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// Event Checking functions for sample

#include "HEADERS.h"

boolean CheckLamps(void)
{
    static unsigned char LastPin1State = 0;
    static unsigned char LastPin2State = 0;
    static unsigned char LastPin3State = 0;
    unsigned char CurrentPinState;
    boolean ReturnVal = False;

    // LAMP 1 CHECK
    CurrentPinState = LAMP_IPORT & LAMP1_IPIN;
    if (CurrentPinState != LastPin1State) // pin is different
    {
        ES_Event ThisEvent;
        ThisEvent.EventType = ES_LAMP1;

        if(CurrentPinState ==0) // pin is low
        {
            ThisEvent.EventParam = 0;
        } else
        {
            ThisEvent.EventParam = 0b00000001;
        }
        PostMaster(ThisEvent); // post to master(?)
    }
    LastPin1State = CurrentPinState;

    // LAMP 2 CHECK
    CurrentPinState = LAMP_IPORT & LAMP2_IPIN;
    if (CurrentPinState != LastPin2State) // pin is different
    {
        ES_Event ThisEvent;
        ThisEvent.EventType = ES_LAMP2;

        if(CurrentPinState ==0) // pin is low
        {
            ThisEvent.EventParam = 0;
        } else
        {
            ThisEvent.EventParam = 0b00000010;
        }
        PostMaster(ThisEvent); // post to master(?)
    }
    LastPin2State = CurrentPinState;

    // LAMP 3 CHECK
    CurrentPinState = LAMP_IPORT & LAMP3_IPIN;
    if (CurrentPinState != LastPin3State) // pin is different
    {
        ES_Event ThisEvent;
        ThisEvent.EventType = ES_LAMP3;
    }
}

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    if(CurrentPinState ==0) // pin is low
    {
        ThisEvent.EventParam = 0;
    } else
    {
        ThisEvent.EventParam = 0b00000100; // pin is high
    }
    PostMaster(ThisEvent); // post to master
}
LastPin3State = CurrentPinState;

ReturnVal = FALSE;
return ReturnVal;
}

boolean CheckChargeState(void)
{
    static unsigned char LastChargePinState = 0;
    unsigned char CurrentPinState;
    boolean ReturnVal = False;

    // Charging Status Check
    CurrentPinState = CHARGE_PORT & CHARGE_PIN;
    if (CurrentPinState != LastChargePinState) // pin is different
    {
        ES_Event ThisEvent;
        ThisEvent.EventType = ES_CHARGE_STATE;

        if(CurrentPinState ==0) // pin is low
        {
            ThisEvent.EventParam = 0;
        } else
        {
            ThisEvent.EventParam = 1;
        }
        PostMaster(ThisEvent); // post to master
    }
    LastChargePinState = CurrentPinState;

    ReturnVal = FALSE;
    return ReturnVal;
}

```