Project : IoT based Door Status Checking System

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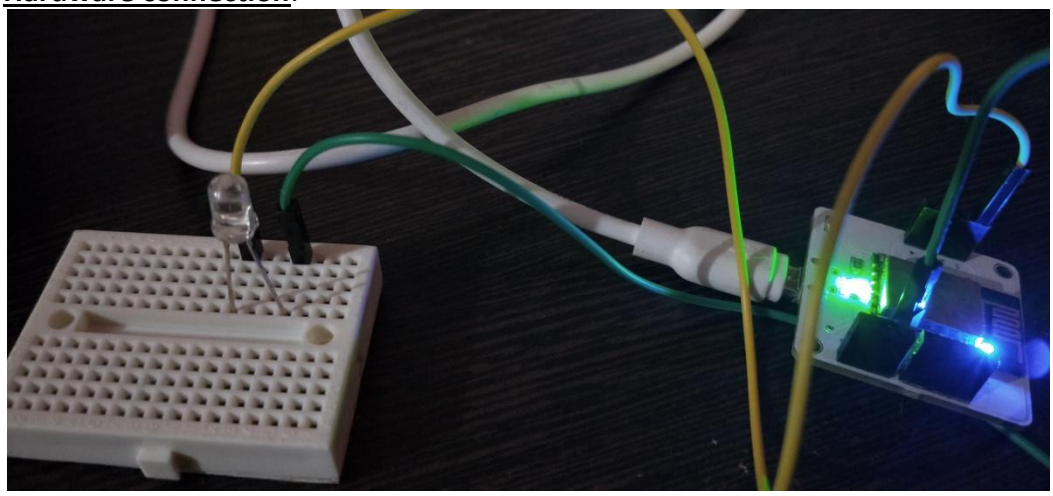
- **Hardware Used**: Bolt Wifi module, breadboard, jumper wires, LED
- **Software Used**: Ubuntu, Bolt Cloud, Twilio
- **Working**: I have developed a door status checking system using the switch logic i.e. whenever the door is closed (digitalRead at pin '0'), the switch closes and, an LED at pin '1', glows and correspondingly an Sms is sent to notify the user for the same and whenever the door is opened the message regarding the current status is sent to the user again.
- **Hardware connection**:



- **Code**:

```
 GNU nano 2.5.3                File: doorcheck.py

from boltiot import Bolt, Sms
import json, time

API_KEY = "eeae3b26-86a9-4e80-854b-dade7d8f5000"
DEVICE_ID = "BOLT14886107"

SID = "ACfaf014dfb2b89eb0df9946dc71e2072b"
AUTH_TOKEN = "f389c6151608281ba394bebee47c6db4"
FROM_NO = '+12052895428'
TO_NO = '+919616201717'

mybolt = Bolt(API_KEY, DEVICE_ID)
sms = Sms(SID, AUTH_TOKEN, TO_NO, FROM_NO)
while True:
    response = mybolt.digitalRead('0')

    data = json.loads(response)
    print (data)
    if data['success'] != 1:
        print("there was an error while retriving the data")
        print("this is the error:"+data['value'])
        time.sleep(2)
        continue
    print ("This is the value "+data['value'])
    val = data["value"]
    if (int(data["success"])==1):
        if(int(val) == 1):
            ledon =  mybolt.digitalWrite('1', 'HIGH')
            sending = sms.send_sms("Door is closed")
            print (ledon)
            print (sending)
        if(int(val)==0):
```

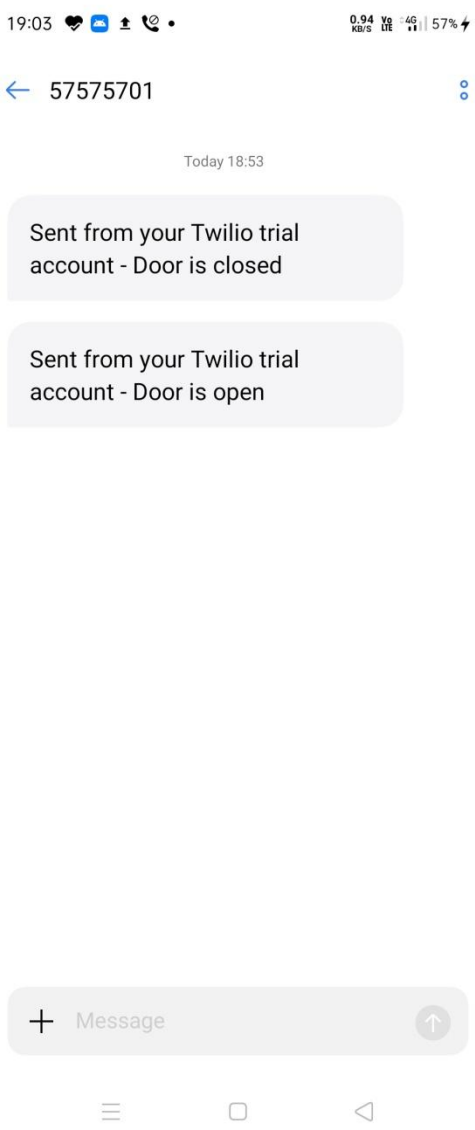
```
 GNU nano 2.5.3                File: doorcheck.py

    print (data)
    if data['success'] != 1:
        print("there was an error while retriving the data")
        print("this is the error:"+data['value'])
        time.sleep(2)
        continue
    print ("This is the value "+data['value'])
    val = data["value"]
    if (int(data["success"])==1):
        if(int(val) == 1):
            ledon =  mybolt.digitalWrite('1', 'HIGH')
            sending = sms.send_sms("Door is closed")
            print (ledon)
            print (sending)
        if(int(val)==0):
            ledoff = mybolt.digitalWrite('1', 'HIGH')
            sendingag = sms.send_sms("Door is open")
            print (ledoff)
            print (sendingag)
time.sleep(2)

^G Get Help  ^O Write Out  ^W Where Is  ^K Cut Text  ^J Justify  ^C Cur Pos  ^Y Prev Page
^X Exit      ^R Read File  ^\ Replace   ^U Uncut Text ^T To Linter ^_ Go To Line ^V Next Page
```

This is the complete code.

Output SMS:


19:03
57575701
Today 18:53
Sent from your Twilio trial account - Door is closed
Sent from your Twilio trial account - Door is open
Message