

MQTT_Reviewer

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1 Namespace Index

1.1 Package List

Here are the packages with brief descriptions (if available):

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2 Class Index

2.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

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3 File Index

3.1 File List

Here is a list of all files with brief descriptions:

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4 Namespace Documentation

4.1 mqtt Namespace Reference

Classes

- class [Program](#)
Main program class for handling MQTT communication and database operations.

4.2 mqtt2 Namespace Reference

Classes

- class [EndDeviceIds](#)
Represents end device IDs.
- class [GatewayIds](#)
Represents gateway IDs.
- class **LHTData**
Represents the data received from an LHT device.
- class [LHTDecodedPayload](#)
Represents the decoded payload of an LHT uplink message.
- class [LHTUplinkMessage](#)
Represents an uplink message from an LHT device.
- class [Location](#)
Represents location information (latitude, longitude, altitude).
- class **MKRData**
Represents the data received from an MKR device.
- class [MKRDecodedPayload](#)
Represents the decoded payload of an MKR uplink message.
- class [MKRUplinkMessage](#)
Represents an uplink message from an MKR device.
- class [RxMetadata](#)
Represents receive (RX) metadata.

5 Class Documentation

5.1 mqtt2.EndDeviceIds Class Reference

Represents end device IDs.

Properties

- string [device_id](#) [get, set]
Gets or sets the device ID.

5.1.1 Detailed Description

Represents end device IDs.

5.1.2 Property Documentation

device_id

```
string mqtt2.EndDeviceIds.device_id [get], [set]
```

Gets or sets the device ID.

The documentation for this class was generated from the following file:

- C:/Users/samer/OneDrive/Desktop/MQTTReciever/mqtt2/[LHTData.cs](#)

5.2 mqtt2.GatewayIds Class Reference

Represents gateway IDs.

Properties

- string [gateway_id](#) [get, set]
Gets or sets the gateway ID.

5.2.1 Detailed Description

Represents gateway IDs.

5.2.2 Property Documentation

gateway_id

```
string mqtt2.GatewayIds.gateway_id [get], [set]
```

Gets or sets the gateway ID.

The documentation for this class was generated from the following file:

- C:/Users/samer/OneDrive/Desktop/MQTTReciever/mqtt2/[LHTData.cs](#)

5.3 mqtt2.LHTDecodedPayload Class Reference

Represents the decoded payload of an LHT uplink message.

Properties

- double [BatV](#) [get, set]
Gets or sets the battery voltage.
- int [Bat_status](#) [get, set]
Gets or sets the battery status.
- double [TempC_SHT](#) [get, set]
Gets or sets the temperature from the SHT sensor.
- double? [TempC_DS](#) [get, set]
Gets or sets the temperature from the DS sensor (nullable).
- double [Hum_SHT](#) [get, set]
Gets or sets the humidity from the SHT sensor.
- int [ILL_lx](#) [get, set]
Gets or sets the ambient light intensity.

5.3.1 Detailed Description

Represents the decoded payload of an LHT uplink message.

5.3.2 Property Documentation

Bat_status

```
int mqtt2.LHTDecodedPayload.Bat_status [get], [set]
```

Gets or sets the battery status.

BatV

```
double mqtt2.LHTDecodedPayload.BatV [get], [set]
```

Gets or sets the battery voltage.

Hum_SHT

```
double mqtt2.LHTDecodedPayload.Hum_SHT [get], [set]
```

Gets or sets the humidity from the SHT sensor.

ILL_lx

```
int mqtt2.LHTDecodedPayload.ILL_lx [get], [set]
```

Gets or sets the ambient light intensity.

TempC_DS

```
double? mqtt2.LHTDecodedPayload.TempC_DS [get], [set]
```

Gets or sets the temperature from the DS sensor (nullable).

TempC_SHT

```
double mqtt2.LHTDecodedPayload.TempC_SHT [get], [set]
```

Gets or sets the temperature from the SHT sensor.

The documentation for this class was generated from the following file:

- C:/Users/samer/OneDrive/Desktop/MQTTReciever/mqtt2/[LHTData.cs](#)

5.4 mqtt2.LHTUplinkMessage Class Reference

Represents an uplink message from an LHT device.

Properties

- [LHTDecodedPayload decoded_payload](#) [get, set]
Gets or sets the decoded payload of the LHT uplink message.
- List< [RxMetadata](#) > [rx_metadata](#) [get, set]
Gets or sets the list of receive (RX) metadata for the uplink message.
- string [consumed_airtime](#) [get, set]
Gets or sets the airtime consumed by the uplink message.

