X-CubeSat Controller language documentation

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Introduction

In this file you will be able to find the definitions of the language used in the X-CubeSat Controller.

Types:

- **string**
- **data**
- **bool**
- **int**

Functions:

- **bool SEND(string)**
- **bool SAVE(data, string)**
- **bool IF(bool)**
- **bool DECLARE(string, string)**
- **bool EQ(int, int)**
- **bool LL(int, int)**
- **bool LEQ(int, int)**
- **string FILE(string)**
- **string APPENDDATE(string)**
- **string FORMAT(string)**
- **data RECEIVE(string)**

SEND()

bool SEND(string)

- **Params:** string to be sent to the interface (often the modem).

- **Return:** boolean value indicating if the send process was successfully accomplished (true) or not (false).

RECEIVE()

data RECEIVE(string)

- **Params:** string with the name of the format that will be received.

- **Return:** read data from the interface (modem) with the right format associated.

SAVE()

bool SAVE(data, string)

- **Params:**

  1. data with the data to be saved.
  2. string with the file name that the data will be saved.

- **Return:** boolean indicating if the save was successful (true) or not (false).

IF()

bool IF (bool)

- **Params:** if true to run what is inside of , else to continue.

- **Return:** true if it should run the or false if it should continue.

DECLARE()

> **bool DECLARE(string, string)**
>
> - **Params:**
>
>   1. the type of the new variable.
>   2. the name of the new variable.
>
> - **Return:** true if the declaration was successful, false otherwise.

EQ()

> **bool EQ(int, int)**
>
> - **Params:**
>
>   1. first element to compare.
>   2. second element to compare.
>
> - **Return:** true if first element equals the second one, false otherwise.

LL()

> **bool LL(int, int)**
>
> - **Params:**
>
>   1. first element to compare.
>   2. second element to compare.
>
> - **Return:** true if first element is less than the second one, false otherwise.

LEQ()

> **bool LEQ(int, int)**
>
> - **Params:**
>
>   1. first element to compare.
>   2. second element to compare.
>
> - **Return:** true if first element is less or equal the second one, false otherwise.

FILE()

string FILE(string)

- **Params:** string with the name of the file to be opened.

- **Return:** string with the content of the file.

APPENDDATE()

string APPENDDATE(string)

- **Params:** string.

- **Return:** the parameter appended with the date (dd/mm/yyyy:hh:mm:ss) of execution of this function.

FORMAT()

string FORMAT(string)

- **Params:** string with the name of the format.

- **Return:** string with the name of the format.