

Musts

Sense that it is raining
Sound an alarm

Shoulds

Sense temperature
Have led display status
Have analog input (buttons) for input

Mays

Close the window
Send mobile alerts

Level 0

Ins

Temperature : Analog I/O
Rain : Analog I/O
Programming ESP32: USB cable
Power - bullet jack or battery: Analog

Outs

Display: I2C
Buttons : Analog
Speaker alarm : PWM

Maybe:

Phone: wifi/bluetooth
Motor: I2C

Level 1

Temperature, Rain, Buttons, speaker
Sensor - does sensing
Sends analog voltage back to processor

Motor and Display : I2C, expand separately

Phone: whatever bluetooth options are chosen

