

ECGR 6185 - 1/26/2011 - p1

Last name - description of paper . pdf

no spaces

use underscore

Ardana S → John C

Vikram → Samyuktha

Genya → Walter

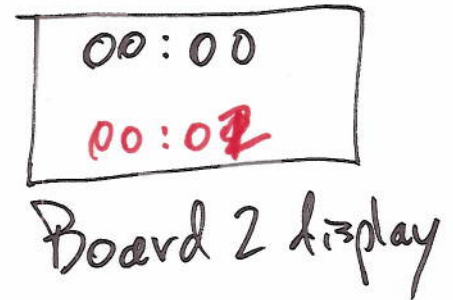
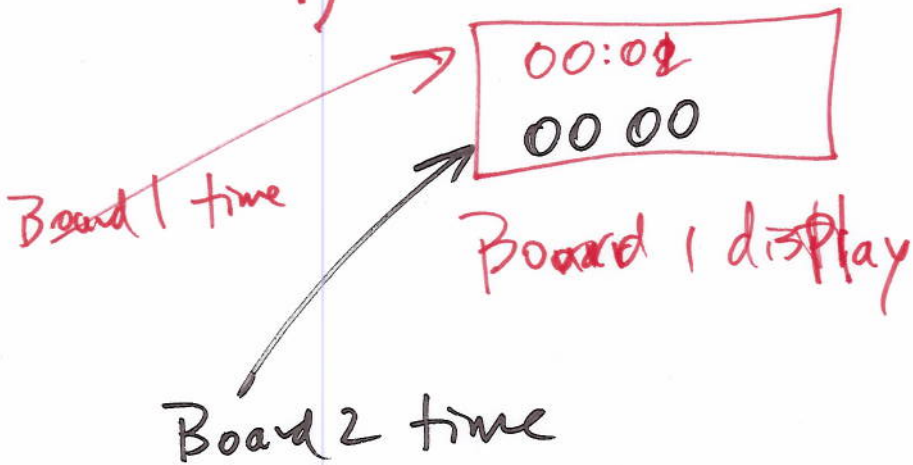
Guangyi → Eastwar

