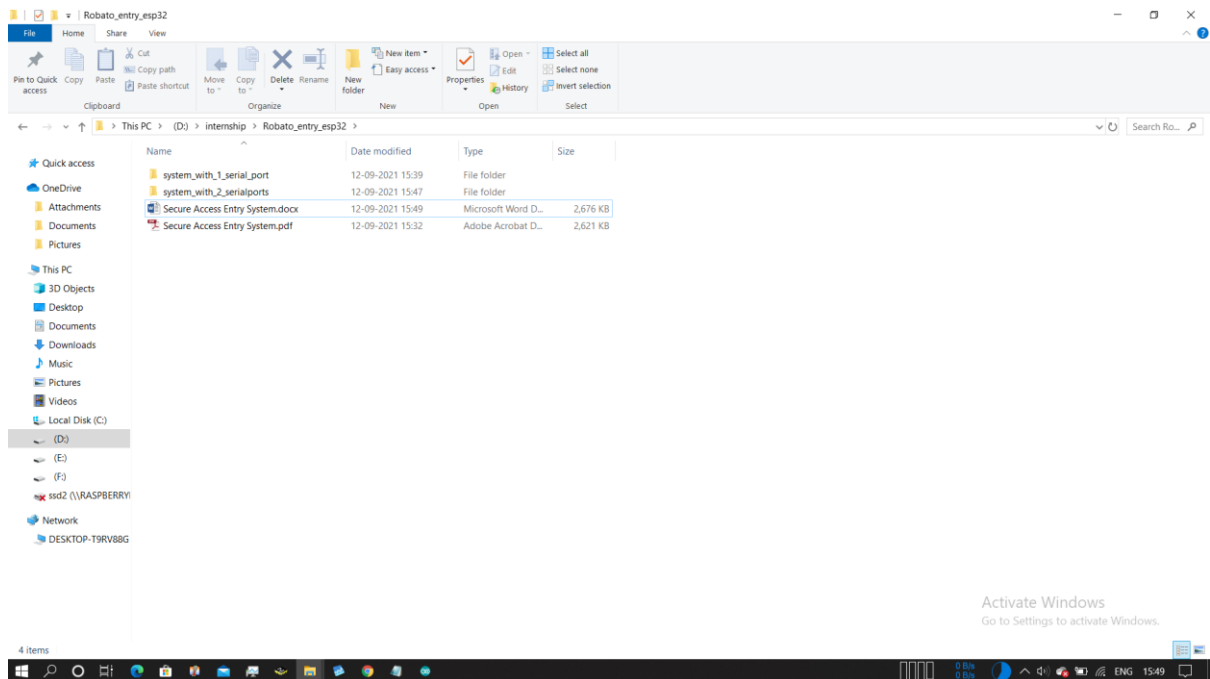


# Secure Access Entry System



## system\_with\_1\_serial\_port folder files

These files take input parameters and also shows debug outputs on same serial port

## system\_with\_2\_serial\_ports folder files

Takes input from Serial port2 and shows output on serial port2

- Upload ESP32\_ENTRY\_WITHOUT\_BUSY\_STATE.ino code to the esp32 and open the serial monitor

```
ROBATO_FINAL_CODE_FLASH_WHILELOOP_UPDATE | Arduino 1.8.10 Hourly Build 2019/05/21 09:33
File Edit Sketch Tools Help

ROBATO_FINAL_CODE_FLASH_WHILELOOP_UPDATE $
1 //{"gid":"1","mid":"1","sc":"0000000010110011","at":"I","rid":"1234567876","dt":"12092021","st":"00:00","et":"23:00"}
2 /*
3  * INCLUDE NTP CLIENT LIBRARY
4  * IF YOU ARE UPLOADING THE CODE FOR FIRST TIME,DIRECTLY UPLOAD THE CODE WITHOUT ANY CHANGES AND send the commands below and press reset
5  *
6  *
7  */
8 /*
9 *****COMMANDS NEED TO BE SEND TO SERIAL PORT FOR CONFIGURING*****
10 erase // to erase the eeprom and spiffs if any unwanted values are there,this is done when first time flashing code to esp32 or for explicit
11 {"ssid":"stijo"} //your wifi ssid
12 {"password":"stijoseph"} //your wifi password
13 {"devId":"0001"} //set the device id
14 {"gymid":"1"} //set the gymid
15 {"serid":"0000000010110011"} //set the service id
16 {"clockset":"16:20;23;05;07;21"} //set the clock manually
17 inclock //set the internet clock to rtc
18 clock //printout current rtc clock datas
19 load //printout the ssid,password,deviceid,gymid,servicecode stored in eeprom
20 *****
21 *
22 *AFTER SETTING UP ALL PARAMETERS PRESS RESET
23 */
24 //FORMAT-{"gid":"1","mid":"1","sc":"0000000010110011","at":"I","rid":"1234567876","dt":"DDMMYY","st":"HH:MM","et":"HH:MM"}
25 //EXAMPLE BELOW OF INPUT JSON FORMAT MAKE SURE YOU ENTER THE CURRENT DAY'S DATE .THE START TIME AND END TIME SHOULD BE BETWEEN YOUR CURRENT TIME ELSE PRINTOUT WILL BE
26 //{"gid":"1","mid":"1","sc":"0000000010110011","at":"I","rid":"1234567876","dt":"08072021","st":"08:00","et":"20:00"}
27
28 //{"gid":"1","mid":"1","sc":"0000000010110011","at":"I","rid":"1234567876","dt":"09092021","st":"13:00","et":"20:00"} //wrong date wrong start time end
29 //{"gid":"1","mid":"1","sc":"0000000010110011","at":"I","rid":"1234567876","dt":"09092021","st":"13:00","et":"20:00"} //wrong date wrong start time end
30
Leaving...
Hard resetting via RTS pin...
Activate Windows
Go to Settings to activate Windows.
ESP32 Dev Module on COM14
0 B/s
0 B/s
ENG 1451
```

