

Disciplina: Nível 5: Vamos interligar as coisas com a nuvem 🍮 Aluno: André Luíz Ferreira de Souza https://github.com/adventureandre/iot-app-M4N5 Github:

Semestre: 4° Turma: 22.3

Link: https://hub-adv-webapp.azurewebsites.net/ Microatividade 1: Como Criar um Hub IoT do Azure

Dispositivo

Resultado

> ESTRUTURA DO CÓDIGO

> DOCKER HUB

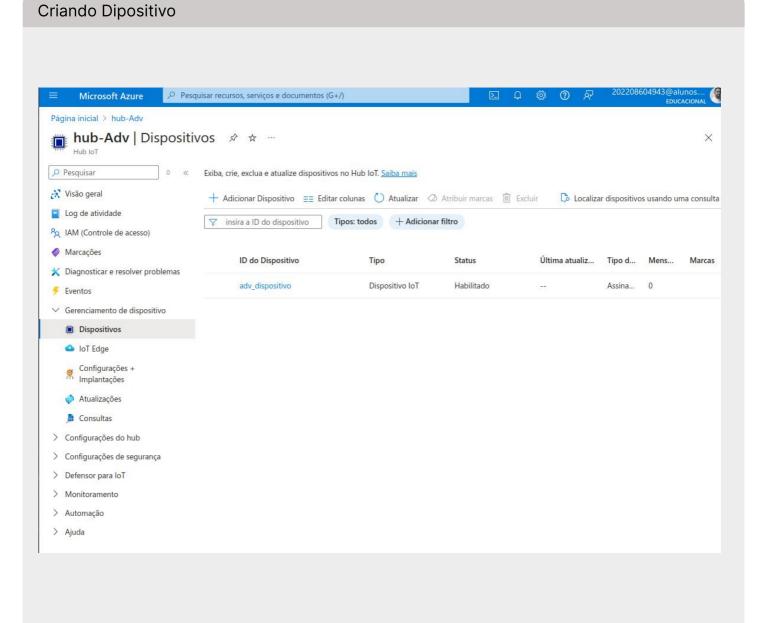
> ESTRUTURA DO CÓDIGO

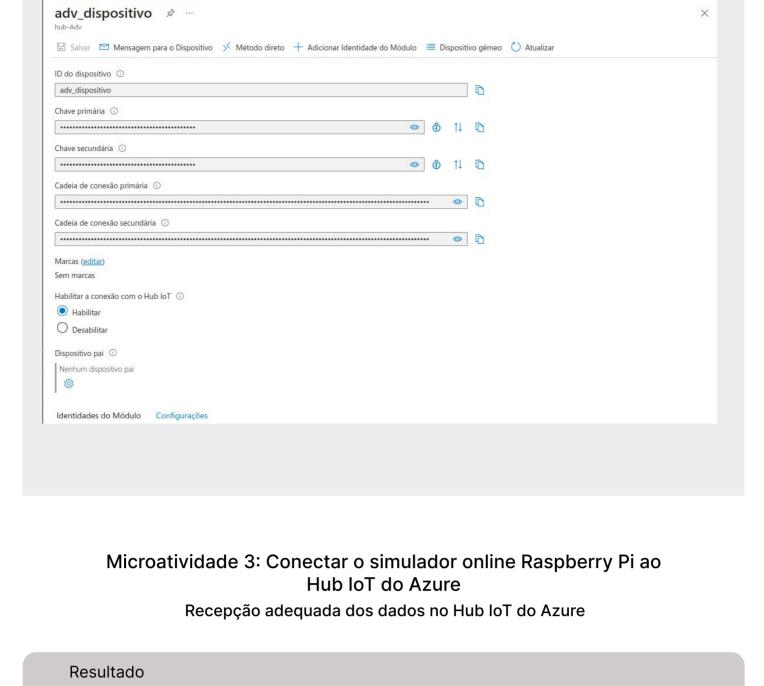
> DOCKER HUB

> AZURE CONTAINER REGISTRY

Microsoft Azure 

→ Pesquisar recursos, serviços e documentos (G+/)





