**ASSIGNMENT NO 03**

**-----------------------------------------------------------------------------------------**

**Name:-** **Dattatray Suresh Gatkal**

**Roll No:- 17**

**Batch:- A**

**Aim :-** Design and implement real time monitoring system using android phone (Blynk App.) such as 'soilparameter monitoring'.

**-----------------------------------------------------------------------------------------**

#define BLYNK\_TEMPLATE\_ID "TMPL3N-mEulsm"

#define BLYNK\_TEMPLATE\_NAME "Quickstart Device"

#define BLYNK\_AUTH\_TOKEN "uGgr0jdefvbXrXZdF0XZBng3GLh2p\_V7"

/\* Comment this out to disable prints and save space \*/

#define BLYNK\_PRINT Serial

#include <WiFi.h>

#include <WiFiClient.h>

#include <BlynkSimpleEsp32.h>

// Your WiFi credentials.

// Set password to "" for open networks.

char ssid[] = "YourNetworkName";

char pass[] = "YourPassword";

BlynkTimer timer;

// This function is called every time the Virtual Pin 0 state changes

BLYNK\_WRITE(V0)

{

// Set incoming value from pin V0 to a variable

int value = param.asInt();

// Update state

Blynk.virtualWrite(V1, value);

}

// This function is called every time the device is connected to the Blynk.Cloud

BLYNK\_CONNECTED()

{

// Change Web Link Button message to "Congratulations!"

Blynk.setProperty(V3, "offImageUrl", "<https://static-image.nyc3.cdn.digitaloceanspaces.com/general/fte/congratulations.png>");

Blynk.setProperty(V3, "onImageUrl", "<https://static-image.nyc3.cdn.digitaloceanspaces.com/general/fte/congratulations_pressed.png>");

Blynk.setProperty(V3, "url", "<https://docs.blynk.io/en/getting-started/what-do-i-need-to-blynk/how-quickstart-device-was-made>");

}

// This function sends Arduino's uptime every second to Virtual Pin 2.

void myTimerEvent()

{

// You can send any value at any time.

// Please don't send more that 10 values per second.

Blynk.virtualWrite(V2, millis() / 1000);

}

void setup()

{

// Debug console

Serial.begin(115200);

Blynk.begin(BLYNK\_AUTH\_TOKEN, ssid, pass);

// You can also specify server:

//Blynk.begin(BLYNK\_AUTH\_TOKEN, ssid, pass, "blynk.cloud", 80);

//Blynk.begin(BLYNK\_AUTH\_TOKEN, ssid, pass, IPAddress(192,168,1,100), 8080);

// Setup a function to be called every second

timer.setInterval(1000L, myTimerEvent);

}

void loop()

{

Blynk.run();

timer.run();

// You can inject your own code or combine it with other sketches.

// Check other examples on how to communicate with Blynk. Remember

// to avoid delay() function!

}