- Copy the command from line 10
- “erase” and enter into the serial monitor

```
1 //{"gid":"I","mid":"I","sc":"0000000010110011","at":"I","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00"}
2 /*
3 * INCLUDE NTP CLIENT LIBRARY
4 * IF YOU ARE UPLOADING THE CODE FOR FIRST TIME, DIRECTLY UPLOAD THE CODE WITHOUT ANY CHANGES AND send the commands below and press reset
5 *
6 *
7 *
8 */
9 //
10 //
11 //
12 //
13 //
14 //
15 //
16 //
17 //
18 //
19 //
20 //
21 //
22 //
23 //
24 //
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91 //
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94 //
95 //
96 //
97 //
98 //
99 //
100 //
```

Serial Monitor Output:

```
14:36:44.441 -> device is resetting wait 2 sec
14:36:44.488 -> Guru Meditation Error: Core 1 panic'ed (InstrFetchProhibited). Exception was unhandled.
14:36:44.582 -> Core 1 register dump:
14:36:44.582 -> PC      : 0x00000000 PS      : 0x00060a30 A0      : 0x800de53c A1      : 0x3ffbf1d50
14:36:44.676 -> A2      : 0x00000000 A3      : 0x3ffcf1d4 A4      : 0x3f4005f5 A5      : 0x3ffc20b4
14:36:44.769 -> A6      : 0x0000000c A7      : 0x0000000d A8      : 0x800d5c18 A9      : 0x3ffbf1d30
14:36:44.863 -> A10     : 0x00000020 A11     : 0x0000001e A12     : 0x3f400143 A13     : 0x3ffcf1e40
14:36:44.957 -> A14     : 0x00000000 A15     : 0x3ffbf1d2c SAR     : 0x00000017 EXCCAUSE: 0x00000014
14:36:45.051 -> EXCVADDR: 0x00000000 LBEG    : 0x400014fd LEND    : 0x4000150d LCOUNT    : 0xffffffff
14:36:45.144 ->
14:36:45.144 -> ELF file SHA256: 0000000000000000
14:36:45.191 ->
14:36:45.191 -> Backtrace: 0x00000000:0x3ffbf1d50 0x400de539:0x3ffbf1fb0 0x4008a5fe:0x3ffbf1fd0
14:36:45.285 ->
14:36:45.285 -> Rebooting...
14:36:45.285 -> [fzYfmbbCR!!f6lfssid not set
14:36:45.754 -> password not set
14:36:45.754 -> deviceid not set
14:36:45.801 -> gym not set
14:36:45.801 -> serviceid not set
```

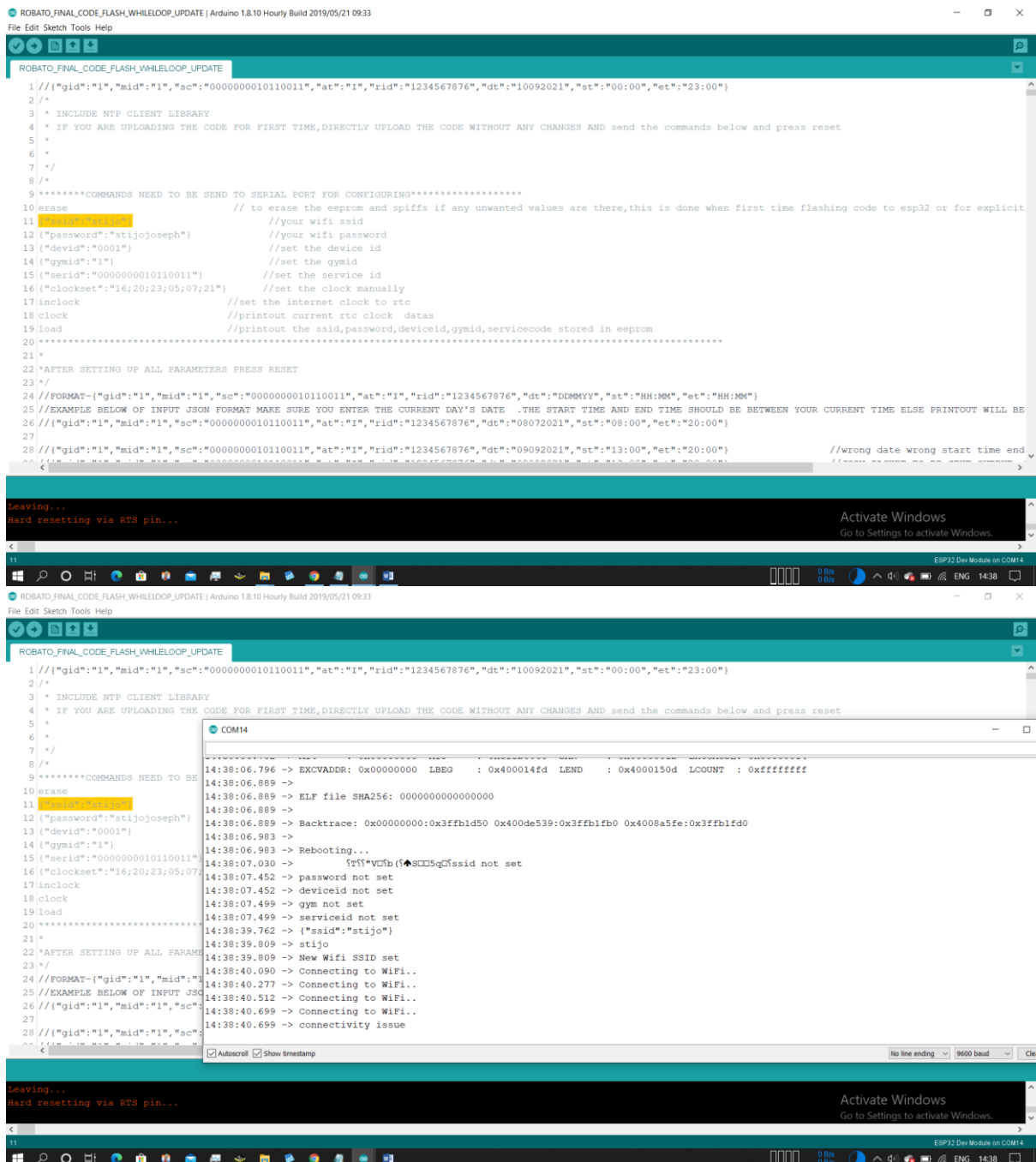
- All datas will get erased and the system restarts

