

# Smart Farming System (Design)

## NULL Team Members:

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## Tasks:

1 – Control [Pri 6]

2 – SysCheck [Pri 5]

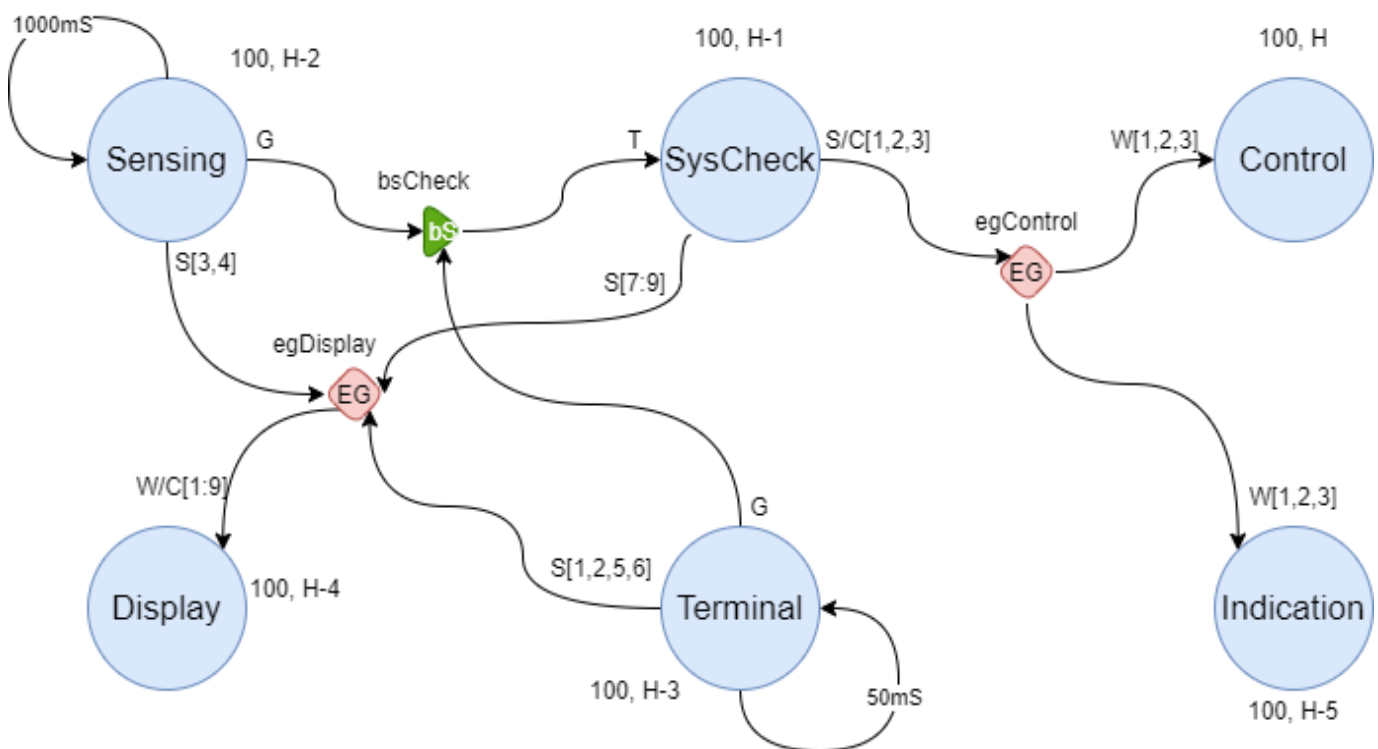
3 – Sensing [Pri 4]

4 – Terminal [Pri 3]

5 – Display [Pri 2]

6 – Indication [Pri 1]

## Tasks Diagram:



## System parameters:

SystemState : [Main/ Config]

SensorData {Temp, Humi}: [0:100]

SensorThreshold {Temp, Humi}: [0:100]

