```c
1 /*
2  * flashSequence.h
3  *
4  *      Author: Taylor Cowley
5  */
6
7 #ifndef FLASHSEQUENCE_H_
8 #define FLASHSEQUENCE_H_
9
10 #include <stdint.h>
11 #include <stdbool.h>
12 #include "simonDisplay.h"
13 #include "globals.h"
14
15
16 #define FLASHSEQUENCE_BLINK_SPEED (GLOBALS_FLASH_SPEED)
17 #define FLASHSEQUENCE_BLANK_SPEED (FLASHSEQUENCE_BLINK_SPEED / 3)
18
19 enum flashSequence_st_t{
20     flashSequence_init_st,            //Init anything (like the screen)
21     wait_for_enable,        //we can't do anything unless enabled
22     display_current_square, //flash the current square of the sequence
23     blank,                  //a blank in between every flash
24     end_flash_sequence,     //we have ended the flash sequence
25     wait_for_disable        //chill here until disabled
26 };
27
28
29 // Turns on the state machine. Part of the interlock.
30 void flashSequence_enable();
31
32 // Turns off the state machine. Part of the interlock.
33 void flashSequence_disable();
34
35 // Other state machines can call this to determine if this state machine is finished.
36 bool flashSequence_completed();
37
38 // Standard tick function.
39 void flashSequence_tick();
40
41 // Tests the flashSequence state machine.
42 void flashSequence_runTest();
43
44 #endif /* FLASHSEQUENCE_H_ */
45
```