Next copy the line 11

```
{"ssid":"stijo"}
```

```
{"ssid":"yourSSID"}
```

- Replace it with your ssid and enter into serial monitor



ROBATO\_FINAL\_CODE\_FLASH\_WHILELOOP\_UPDATE | Arduino 1.8.10 Hourly Build 2019/05/21 09:33

```

1 //{"gid":"1","mid":"1","sc":"0000000010110011","at":"I","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00"}
2 /*
3  * INCLUDE NTP CLIENT LIBRARY
4  * IF YOU ARE UPLOADING THE CODE FOR FIRST TIME,DIRECTLY UPLOAD THE CODE WITHOUT ANY CHANGES AND send the commands below and press reset
5  *
6  *
7  */
8 /*
9 *****COMMANDS NEED TO BE SEND TO SERIAL PORT FOR CONFIGURING*****
10 erase // to erase the eeprom and spiffs if any unwanted values are there,this is done when first time flashing code to esp32 or for explicit
11 //your wifi ssid
12 {"password":"stijoseph"} //your wifi password
13 {"devId":"0001"} //set the device id
14 {"gymid":"1"} //set the gymid
15 {"serid":"0000000010110011"} //set the service id
16 {"clockset":"16:20;23;05;07;21"} //set the clock manually
17 inclock //set the internet clock to rtc
18 clock //printout current rtc clock datas
19 load //printout the ssid,password,deviceid,gymid,servicecode stored in eeprom
20 *****
21 *
22 *AFTER SETTING UP ALL PARAMETERS PRESS RESET
23 */
24 //FORMAT-{"gid":"1","mid":"1","sc":"0000000010110011","at":"I","rid":"1234567876","dt":"DDMMYY","st":"HH:MM","et":"HH:MM"}
25 //EXAMPLE BELOW OF INPUT JSON FORMAT MAKE SURE YOU ENTER THE CURRENT DAY'S DATE .THE START TIME AND END TIME SHOULD BE BETWEEN YOUR CURRENT TIME ELSE PRINTOUT WILL BE
26 //{"gid":"1","mid":"1","sc":"0000000010110011","at":"I","rid":"1234567876","dt":"08072021","st":"08:00","et":"20:00"}
27
28 //{"gid":"1","mid":"1","sc":"0000000010110011","at":"I","rid":"1234567876","dt":"09092021","st":"13:00","et":"20:00"} //wrong date wrong start time end

```

Leaving...  
Hard resetting via RTS pin...

Activate Windows  
Go to Settings to activate Windows.

ESP32 Dev Module on COM14

```

14:38:06.796 -> EXCVADDR: 0x00000000 LBEG : 0x400014fd LEND : 0x4000150d LCOUNT : 0xffffffff
14:38:06.889 ->
14:38:06.889 -> ELF file SHA256: 0000000000000000
14:38:06.889 ->
14:38:06.889 -> Backtrace: 0x00000000:0x3ffb1d50 0x400de539:0x3ffb1fb0 0x4008a5fe:0x3ffb1fd0
14:38:06.983 ->
14:38:06.983 -> Rebooting...
14:38:07.030 ->
14:38:07.452 -> password not set
14:38:07.452 -> deviceid not set
14:38:07.499 -> gym not set
14:38:07.499 -> serviceid not set
14:38:39.762 -> {"ssid":"stijo"}
14:38:39.809 -> stijo
14:38:39.809 -> New Wifi SSID set
14:38:40.090 -> Connecting to Wifi..
14:38:40.277 -> Connecting to Wifi..
14:38:40.512 -> Connecting to Wifi..
14:38:40.699 -> Connecting to Wifi..
14:38:40.699 -> connectivity issue

```

Autoscroll Show timestamp

No line ending 9600 baud

Leaving...  
Hard resetting via RTS pin...

Activate Windows  
Go to Settings to activate Windows.

ESP32 Dev Module on COM14

- Output will be new Wifi ssid set ,next silimlary copy 12<sup>th</sup> line and set password

```
1 //{"gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00"}
2 /*
3  * INCLUDE NTP CLIENT LIBRARY
4  * IF YOU ARE UPLOADING THE CODE FOR FIRST TIME, DIRECTLY UPLOAD THE CODE WITHOUT ANY CHANGES AND send the commands below and press reset
5  *
6  *
7  */
8 /*
9  *****COMMANDS NEED TO BE
10 erase
11 {"ssid":"stijo"}
12 {"password":"stijoseph"}
13 {"devId":"0001"}
14 {"gymid":"1"}
15 {"serId":"0000000010110011"}
16 {"clockset":"16:20;23;05;07"}
17 inclock
18 clock
19 load
20 *****
21 *
22 *AFTER SETTING UP ALL PARAM
23 */
24 //FORMAT-{"gid":"1","mid":"1","sc":"0000000010110011"}
25 //EXAMPLE BELOW OF INPUT JSON
26 //{"gid":"1","mid":"1","sc":"0000000010110011"}
27
28 //{"gid":"1","mid":"1","sc":"0000000010110011"}
29
```

