Unity3D – Uduino MQTT

Main Topic: **Unity 3D** – Sensor Input und MQTT Geschwindigkeitstest

Keywords: Uduino Analogdaten [A0], MQTT, senden/empfangen

C1 Steuerungscode

```
using System.Collections;
using System.Collections.Generic;
using UnityEngine;
using UnityEngine.UI;
using Uduino;
using uPLibrary.Networking.M2Mqtt.Messages;
using M2MqttUnity;

public class GameLogicMove : M2MqttUnityClient
{
    private UduinoManager u;
    private M2MqttUnityClient mqtt;
    public GameObject ballUduino;
    public GameObject ballMQTT;
    private int drehOldPotiValue = 0;

    protected override void Start()
    {
           = UduinoManager.Instance;
           pinMode(AnalogPin.A0, PinMode.Input);
        brokerAddress = "dmt.fh-joanneum.at";
        mqttUserName = "dmt";
        mqttPassword = "xxxxxx";
        isEncrypted = false;
        autoConnect = true;
        base.Start();
    }
    protected override void Update()
    {
        int drehPotiValue = 0;
        base.Update();
        drehPotiValue = u.analogRead(AnalogPin.A0); // 0 to 1023
        ballUduino.transform.position =
          new Vector3(-14.0f * drehPotiValue / 1023.0f + 7.0f,-1.5f,0);
        if ( Mathf.Abs(drehOldPotiValue-drehPotiValue) > 3)
            MQTTPublish("uduino/analogX", drehPotiValue.ToString());
        drehOldPotiValue = drehPotiValue;
    }
    protected override void Awake()
    {
        UduinoManager.Instance.alwaysRead = true;
        base.Awake();
    }
    protected override void SubscribeTopics()
    {
        client.Subscribe(new string[] { "uduino/analogX" },
          new byte[] { MqttMsgBase.QOS_LEVEL_EXACTLY_ONCE });
    }
    protected override void DecodeMessage(string topic, byte[] message)
    {
        string msg = System.Text.Encoding.UTF8.GetString(message);
        if (topic == "uduino/analogX")
            ballMQTT.transform.position =
              new Vector3(-14.0f * int.Parse(msg) / 1023.0f + 7.0f, -2.5f, 0);
    }
}
```