

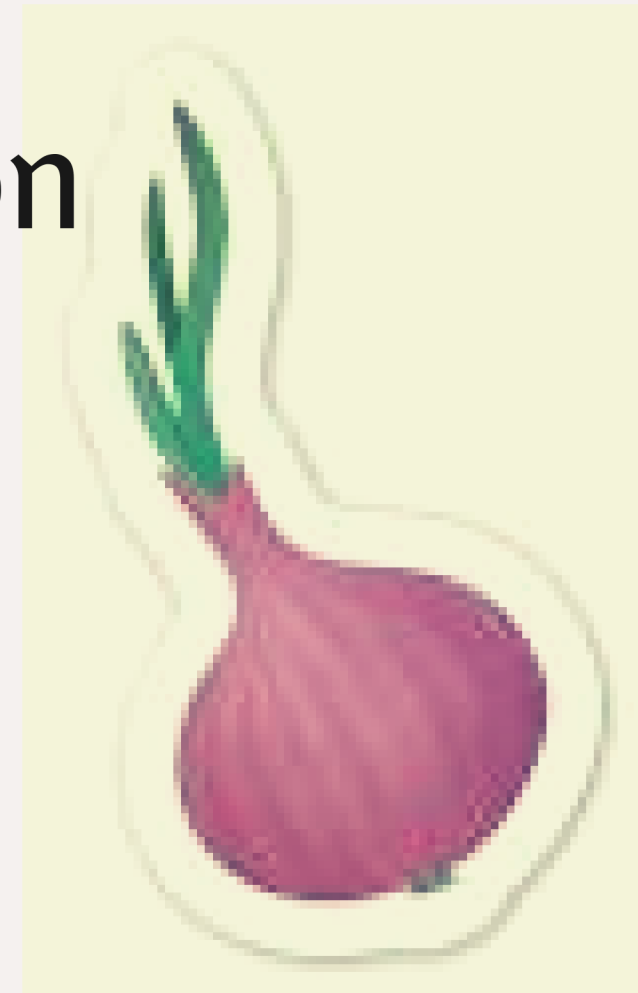
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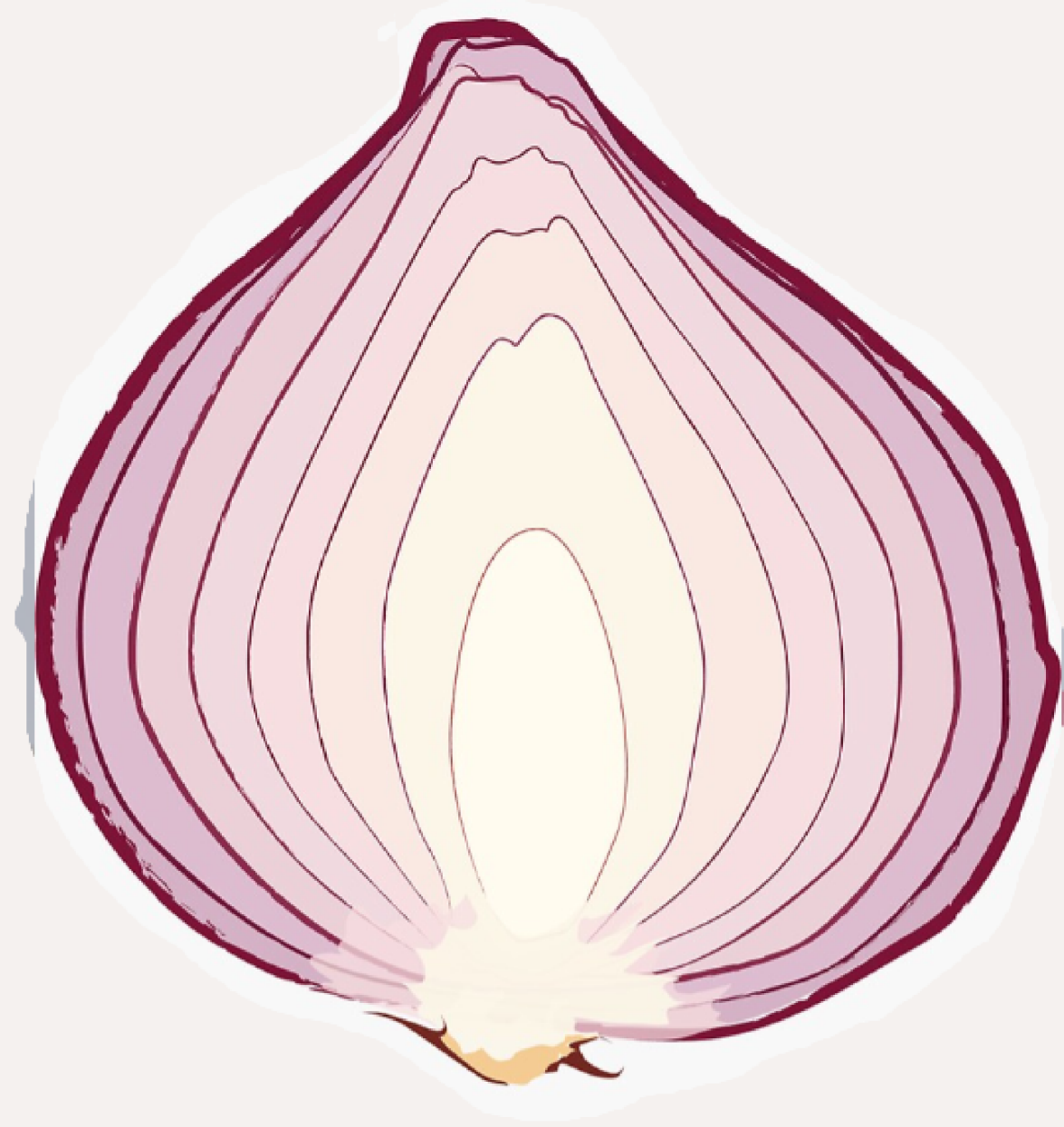
Monitoring and Preservation