Serial Monitor (COM14):

```
14:38:06.889 -> Backtrace: 0x00000000:0x3ffb1d50 0x400de539:0x3ffb1fb0 0x4008a5fe:0x3ffb1fd0
14:38:06.983 ->
14:38:06.983 -> Rebooting...
14:38:07.030 -> {ssid}vqfb{f}SSID5qfssid not set
14:38:07.452 -> password not set
14:38:07.452 -> deviceid not set
14:38:07.499 -> gym not set
14:38:07.499 -> serviceid not set
14:38:39.762 -> {"ssid":"stijo"}
14:38:39.809 -> stijo
14:38:39.809 -> New Wifi SSID set
14:38:40.090 -> Connecting to Wifi..
14:38:40.277 -> Connecting to Wifi..
14:38:40.512 -> Connecting to Wifi..
14:38:40.699 -> Connecting to Wifi..
14:38:40.699 -> connectivity issue
14:38:19.158 -> {"password":"stijoseph"}
14:38:19.205 -> New Wifi Password set
14:38:19.345 -> Connecting to Wifi..
14:38:19.392 -> Connected to the Wifi network
```

- It will show connecting wifi, then Connected to wifi network
- Make sure you put the correct ssid and password

## Possible error situation

```
1 //{"gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00"}
2 /*
3  * INCLUDE NTP CLIENT LIBRARY
4  * IF YOU ARE UPLOADING THE CODE FOR FIRST TIME, DIRECTLY UPLOAD THE CODE WITHOUT ANY CHANGES AND send the commands below and press reset
5  *
6  *
7  */
8 /*
9  *****COMMANDS NEED TO BE
10 erase
11 {"ssid":"stijo"}
12 {"password":"stijoseph"}
13 {"devId":"0001"}
14 {"gymid":"1"}
15 {"serId":"0000000010110011"}
16 {"clockset":"16:20;23;05;07"}
17 inclock
18 clock
19 load
20 *****
21 *
22 *AFTER SETTING UP ALL PARAM
23 */
24 //FORMAT-{"gid":"1","mid":"1","sc":"0000000010110011"}
25 //EXAMPLE BELOW OF INPUT JSON
26 //{"gid":"1","mid":"1","sc":"0000000010110011"}
27
28 //{"gid":"1","mid":"1","sc":"0000000010110011"}
29
```

Serial Monitor (COM14):

```
14:40:46.908 -> {ssid}vqfb{f}SSID5qfssid not set
14:40:47.376 -> password not set
14:40:47.376 -> deviceid not set
14:40:47.423 -> gym not set
14:40:47.423 -> serviceid not set
14:40:56.432 -> {"ssid":"stijo"}
14:40:56.526 -> stijo
14:40:56.526 -> New Wifi SSID set
14:40:56.807 -> Connecting to Wifi..
14:40:57.041 -> Connecting to Wifi..
14:40:57.229 -> Connecting to Wifi..
14:40:57.416 -> Connecting to Wifi..
14:40:57.463 -> connectivity issue
14:41:05.859 -> {"password":"stijoseph"}
14:41:05.906 -> New Wifi Password set
14:41:06.094 -> Connecting to Wifi..
14:41:06.281 -> Connecting to Wifi..
14:41:06.469 -> Connecting to Wifi..
14:41:06.703 -> Connecting to Wifi..
14:41:06.703 -> connectivity issue
```

- If you get any connectivity issue even after entering correct ssid and password, that will be solved on next a device reset

- Now set the remaining parameters from line 13

The image shows the Arduino IDE interface with a custom upload script for a Robato module. The script is a C++ program that sends AT commands to the module via the serial port. The script includes comments explaining the purpose of each command and the expected response. The serial monitor shows the module's response to these commands, indicating successful configuration and connectivity. The script is as follows:

```
1 // ("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
2 /*
3  * INCLUDE NTP CLIENT LIBRARY
4  * IF YOU ARE UPLOADING THE CODE FOR FIRST TIME, DIRECTLY UPLOAD THE CODE WITHOUT ANY CHANGES AND send the commands below and press reset
5  *
6  */
7 */
8 /*
9 *****COMMANDS NEED TO BE
10 erase
11 ["ssid":"stijo"]
12 ["password":"stijoseph"]
13 ["devic":"0001"]
14 ["clockset":"16;20;23;05;07"]
15 ["serid":"0000000010110011"]
16 ["clockset":"16;20;23;05;07"]
17 inclock
18 clock
19 load
20 *****
21 *
22 *AFTER SETTING UP ALL PARAMS
23 */
24 //FORMAT-("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
25 //EXAMPLE BELOW OF INPUT JSON
26 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
27
28 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
29 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
30 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
31 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
32 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
33 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
34 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
35 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
36 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
37 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
38 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
39 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
40 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
41 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
42 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
43 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
44 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
45 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
46 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
47 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
48 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
49 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
50 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
51 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
52 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
53 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
54 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
55 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
56 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
57 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
58 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
59 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
60 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
61 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
62 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
63 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
64 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
65 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
66 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
67 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
68 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
69 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
70 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
71 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
72 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st":"00:00","et":"23:00")
73 //("gid":"1","mid":"1","sc":"0000000010110011","at":"1","rid":"1234567876","dt":"10092021","st
```

Similarity set gymid,deviceid

```
    {"devid":"0001"}           //set the device id
```

```
{"gymid":"1"} //set the gymid
```

```
{"serid":"0000000010110011"} //set the service id
```

```
{ "clockset": "16;20;23;05;07;21" } //manual clock set if needed
```

