

```

1
2 #include "main.hpp"
3
4 void Door::start() {
5     // We are currently in DOOR_CLOSED state, we will change state and
6     // Latch and send sound output
7     mState = DOOR_LAT_SND;
8     std::this_thread::sleep_for(2s); // wait for 2s to latch
9     Sound = true;
10
11     // Door is latched now we wait for the controller to tell us to
12     // open the gate
13     while (!mConDoorOpen) ;// { std::this_thread::yield(); }
14
15     // Open Door (Turn off sound too)
16     mState = DOOR_OPEN;
17     std::this_thread::sleep_for(1s); // Door is opening
18
19     // Door is open, now let people in and out
20     mState = DOOR_IR; // Honestly this should be called Door Wait
21     // but too lazy to change
22     Sound = false;
23     if (!FireKey) {
24         mIRSen.start(); // This is a blocking function
25         // this function will start the IRSensor and wait
26         // for its finish to close the door
27     }
28
29     // Wait for the controller to send close door signal
30     while (!mConDoorClose) ;// { std::this_thread::yield(); }
31     mState = DOOR_CLOSING;
32     std::this_thread::sleep_for(1s); // Door is closing
33
34     mState = DOOR_CLOSED; // Door is closed
35
36 }

```