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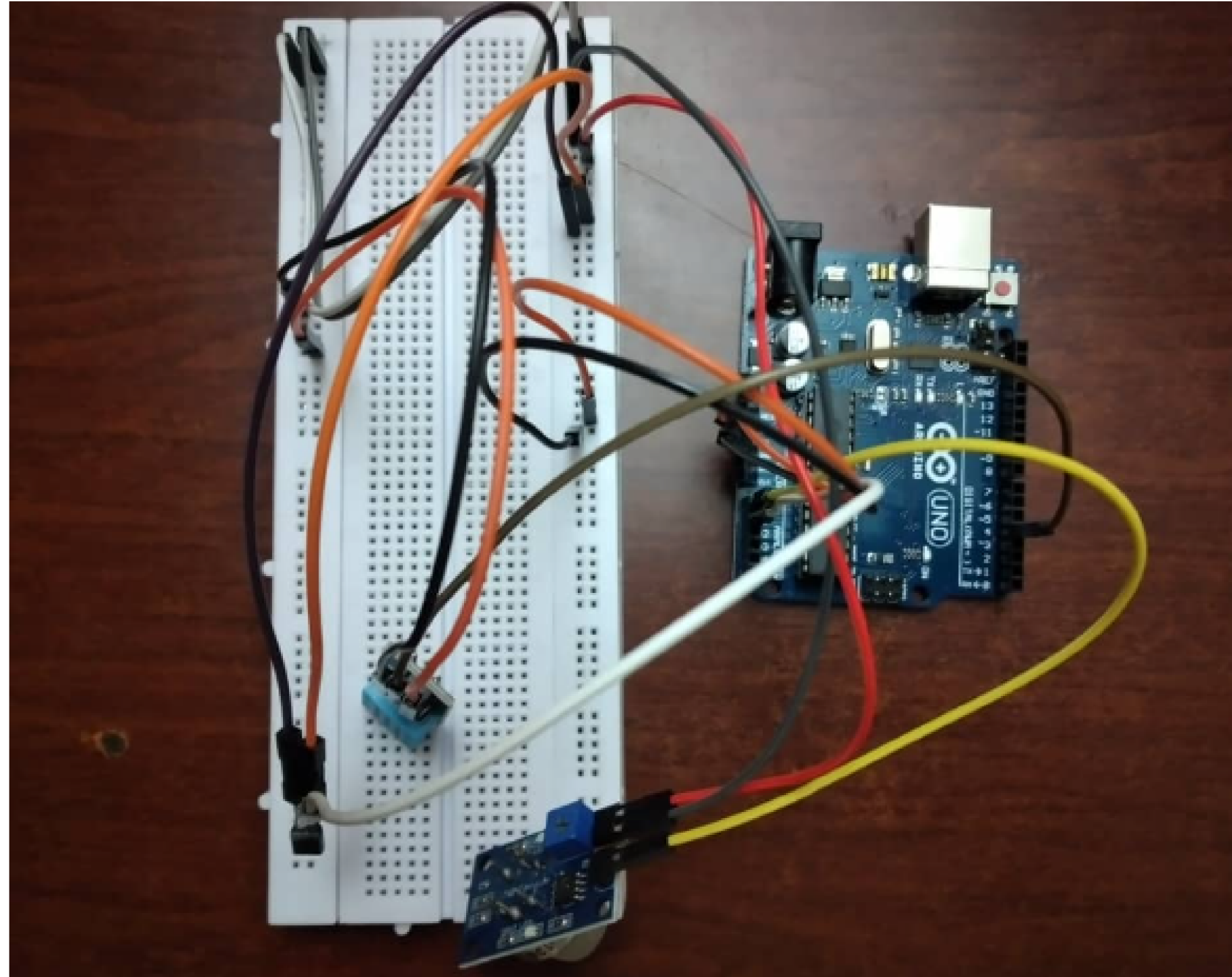