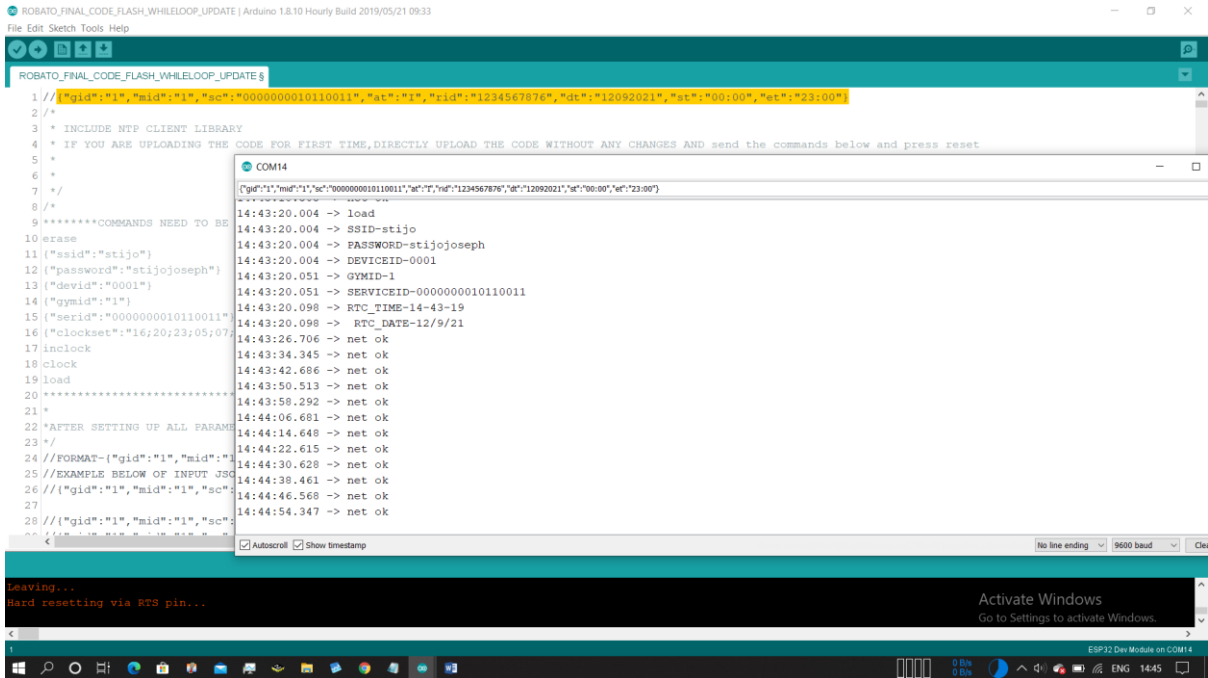
```
{"clockset":"HH;MM;SS;DD;MM;YY"}
```

```
inclock           //set the internet clock to rtc
```

```
clock          //printout current rtc clock datas
```