const upi = require('wiring-pi');
const Client = require('azure-iot-device').Client;
const Ressage = require('azure-iot-device').Message;
const Protocol = require('azure-iot-device-mqtt').Mqt;
const BME280 = require('azure-iot-device-mqtt').Mqt; const BME280\_OPTION = {
 izcbusNo: 1, // defaults to 1
 izcAddress: BME280\_DEFAULT\_IZC\_ADDRESS() // defaults to 0x77



```
Microatividade 5: Gerenciando e interagindo com o Hub IoT
Resultado
                                                                                         // For simplicity, this sample sets the connection string in code.
// In a production environment, the recommended approach is to use
// an environment variable to make it available to your application
// or use an HSM or an x509 certificate.
// https://docs.microsoft.com/azure/iot-hub/iot-hub-devguide-security
```

> LINHA DO TEMPO > AZURE CONTAINER REGISTRY > SUGGESTED DOCKER HUB IMAGES

teste

// https://github.com/Azure/azure-iot-sdk-node
// Run 'npm install azure-iot-device-mqtt' to install the required libraries
// The sample connects to a device-specific MQTT endpoint on your IoT Hub.
var Mqtt = require('azure-iot-device-mqtt').Mqtt;
var DeviceClient = require('azure-iot)

var Message = require('azure-iot-device').Message;

```
Missão Prática | Vamos interligar as coisas com a nuvem! 👛
Link: https://hub-adv-webapp.azurewebsites.net/
GITHUB: https://github.com/adventureandre/iot-app-M4N5
     Resultado
            launch.json - web-apps-node-iot-hub-data-visualization - Visual Studio Code
     ecutar Terminal Ajuda
                      V □ C ↑ ↑ ♡ II II
                                                                           "program": "${workspaceFolder}/server.js",
"protocol": "inspector",
"smartStep": true,
        19
                                                                       Adicionar Configuração..
       PROBLEMAS (1)
```

Successfully created the EventHubConsumerClient from IoT Hub event hub-compatible connection stri ...ent-hub-reader.js:18

server. is:15

event-hub-reader.js:21

X 150% ☆

\* /\*
\* IoT Hub Raspberry Pi NodeJS - Microsoft Sample Code - Copyright (c) 2017 - License

const connectionString = 'HostName=hub-Adv.azure-devices.net;DeviceId=adv\_dispositiv
const LEDPin = 4;

essage: {"messageId":4,"deviceId":"Raspberry Pi Web Client","temperature":22

const wpi = require('wiring-pi');
const Client = require('azure-iot-device').Client;
const Message = require('azure-iot-device').Message;
const Protocol = require('azure-iot-device-mqtt').Mqtt;
const BME280 = require('bme280-sensor');

```
Resultado
                                                                                          launch.json - web-apps-node-iot-hub-data-visualization - Visual Studio Code
                                                     ecutar Terminal Ajuda
                                                                                                                                                           "program": "${workspaceFolder}/server.js",
"protocol": "inspector",
"smartStep": true,
"showAsyncStacks": true,
                                                                                                                                                           "sourceMaps : true,
"env": {
    "NODE_ENV": "local",
    "IotHubConnectionString": "HostName=hub-Adv.azure-devices.net;Share
    "EventHubConsumerGroup": "adv_hub_test"
    AdicionarConfiguração...
AdicionarConfiguração...
                                                                  19
                                                                      OBLEMAS 🕕 SAÍDA
                                                                 /home/andre-luiz/.nvm/versions/node/v20.13.1/bin/node ./server.js
Using IoT Hub connection string [HostName=hub-Adv.azure-devices.net;SharedAccessKeyName=iothubowner;SharedAcce ...<u>r.js:12</u>
ssKey=2Aye+j04FjcKiAh/X5oS35+fMSP7mDCqAIoTHyADc8=]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       server.js:15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       server.js:20
                                                                Listening on 3000.

Server.js:46

Successfully created the EventHubConsumerClient from IoT Hub event hub-compatible connection stri ...ent-hub-reader.js:18
                                                                | Signature | Sign
Resultado
```

Raspberry Pi Azure IoT Online Simulator

:: :: : ::: ::::: :

..... ..... ..... ..... .....

```
Resultado
1 device adv_dispositivo
                                                           Temperature & Humidity Real-time Data
                                              Temperature Humidity
 (3c)
                                                                                                      40
```

fritzing