5.4.1 Detailed Description

Represents an uplink message from an LHT device.

5.4.2 Property Documentation

consumed_airtime

```
string mqtt2.LHTUplinkMessage.consumed_airtime [get], [set]
```

Gets or sets the airtime consumed by the uplink message.

decoded_payload

```
LHTDecodedPayload mqtt2.LHTUplinkMessage.decoded_payload [get], [set]
```

Gets or sets the decoded payload of the LHT uplink message.

rx_metadata

```
List<RxMetadata> mqtt2.LHTUplinkMessage.rx_metadata [get], [set]
```

Gets or sets the list of receive (RX) metadata for the uplink message.

The documentation for this class was generated from the following file:

- C:/Users/samer/OneDrive/Desktop/MQTTReciever/mqtt2/[LHTData.cs](#)

5.5 mqtt2.Location Class Reference

Represents location information (latitude, longitude, altitude).

Properties

- double [latitude](#) [get, set]
Gets or sets the latitude.
- double [longitude](#) [get, set]
Gets or sets the longitude.
- int? [altitude](#) [get, set]
Gets or sets the altitude (nullable).

5.5.1 Detailed Description

Represents location information (latitude, longitude, altitude).

5.5.2 Property Documentation

altitude

```
int? mqtt2.Location.altitude [get], [set]
```

Gets or sets the altitude (nullable).

latitude

```
double mqtt2.Location.latitude [get], [set]
```

Gets or sets the latitude.

longitude

```
double mqtt2.Location.longitude [get], [set]
```

Gets or sets the longitude.

The documentation for this class was generated from the following file:

- C:/Users/samer/OneDrive/Desktop/MQTTReciever/mqtt2/LHTData.cs

5.6 mqtt2.MKRDecodedPayload Class Reference

Represents the decoded payload of an MKR uplink message.

Properties

- double [temperature](#) [get, set]
Gets or sets the temperature reported by the MKR device.
- double [humidity](#) [get, set]
Gets or sets the humidity reported by the MKR device.
- int [light](#) [get, set]
Gets or sets the light intensity reported by the MKR device.
- int [pressure](#) [get, set]
Gets or sets the atmospheric pressure reported by the MKR device.

5.6.1 Detailed Description

Represents the decoded payload of an MKR uplink message.

5.6.2 Property Documentation

humidity

```
double mqtt2.MKRDecodedPayload.humidity [get], [set]
```

Gets or sets the humidity reported by the MKR device.

light

```
int mqtt2.MKRDecodedPayload.light [get], [set]
```

Gets or sets the light intensity reported by the MKR device.

pressure

```
int mqtt2.MKRDecodedPayload.pressure [get], [set]
```

Gets or sets the atmospheric pressure reported by the MKR device.

temperature

```
double mqtt2.MKRDecodedPayload.temperature [get], [set]
```

Gets or sets the temperature reported by the MKR device.

The documentation for this class was generated from the following file:

- C:/Users/samer/OneDrive/Desktop/MQTTReciever/mqtt2/[MKRData.cs](#)

5.7 mqtt2.MKRUplinkMessage Class Reference

Represents an uplink message from an MKR device.

Properties

- [MKRDecodedPayload decoded_payload](#) [get, set]
Gets or sets the decoded payload of the MKR uplink message.
- List< [RxMetadata](#) > [rx_metadata](#) [get, set]
Gets or sets the list of receive (RX) metadata for the uplink message.
- string [consumed_airtime](#) [get, set]
Gets or sets the airtime consumed by the uplink message.

5.7.1 Detailed Description

Represents an uplink message from an MKR device.

5.7.2 Property Documentation

consumed_airtime

```
string mqtt2.MKRUplinkMessage.consumed_airtime [get], [set]
```

Gets or sets the airtime consumed by the uplink message.

decoded_payload

```
MKRDecodedPayload mqtt2.MKRUplinkMessage.decoded_payload [get], [set]
```

Gets or sets the decoded payload of the MKR uplink message.

rx_metadata

```
List<RxMetadata> mqtt2.MKRUplinkMessage.rx_metadata [get], [set]
```

Gets or sets the list of receive (RX) metadata for the uplink message.

The documentation for this class was generated from the following file:

- C:/Users/samer/OneDrive/Desktop/MQTTReciever/mqtt2/[MKRData.cs](#)

5.8 mqtt.Program Class Reference

Main program class for handling MQTT communication and database operations.