## Display Events:

1 – E\_MainScreen  
2 - E\_ConfigScreen  
3 – E\_HUpdated  
4 – E\_TUpdated  
5 – E\_HTUpdated

6 – E\_TTUpdated  
7 – E\_Heater  
8 – E\_Cooler  
9 – E\_Pump

## Control Events:

1 – E\_PUMP                      2 - E\_HEATER                      3 – E\_COOLER

## Screen Design:

### Main Screen

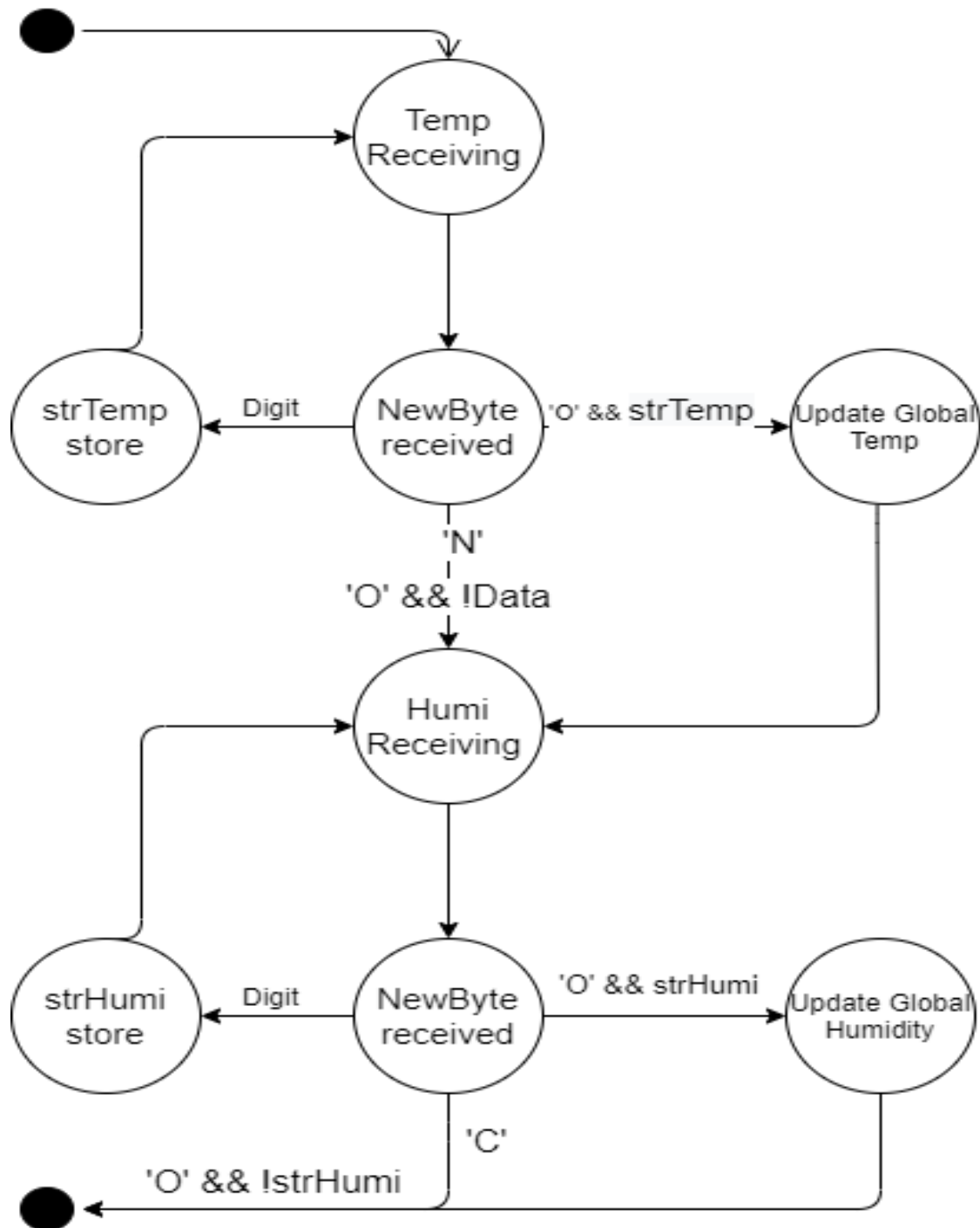
Temp:	Humidity:
Temp threshold:	Humidity threshold:
P:	H:                      C:
Config:C	

