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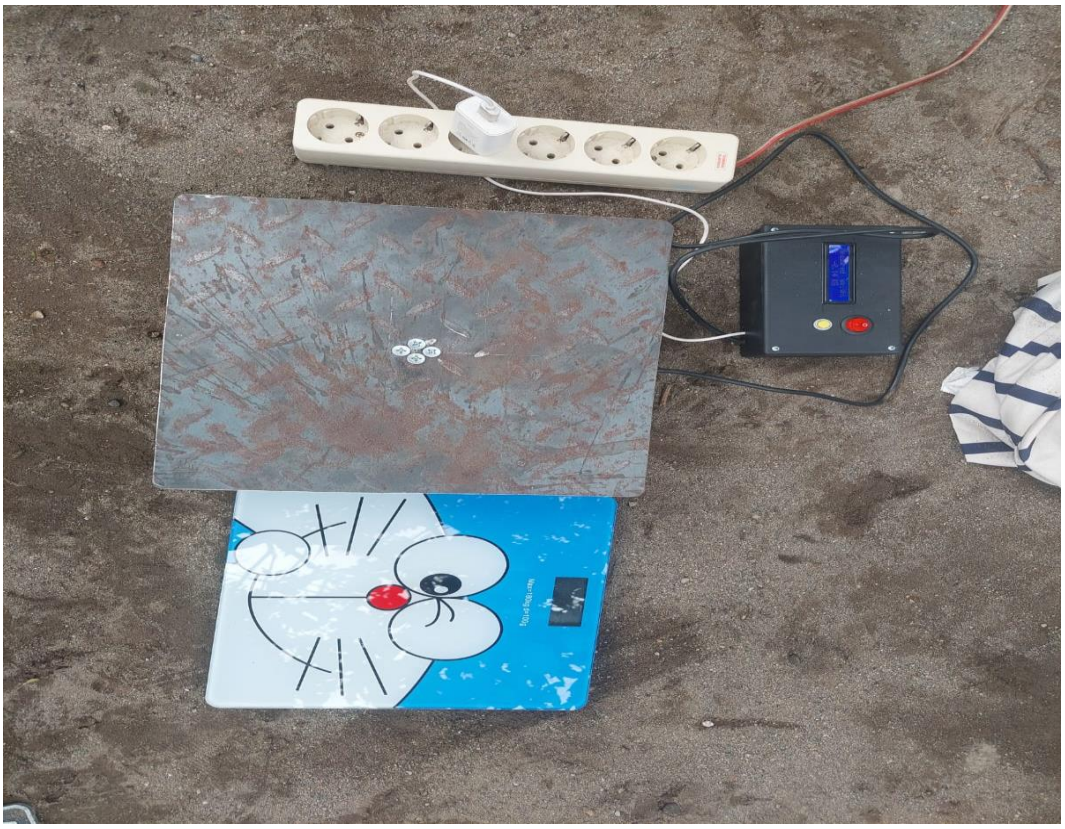
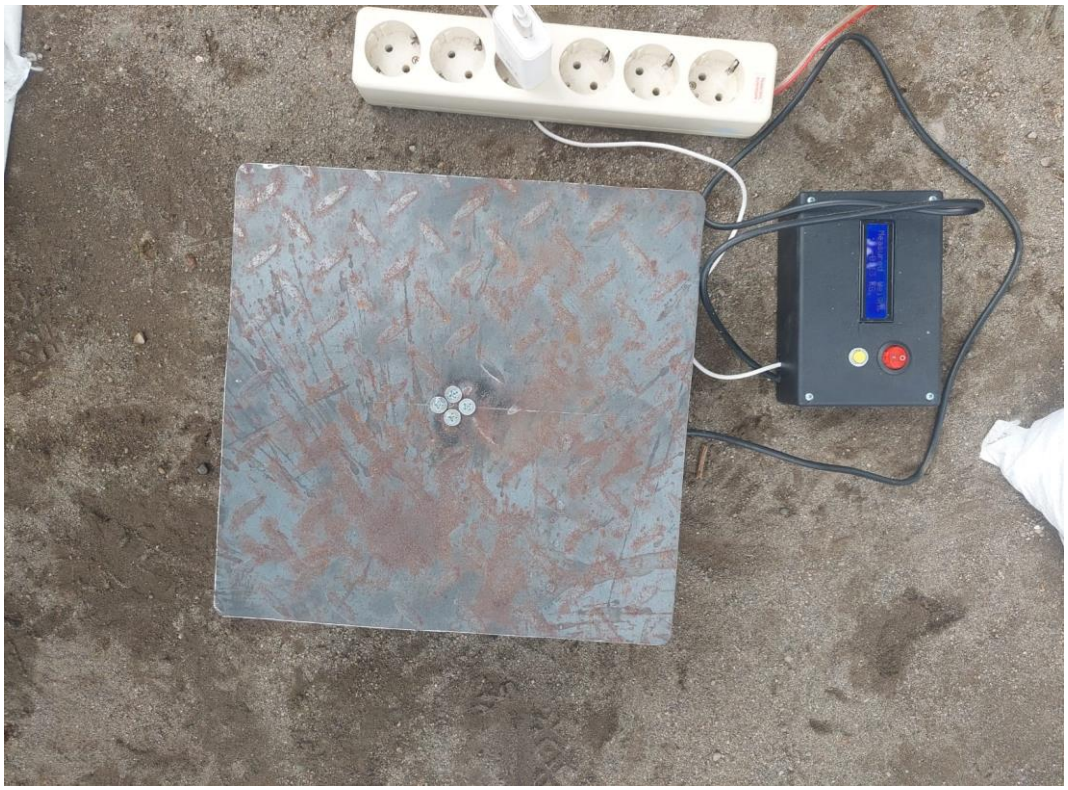
LAMPIRAN