Static Private Member Functions

- static async Task [Main](#) (string[] args)
Main entry point of the program.
- static void [UploadToDatabase](#) (LHTData parsedPayload)
Uploads LHT sensor data to the database.
- static void [UploadToDatabase](#) (MKRData parsedPayload)
Uploads MKR sensor data to the database.

5.8.1 Detailed Description

Main program class for handling MQTT communication and database operations.

5.8.2 Member Function Documentation**Main()**

```
static async Task mqtt.Program.Main (
    string[] args ) [static], [private]
```

Main entry point of the program.

Parameters

<i>args</i>	Command-line arguments.
-------------	-------------------------

UploadToDatabase() [1/2]

```
static void mqtt.Program.UploadToDatabase (
    LHTData parsedPayload ) [static], [private]
```

Uploads LHT sensor data to the database.

Parameters

<i>parsedPayload</i>	Parsed LHT sensor data.
----------------------	-------------------------

UploadToDatabase() [2/2]

```
static void mqtt.Program.UploadToDatabase (
    MKRData parsedPayload ) [static], [private]
```

Uploads MKR sensor data to the database.

Parameters

<i>parsedPayload</i>	Parsed MKR sensor data.
----------------------	-------------------------

The documentation for this class was generated from the following file:

- C:/Users/samer/OneDrive/Desktop/MQTTReciever/mqtt2/[Program.cs](#)

5.9 mqtt2.RxMetadata Class Reference

Represents receive (RX) metadata.

Properties

- [GatewayIds gateway_ids](#) [get, set]
Gets or sets the gateway IDs.
- int [rssi](#) [get, set]
Gets or sets the Received Signal Strength Indicator (RSSI).
- double [snr](#) [get, set]
Gets or sets the Signal-to-Noise Ratio (SNR).
- [Location location](#) [get, set]
Gets or sets the location information.
- DateTime [received_at](#) [get, set]
Gets or sets the timestamp when the data was received.

5.9.1 Detailed Description

Represents receive (RX) metadata.

5.9.2 Property Documentation

gateway_ids

[GatewayIds](#) mqtt2.RxMetadata.gateway_ids [get], [set]

Gets or sets the gateway IDs.

location

```
Location mqtt2.RxMetadata.location [get], [set]
```

Gets or sets the location information.

received_at

```
DateTime mqtt2.RxMetadata.received_at [get], [set]
```

Gets or sets the timestamp when the data was received.

rsi

```
int mqtt2.RxMetadata.rssi [get], [set]
```

Gets or sets the Received Signal Strength Indicator (RSSI).

snr

```
double mqtt2.RxMetadata.snr [get], [set]
```

Gets or sets the Signal-to-Noise Ratio (SNR).

The documentation for this class was generated from the following file:

- C:/Users/samer/OneDrive/Desktop/MQTTReciever/mqtt2/[LHTData.cs](#)

6 File Documentation

6.1 C:/Users/samer/OneDrive/Desktop/MQTTReciever/mqtt2/LHTData.cs File Reference

Classes

- class **mqtt2.LHTData**
Represents the data received from an LHT device.
- class [mqtt2.Location](#)
Represents location information (latitude, longitude, altitude).
- class [mqtt2.GatewayIds](#)
Represents gateway IDs.
- class [mqtt2.RxMetadata](#)
Represents receive (RX) metadata.
- class [mqtt2.EndDeviceIds](#)
Represents end device IDs.
- class [mqtt2.LHTUplinkMessage](#)
Represents an uplink message from an LHT device.
- class [mqtt2.LHTDecodedPayload](#)
Represents the decoded payload of an LHT uplink message.

Namespaces

- namespace [mqtt2](#)

6.2 C:/Users/samer/OneDrive/Desktop/MQTTReciever/mqtt2/MKRData.cs File Reference

Classes

- class [mqtt2.MKRData](#)
Represents the data received from an MKR device.
- class [mqtt2.MKRUplinkMessage](#)
Represents an uplink message from an MKR device.
- class [mqtt2.MKRDecodedPayload](#)
Represents the decoded payload of an MKR uplink message.

Namespaces

- namespace [mqtt2](#)

6.3 C:/Users/samer/OneDrive/Desktop/MQTTReciever/mqtt2/Program.cs File Reference

Classes

- class [mqtt.Program](#)
Main program class for handling MQTT communication and database operations.

Namespaces

- namespace [mqtt](#)

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