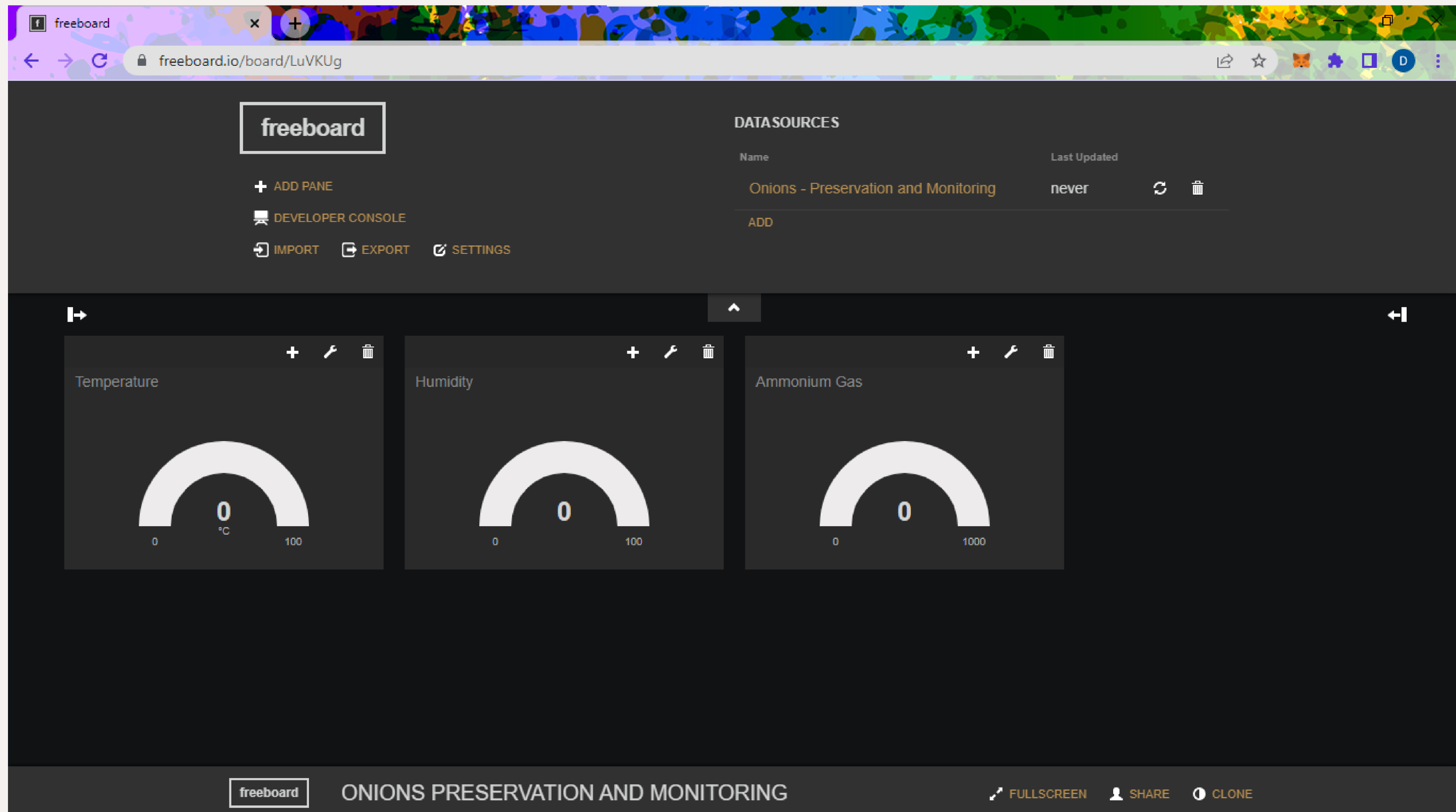
Abstract

In this review, the sensors are interfaced with Arduino UNO - DHT11 Humidity sensor will provide the humidity level of the environment, LM35 Temperature sensor will keep the measure of temperature and MQ135 Gas sensor will detect the content of ammonia gas. The freeboard which is a digital dashboard is used to monitor the sensor data visually online.

Circuit



Freeboard.io



Code

```
#include <DHT.h>
#define DHT11_PIN 4
#define LM35_PIN A1
#define MQ135_PIN A0

DHT dht(DHT11_PIN, DHT11);
int gas_read = 0;
int t = 0;
void setup() {
    pinMode(DHT11_PIN, INPUT);
    pinMode(MQ135_PIN,
INPUT);
    Serial.begin(9600);
    delay(1000);87
}
```

```
void loop(){
    delay(2000);
    gas_read = analogRead(MQ135_PIN);
    Serial.print("Ammonium: ");
    Serial.print(gas_read);

    int h = dht.readHumidity();
    Serial.print("\tHumidity: ");
    Serial.print(h);

    int temp_val;
    int temp;
    temp_val = analogRead(LM35_PIN);
    temp = (temp_val * 500) / 1023;
    Serial.print("\tTemperature: ");
    Serial.print(temp);
    Serial.println(" C");
    delay(2000);
}
```

Thank You!