LAMPIRAN 1 PROTYPE ALAT





GAMBAR UKURAN PLAT BESI 30 X 30

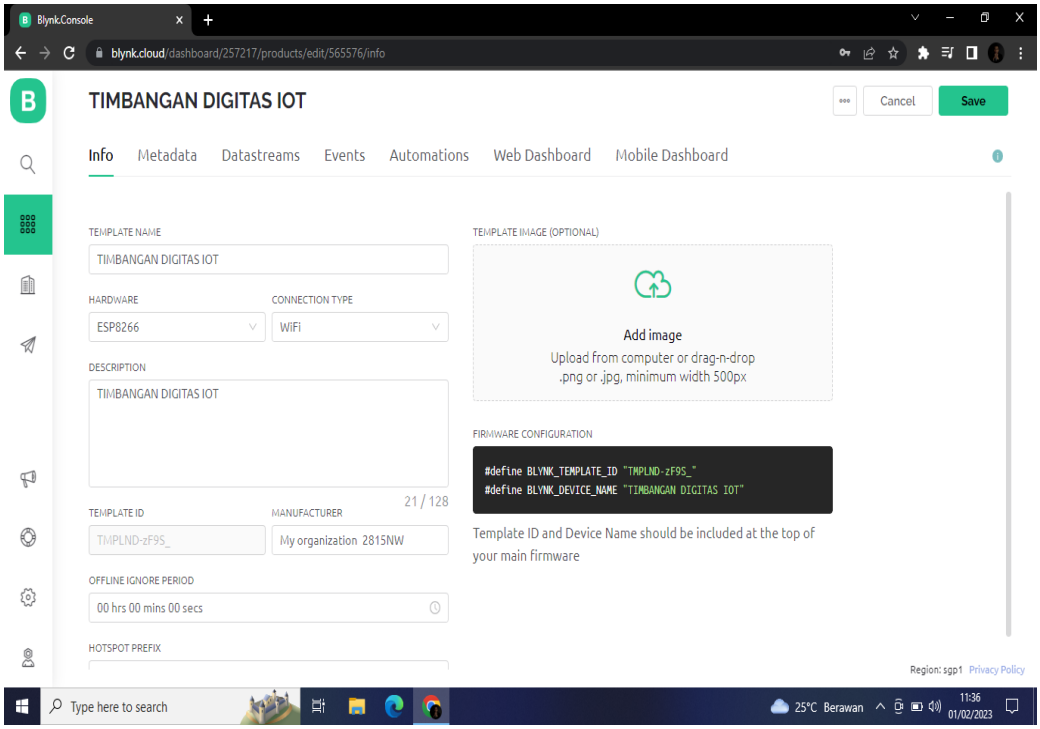
LAMPIAN 2 CODING

```
//coding timbangan IoT


#include <ESP8266WiFi.h>
#include "HX711.h"
#define BLYNK_PRINT Serial
#include <Blynk.h>
#include <BlynkSimpleEsp8266.h>
#include <Wire.h>
#include <LiquidCrystal_I2C.h>
LiquidCrystal_I2C lcd(0x27, 16, 2);
#define BLYNK_PRINT Serial


#define BLYNK_TEMPLATE_ID "TMPLd19hq-X9"
#define BLYNK_DEVICE_NAME "TIMBANGAN DIGITAL IOT"
const char *ssid = "akucantik"; // masukkan nama wifi adnda
const char *pass = "hurufkecilsemua"; // masukkan password anda
char auth[] = "oueVdrCoOXiiNf2sl4V8NnU3KPm_VxDS";    // masukkan token autentikasi di aplikasi Blynk


WiFiClient client;


HX711 scale(D5, D6);


int rbutton = D4; // tombol ini akan digunakan untuk mengatur ulang skala ke 0
float weight;
float calibration_factor = 43241; // vlaue timbangan 100kg - 43241


void setup()
{
```