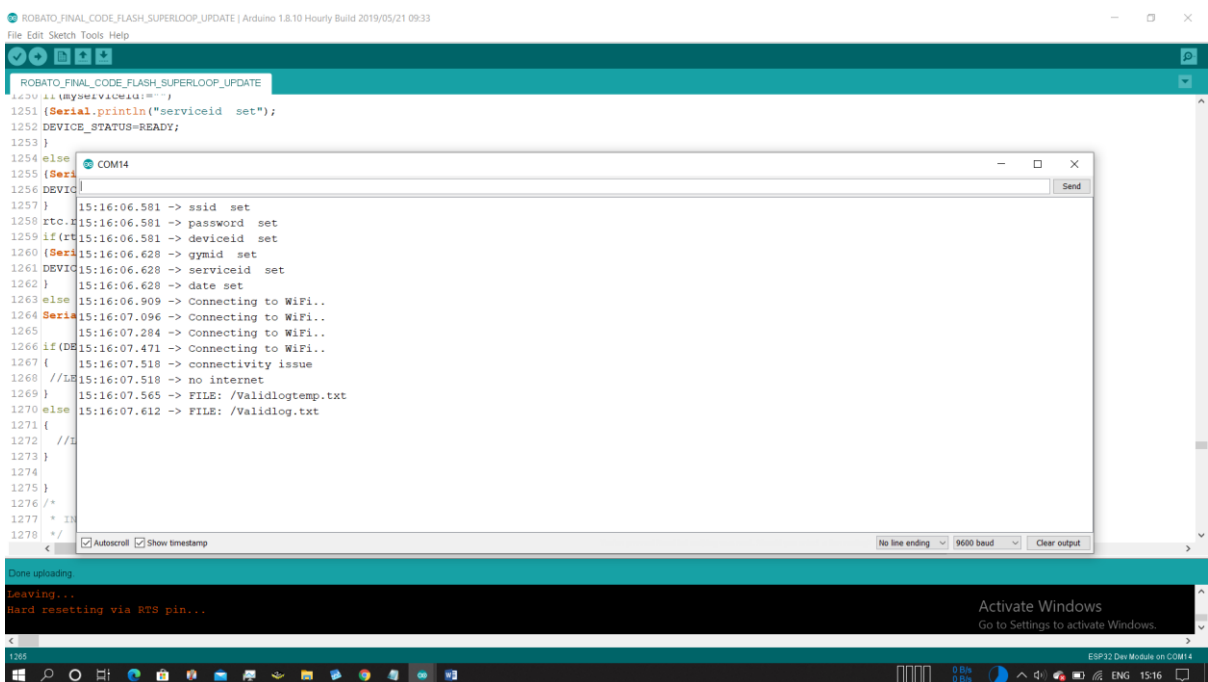
```
load          //printout the
```

ssid,password,deviceid,gymid,servicecode stored in eeprom



## Load command output

- Press reset button of the Esp32 ,so that device reset



ssid set

password set

deviceid set

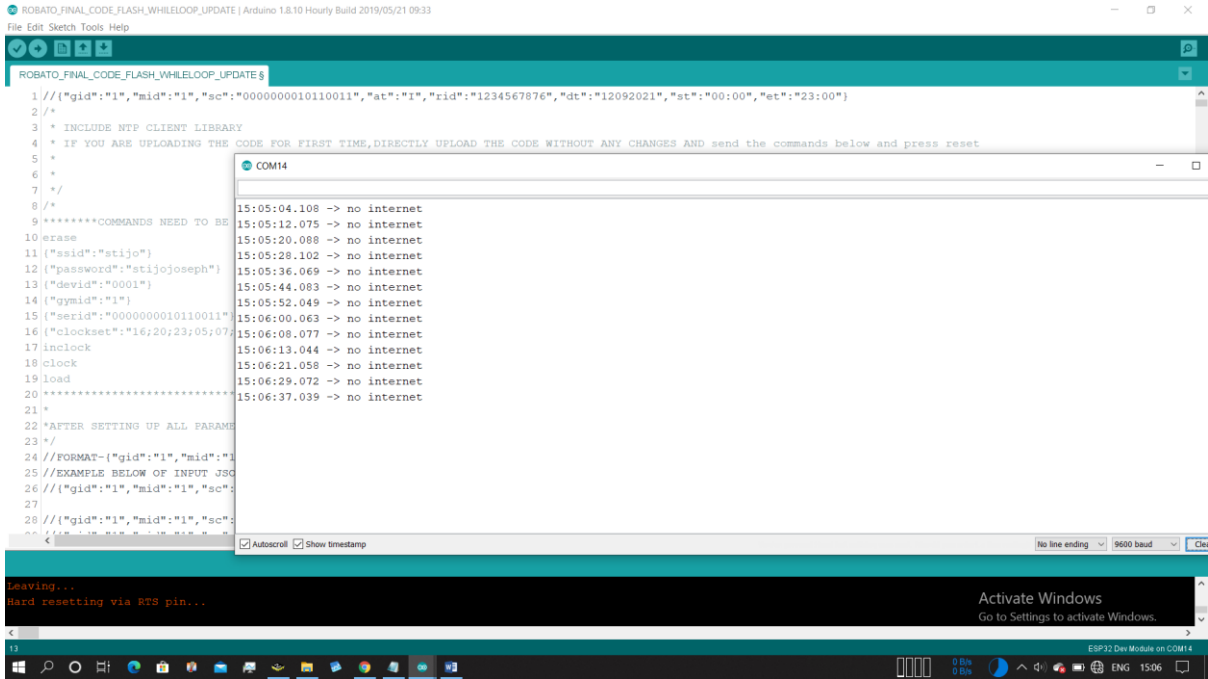
gymid set

serviceid set

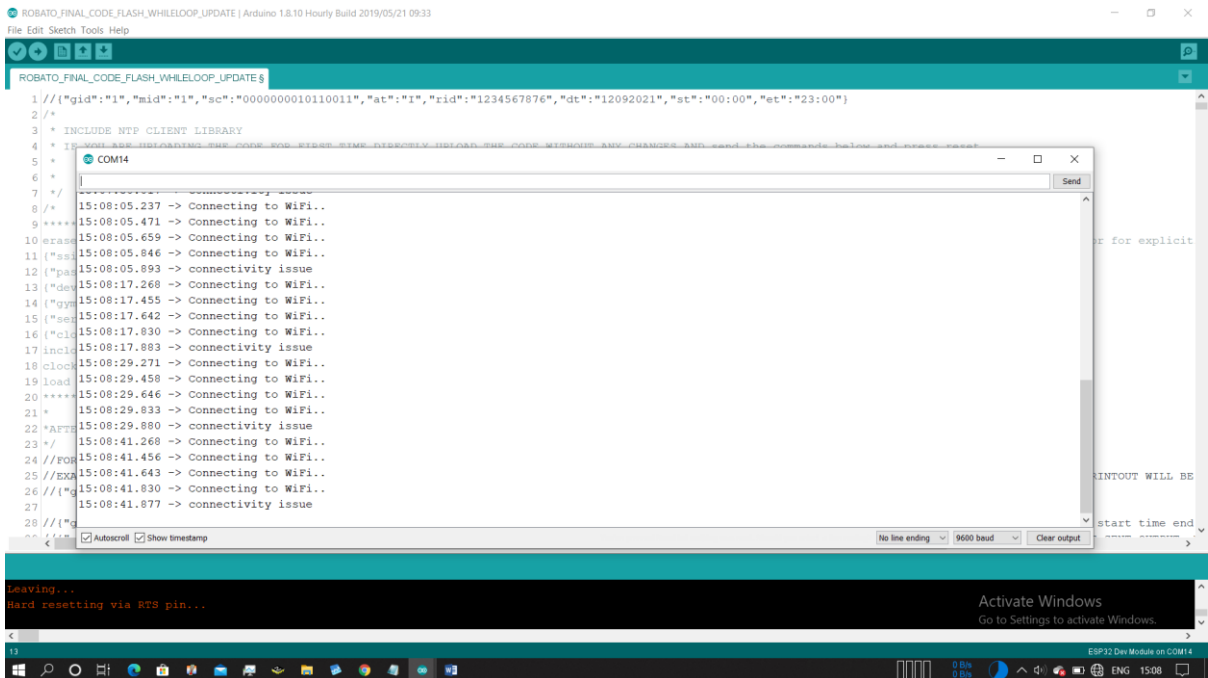
date set

- if any of these paramaters are not set try reconfiguring using its particular commands
- “net ok” this keeps on outputting onscreen which means internet and wifi connectivity is ok