### Config Screen

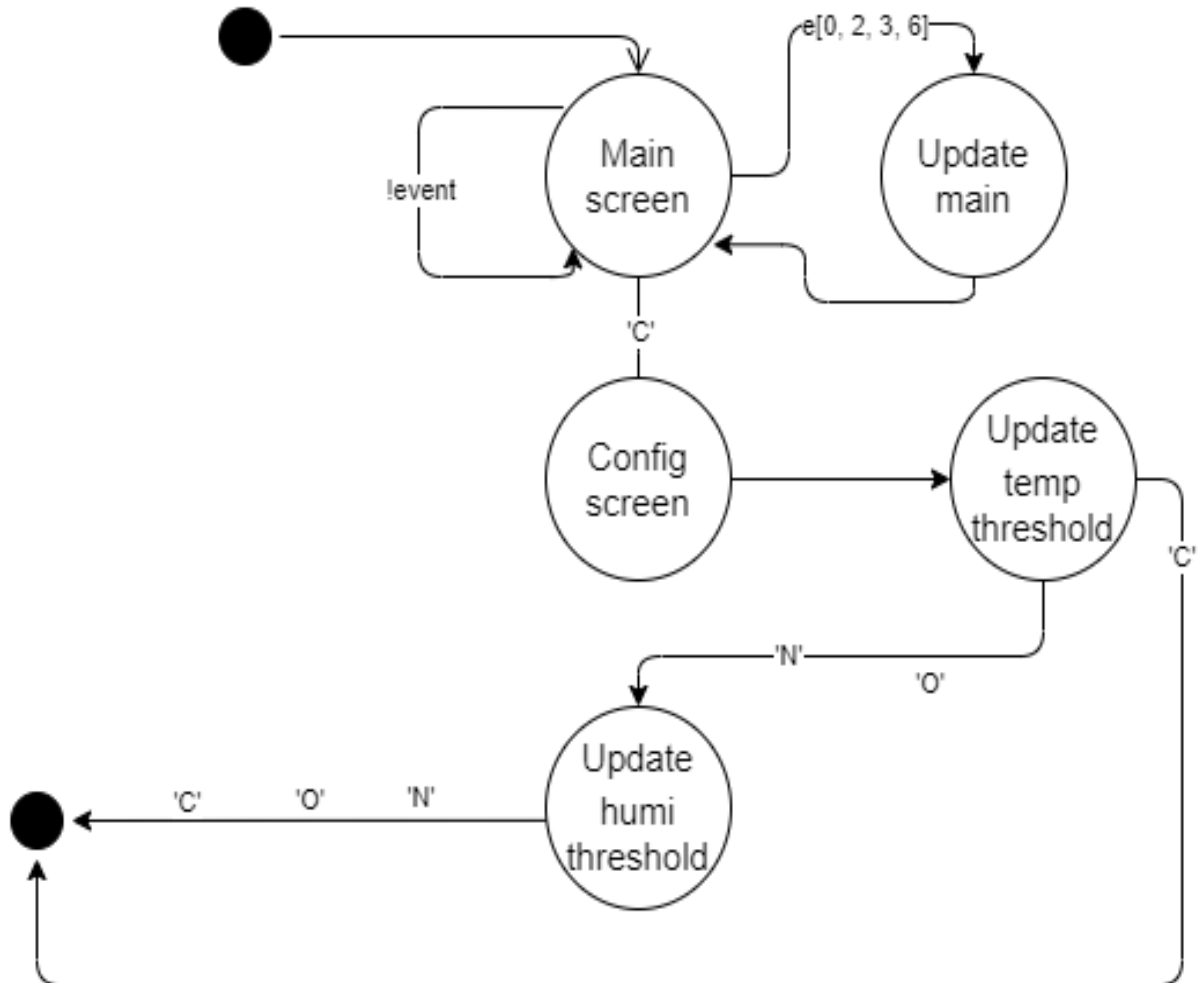
Temperture threshold:
Humiditythreshold :
OK:O                      Next:N                      Cancel:C