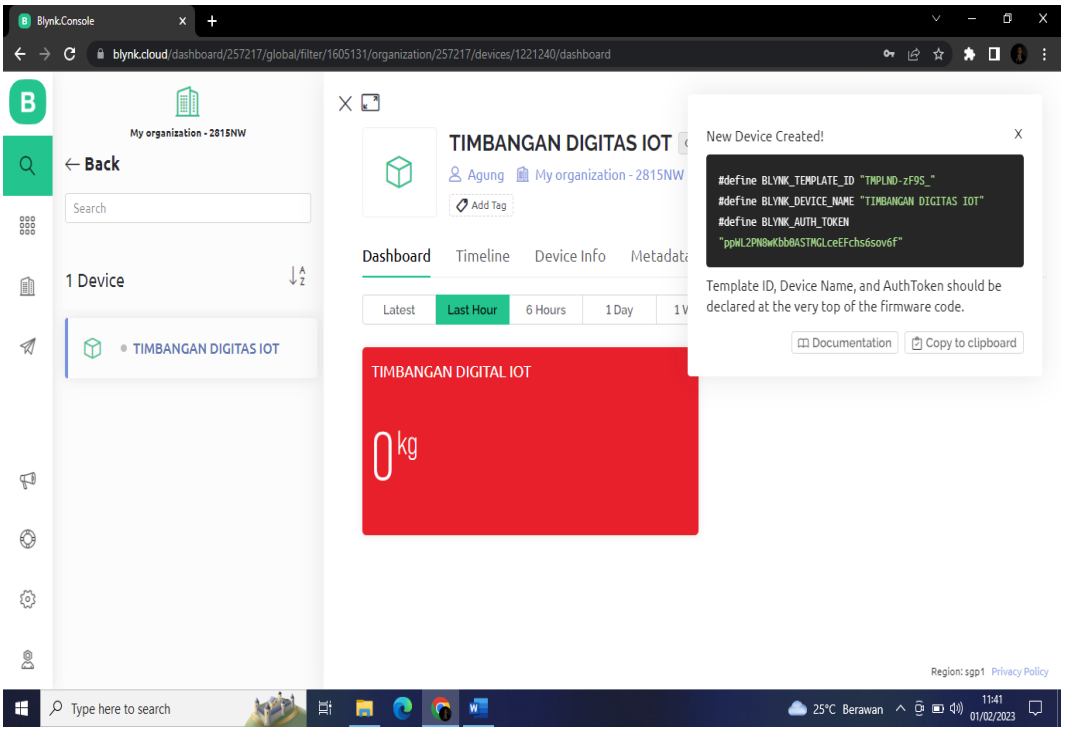
```
 Serial.begin(9600);
 pinMode(rbutton, INPUT_PULLUP);
 scale.set_scale();
 scale.tare(); // Setel ulang skala ke 0
 long zero_factor = scale.read_average(); // mendapatkan bacaan dasar
 Blynk.begin(auth, ssid, pass);
 Wire.begin(D2, D1);
 lcd.begin();
 lcd.setCursor(3,0);
 lcd.print("ELEKTRONIK");
 lcd.setCursor(0,1);
 lcd.print("TIMBANGAN 100KG");
 delay(3500);
 lcd.clear();

 lcd.print("Connecting Wifi");

 WiFi.begin(ssid, pass);
 {
 delay(1000);
 Serial.print(".");
 lcd.clear();
 }
 Serial.println("");
 Serial.println("WiFi connected..");
 lcd.clear();
 lcd.print("WiFi connected");

 delay(2000);
}
```

```
void loop()

{

  Blynk.run();
  scale.set_scale(calibration_factor); // Sesuaikan dengan faktor kalibrasi ini

  weight = scale.get_units(5);

  lcd.setCursor(0, 0);
  lcd.print("Measured  Weight");
  lcd.setCursor(4, 1);
  lcd.print(weight);
  lcd.print(" KG  ");
  Blynk.virtualWrite(V0, weight);
  delay(1000);
  lcd.clear();

  Serial.print("weight: ");
  Serial.print(weight);
  Serial.println(" KG");
  Serial.println();


  if ( digitalRead(rbutton) == LOW)
{
  scale.set_scale();
  scale.tare(); // Setel ulang skala ke 0
}

}
```

