motor;

CY\_ISR(pioneerISR\_Interrupt)//when pioneer button is pressed, changes direction

{

/\* Place your Interrupt code here. \*/

/\* `#START pioneerISR\_Interrupt` \*/

if (motor == 0x04){

motor = 0x08; //global variable

en3\_Write(1);

SPIM\_WriteTxData(motor);

CyDelay(100);

transfer\_Write(1);

transfer\_Write(0);

en3\_Write(0);

}

else if (motor == 0x08)//turn other direction

{motor = 0x04;

en3\_Write(1);

SPIM\_WriteTxData(motor);

CyDelay(100);

transfer\_Write(1);

transfer\_Write(0);

en3\_Write(0); } /\* `#END` \*/}