

```

1  #pragma once
2
3  #include <atomic>
4
5  #include "ir_sensor.hpp"
6
7  enum DoorState {
8      DOOR_CLOSED = 0b000,
9      DOOR_LAT_SND,
10     DOOR_OPEN,
11     DOOR_IR,
12     DOOR_CLOSING,
13     DOOR_DC1 = 0b101, // not needed, just so we can remember
14     DOOR_DC2,
15     DOOR_DC3
16 };
17
18 inline std::string pretty(DoorState s) {
19     switch (s) {
20         case DOOR_CLOSED:
21             return "Closed";
22         case DOOR_LAT_SND:
23             return "Latch and Sound";
24         case DOOR_OPEN:
25             return "Open";
26         case DOOR_IR:
27             return "Waiting for IR";
28         case DOOR_CLOSING:
29             return "Door Closing";
30
31         default:
32             return "Broken";
33     }
34 }
35
36 struct Door {
37     DoorState mState;
38     IR_Sensor mIRSen;
39
40     std::atomic_bool mConDoorOpen;
41     std::atomic_bool mConDoorClose;
42
43     void start();
44
45 };

```