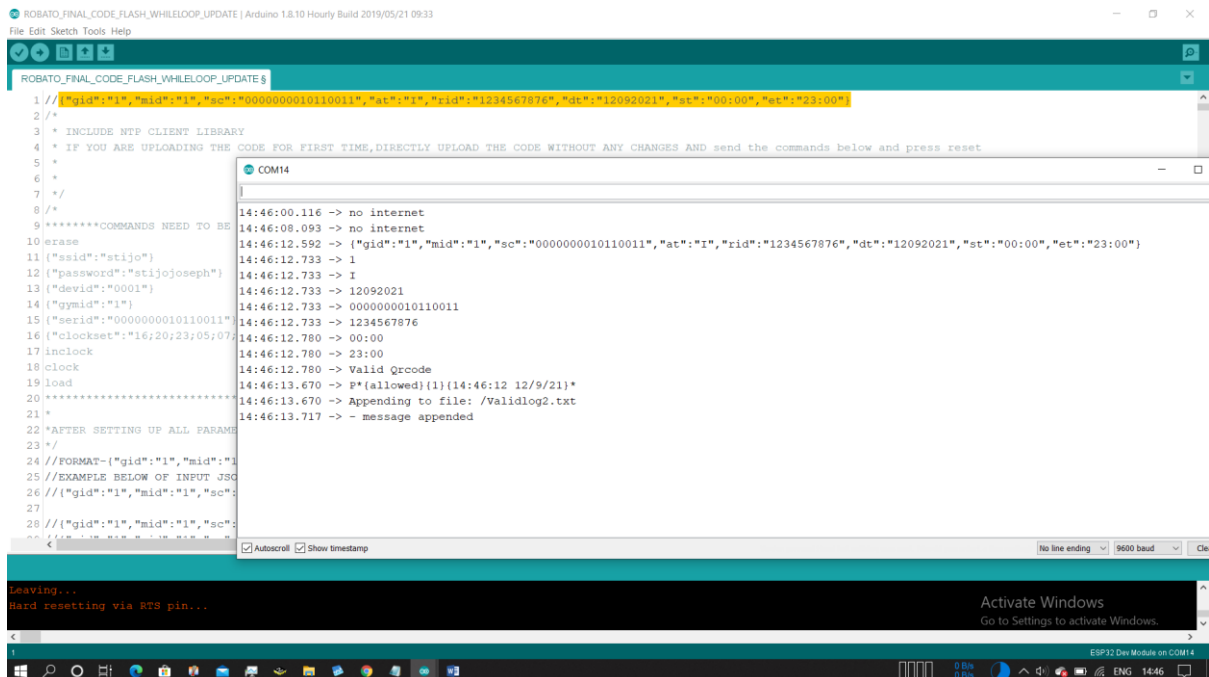




- If internet connectivity is lost “no internet” is printed out



- If wifi accesspoint is not there or any connectivity issue



```
1 //{"gid":"1","mid":"1","sc":"0000000010110011","at":"I","rid":"1234567876","dt":"12092021","st":"00:00","et":"23:00"}
2 /*
3  * INCLUDE NTP CLIENT LIBRARY
4  * IF YOU ARE UPLOADING THE CODE FOR FIRST TIME, DIRECTLY UPLOAD THE CODE WITHOUT ANY CHANGES AND send the commands below and press reset
5  *
6  *
7  */
8 /*
9  * *****COMMANDS NEED TO BE *****
10 erase
11 {"ssid":"stijo"}
12 {"password":"stijoseph"}
13 {"devicid":"0001"}
14 {"gymid":"1"}
15 {"serid":"0000000010110011"}
16 {"clockset":"16;20;23;05;07"}
17 inclock
18 clock
19 load
20 *****
21 *
22 *AFTER SETTING UP ALL PARAM
23 */
24 //FORMAT-{"gid":"1","mid":"1","sc":"0000000010110011","at":"I","rid":"1234567876","dt":"12092021","st":"00:00","et":"23:00"}
25 //EXAMPLE BELOW OF INPUT JSON
26 //{"gid":"1","mid":"1","sc":"0000000010110011","at":"I","rid":"1234567876","dt":"12092021","st":"00:00","et":"23:00"}
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28 //{"gid":"1","mid":"1","sc":"0000000010110011","at":"I","rid":"1234567876","dt":"DDMMYYYY","st":"00:00","et":"23:00"}
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```

- Then enter it into serial monitor

The image shows the Arduino IDE interface with a custom C++ firmware being uploaded to an ESP32 Dev Module. The main editor contains a file named 'ROBATO\_FINAL\_CODE\_FLASH\_WHILELOOP\_UPDATE.h' which includes a custom AT+Q firmware. The code defines pins for the ESP32, includes the 'NTP\_CLIENT\_LIBRARY', and contains a main loop that sends AT commands and receives responses. The serial monitor on the right shows the upload progress and the resulting AT+Q response, including the 'AT+QID' command and its response. The status bar at the bottom indicates the upload is complete and the device is in 'Hard resetting via RTS pin...' state.