GAMBAR APLIKASI BYLINK

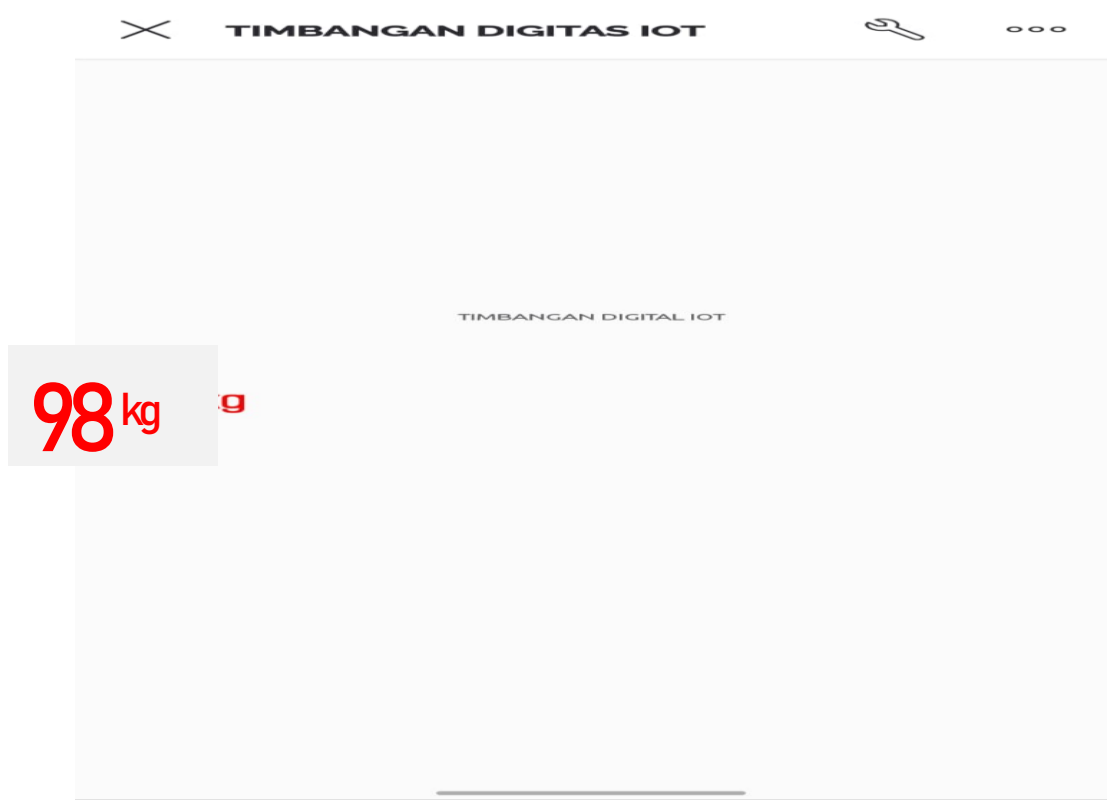


GAMBAR PENGGUNAAN APLIKASI BYLINK



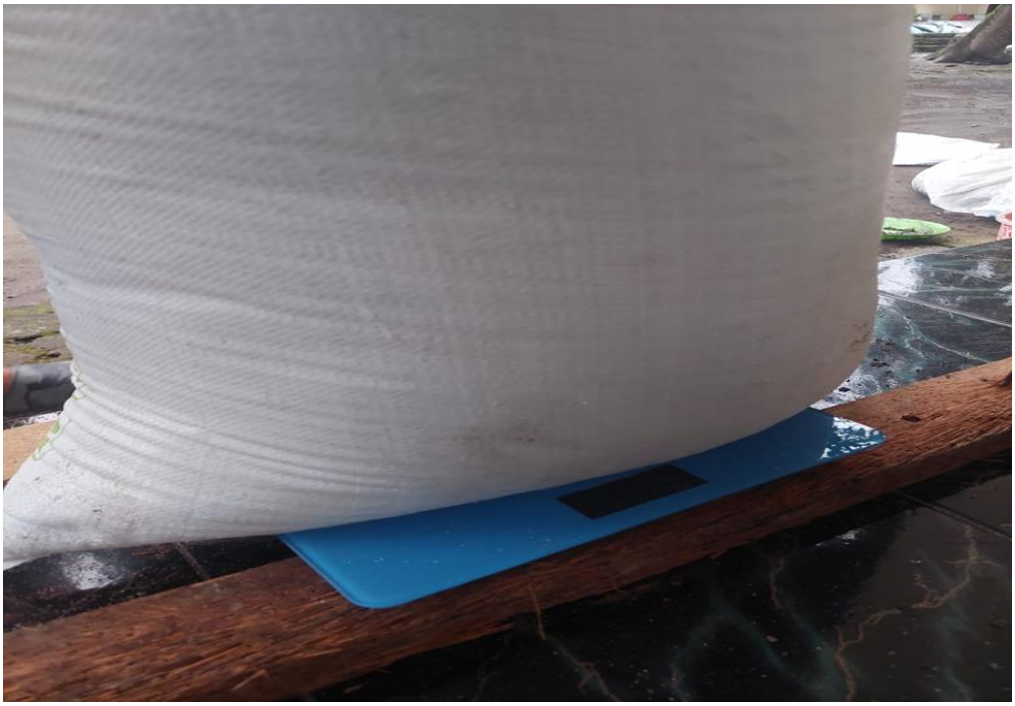
GAMBAR PEMBACAAN APLIKASI BYLINK 25 KG DAN 50 KG

GAMBAR PEMBACAAN BYLINK 75 KG DAN 98 KG



LAMPIRAN 3 KEGIATAN PENELITIAN MENIMBANG PASIR

GAMBAR PENIMBANGAN MENGGUNAKAN TIMBANGAN DIGITAL



GAMBAR PENIMMBANGAN MENGGUNAKAN TIMBANGAN IOT