Lab1



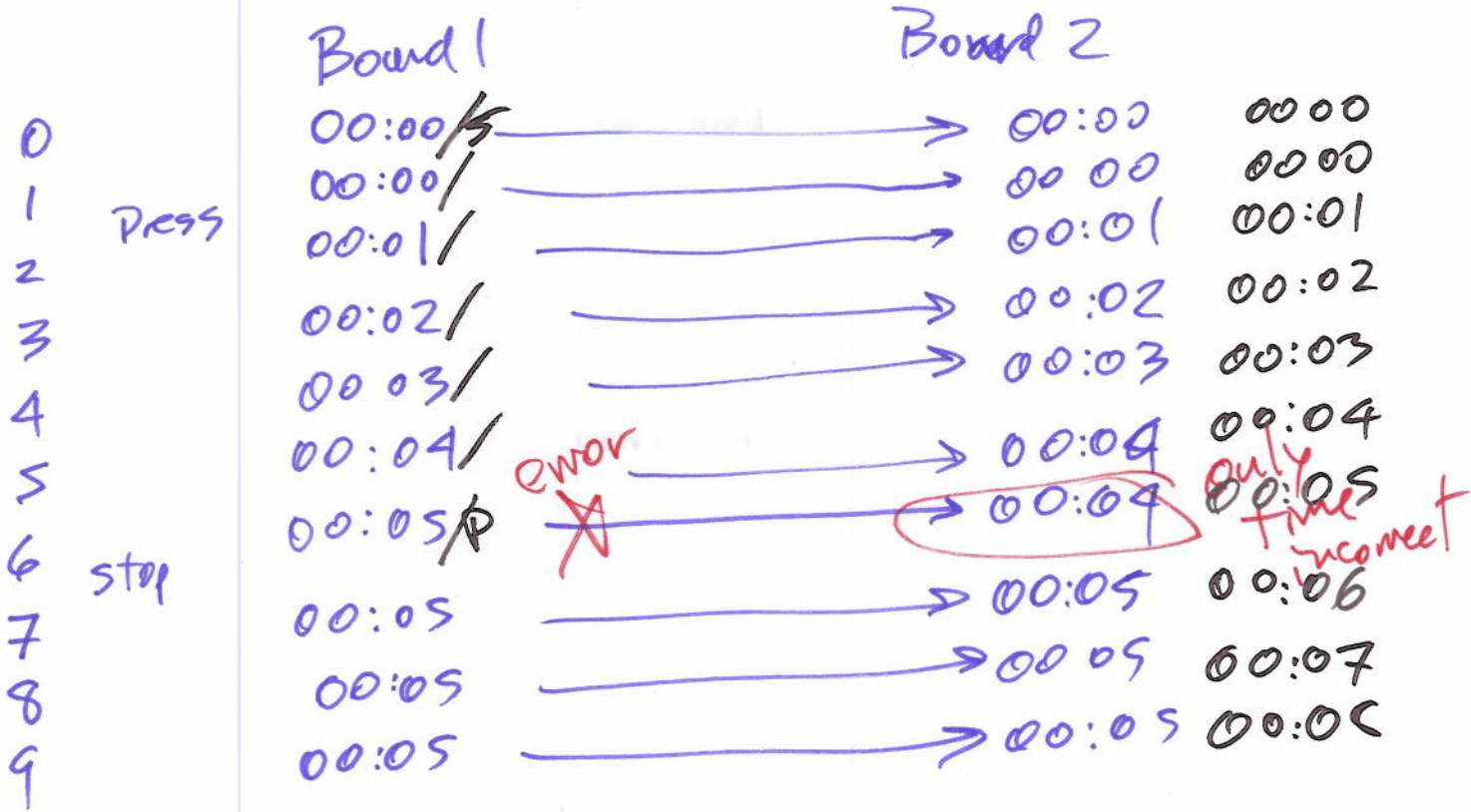
1) You can press a start, stop button on each board to start a timer. Display the time on your board.

1) start Board 1



2) 2 way to "communicate"

- A) Send 3 different characters representing start, stop, reset
- B) Every second, send to the other board your time display.



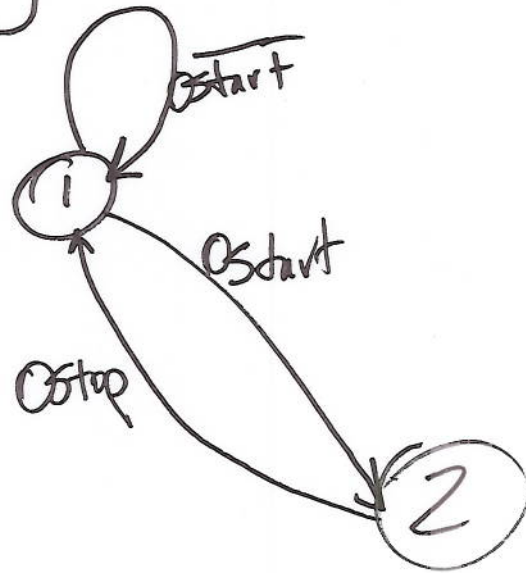
START = S
 STOP = P
 RESET = R

If you send
 4 chars (0000)(0001)

1 char = N bits Start
 11 bits Stop
 Parity

$$44 \text{ bits} / 1200 \text{ bps} = 0.036 \text{ sec for time}$$

- 1) No timers running - either
- 2) own running, other not
- 3) own not, other running
- 4) both running



4

3

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Architecture

ISR_Receive
ISR_Transmit
ISR_Timer
Main
Setup
SW1
SW2

```
char overtime[6] =  
    "00:00";  
char othertime[6] =  
    "00:00";  
int send_char_count;  
int receive_char_count;
```

ISR_Receive

```
move char to othertime[receive_char_count]  
if char is null  
    receive_char_count = 0  
else  
    receive_char_count++;
```