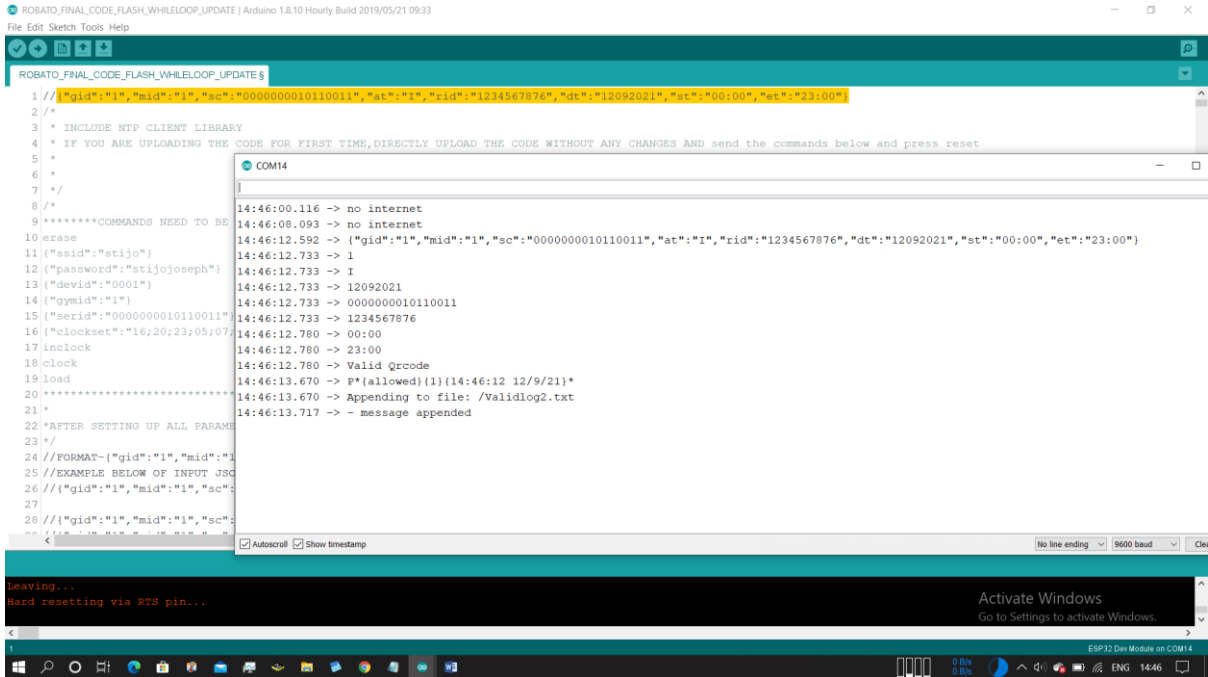
- If your parameters on flash matches the incoming json parameters the output will be this
- And based on internet connectivity it will send it to the server or will write it into the flash file

The screenshot shows the Arduino IDE interface with the following components:

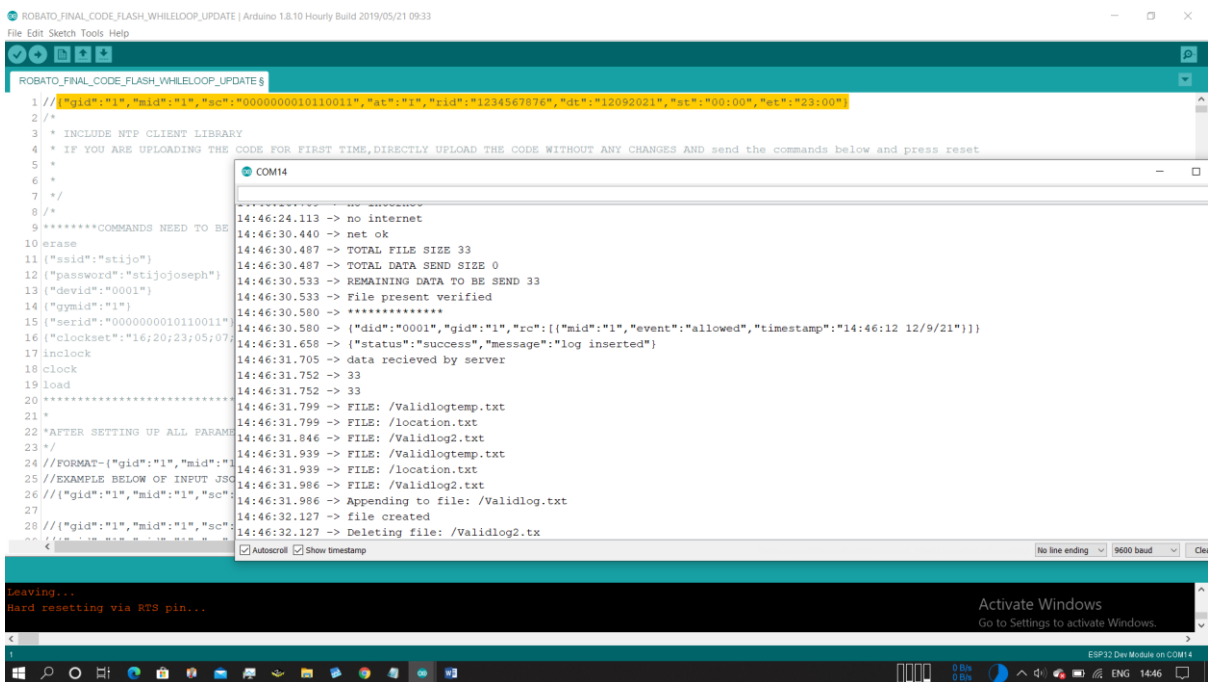
- Top Bar:** Arduino\_FINAL\_CODE\_FLASH\_WHILELOOP\_UPDATE | Arduino 1.8.10 Hokey Build 2019/05/21 09:33
- File Edit Sketch Tools Help** menu bar.
- Code Editor:** Contains the file `ROBATO_FINAL_CODE_FLASH_WHILELOOP_UPDATE.g`. The code is a simple HTTP client using the `HttpClient` library. It defines a server IP and port, and sends a GET request to `1234567876` on port `12092021`. The response is printed to the serial monitor.
- Serial Monitor:** Opened to `COM14` at `9600 baud`. It shows the following data received from the device:

```
15:21:23.703 -> net ok
15:21:31.900 -> net ok
15:21:33.071 -> {"gid":"1","mid":"1","sc":"0000000010110011","at":"I","rid":"1234567876","dt":"12092021","st":"00:00","et":"23:00"}
15:21:33.212 -> 1
15:21:33.212 -> I
15:21:33.212 -> 12092021
15:21:33.212 -> 0000000010110011
15:21:33.259 -> 1234567876
15:21:33.259 -> 00:00
15:21:33.259 -> 23:00
15:21:33.259 -> Valid Qrcode
15:21:34.149 -> *****
15:21:34.149 -> {"did":"0001","gid":"1","rc":[{"mid":"1","event":"allowed","timestamp":"15:21:33 12/9/21"}]}
15:21:34.243 -> *****
15:21:35.977 -> {"status":"success","message":"log inserted"}
15:21:36.024 -> data recieved by server
15:21:36.070 -> 1
15:21:36.070 -> DATA recieved by server
```
- Bottom Bar:** Shows the status bar with `ESP32 Dev Module on COM14`.

Eg: data uploaded to server



Eg: Data appended to file due bad internet connectivity



Eg:Automatic update data from file to server when internet connectivity comes back