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**Title**

DHT11 Sensor and Alert System using Blynk IoT

Program:

import time

import Adafruit\_DHT

import BlynkLib

# Replace with your Blynk Auth Token

BLYNK\_AUTH\_TOKEN = '\_XnsCg95jOshh7O2jiBuMq7oWbVA6iCr'

# Set the sensor type and the GPIO pin

DHT\_SENSOR = Adafruit\_DHT.DHT11

DHT\_PIN = 4 # GPIO pin number where the sensor's data pin is connected

# Initialize Blynk

blynk = BlynkLib.Blynk(BLYNK\_AUTH\_TOKEN)

# Function to read DHT11 data and send it to Blynk

@blynk.on("connected")

def read\_and\_send\_data():

humidity, temperature = Adafruit\_DHT.read(DHT\_SENSOR, DHT\_PIN)

if humidity is not None and temperature is not None:

print(f'Temperature: {temperature}C, Humidity: {humidity}%')

blynk.virtual\_write(1, temperature) # Send temperature to virtual pin V1

blynk.virtual\_write(0, humidity) # Send humidity to virtual pin V2

else:

print('Failed to retrieve data from sensor')

# Main loop

while True:

read\_and\_send\_data() # Read and send data

blynk.run() # Keep Blynk connection alive

time.sleep(1) # Wait for 10 seconds before reading again