

EU-IOT HACKATHON

Team: 6 (Skills Training)

Project Title: Sustainable Irrigation

Challenge Domain: EU-IoT2 (IoT interfaces)

IoTHackathon URL: http://13.58.171.165/irriga/en/

Date: 28/06/2022

INTRODUCTION

Motivation

Reduce water consumption



















INTRODUCTION

Team

Esp. Felipe da Silva Braz, http://lattes.cnpg.br/8950385647983193 Specialized in Teaching in Technical Education at Centro Universitário Senac/SP and graduated in Computer Networking at Fatec de Mococa, he is currently studying Computer Engineering at Univesp and works at the Data Processing Center of the Municipality of São José do Rio Pardo/SP



Esp. Cassio Dias, https://www.linkedin.com/in/cassiohenrique/ Graduate in Process Management and Postgraduate in IT Management, both at Laureate International Universities. He is currently studying Computer Engineering at Univesp and works as Business Agility Specialist in AB-Inbev.



















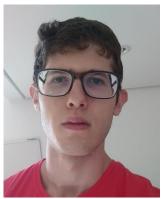
INTRODUCTION

Team

José Angelo de Oliveira, http://linkedin.com/in/jos%C3%A9-%C3%A2ngelo-de-oliveira-a1959159 He is currently studying Computer Engineering at Univesp.

Gabriel Negri, He is currently studying Computer Engineering at Univesp.





















The Need for the Training

The learning process can take place online or face-to-face























Training Objectives

- Automate irrigation system
- First contact with IoT





















Training Design and Structure

The training is divided into two parts:







Approximate value of the material student: R\$ 250.00 | 46 €



















Training Design and Structure

```
void loop()
      // C++ code
                                                                   20
                                                                        ⊟{
                                                                   21
                                                                           // Apply power to the soil moisture sensor
      int moisture = 0;
                                                                   22
                                                                           digitalWrite (A0, HIGH);
                                                                           delay(10); // Wait for 10 millisecond(s)
 5
      //Pino Bomba D'água
                                                                           moisture = analogRead(Al);
      const int motor = 13;
                                                                           // Turn off the sensor to reduce metal corrosion
                                                                   26
                                                                           // over time
 8
      void setup()
                                                                   27
 9
                                                                           digitalWrite(A0, LOW);
    28
                                                                           Serial.println(moisture);
10
        pinMode (A0, OUTPUT);
                                                                   29
11
        pinMode (Al, INPUT);
                                                                   30
                                                                           if (moisture < 200) { //Porcentagem Ex.: 200 = 20%
12
                                                                   31
                                                                             digitalWrite (motor, HIGH); //Ligar Bomba D'Água
13
        //Definir pinos de saída
                                                                   32
                                                                             delay(5000); //Tempo de Irrigação
14
        pinMode (motor, OUTPUT);
                                                                   33
15
                                                                   34
16
        Serial.begin(9600);
                                                                   35
                                                                           digitalWrite(motor, LOW); //Desligar Bomba D'Água
17
                                                                   36
                                                                           delay(1000); //Tempo entre verifições
18
                                                                   37
```

*Open-source code

















IMPACT



Sustainable Irrigation

EU-IoT Hackathon / Univesp



Sustainability and Production!

Posted on 2022-05-24 by cassio

The Sustainable Irrigation System Project aims to document ways to automate irrigation using solar energy and seek greater use in water consumption.



For more information visit our website: http://13.58.171.165/irriga/en/



















THANK YOU FOR YOUR ATTENTION