## State Machines for some tasks:

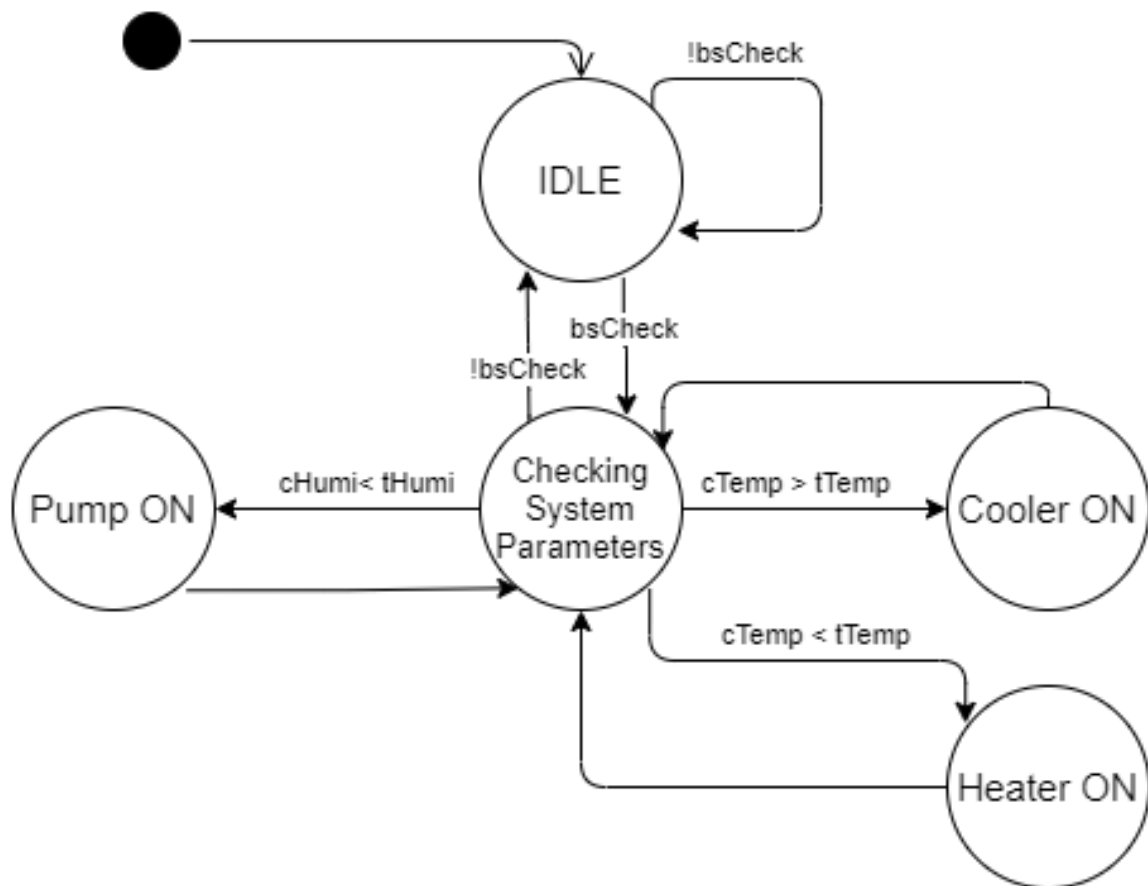
### Terminal task state machine:



## Display task state machine:



## SysCheck task state machine:



## Control task state machine:

