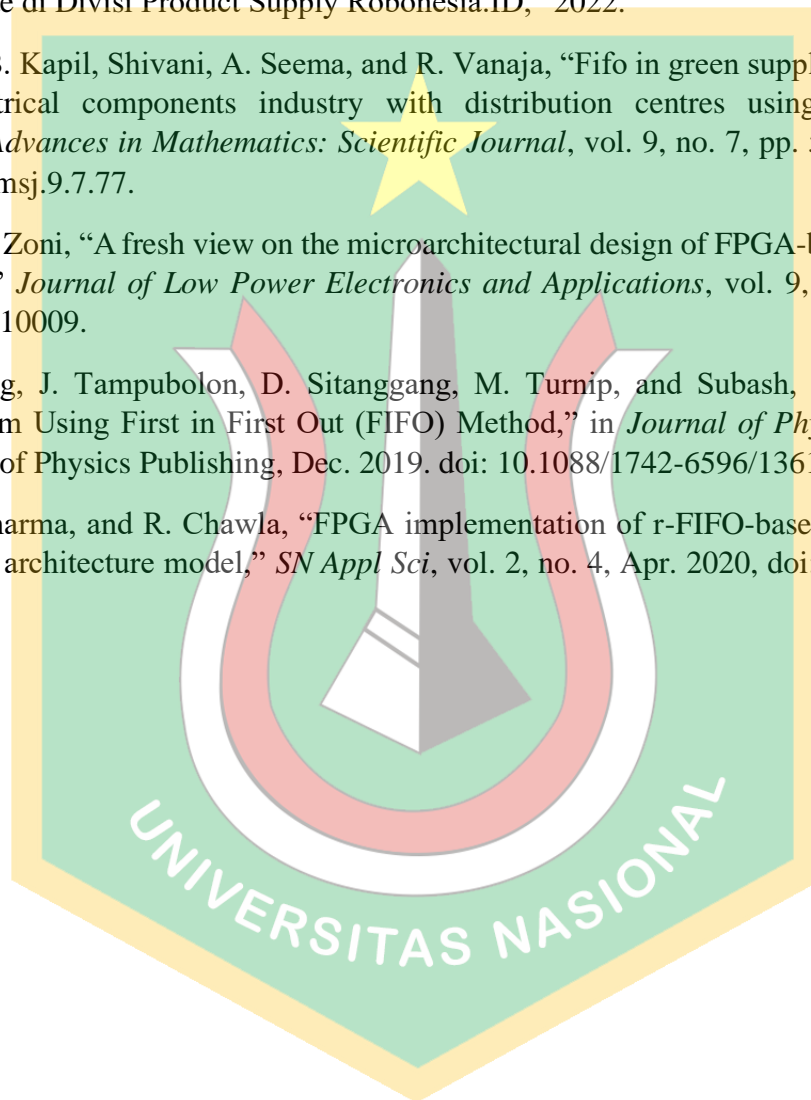


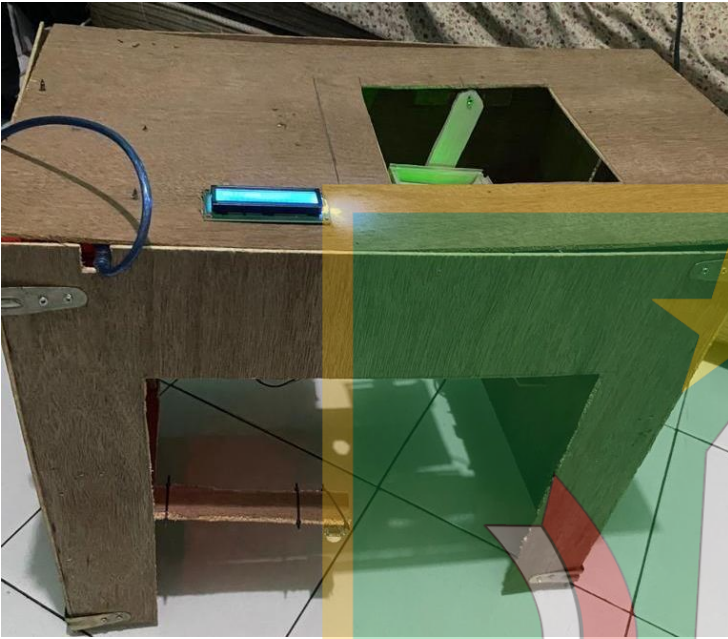
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LAMPIRAN





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LETTER OF ACCEPTANCE

Kepada Yth. Bapak/Ibu:

Andilaw, Ratih Titi Komalasari

di tempat

Dengan hormat,


Bersama surat ini, redaksi Jurnal STRING (Satuan Tulisan Riset dan Inovasi Teknologi) Program Studi Teknik Informatika Universitas Indraprasta PGRI menginformasikan kepada Bapak/Ibu bahwa artikel dengan judul: "**ALAT PEMILAH SAMPAH OTOMATIS SAMPAH ORGANIK DAN ANORGANIK**" telah masuk pada redaksi STRING (Satuan Tulisan Riset dan Inovasi Teknologi) dan sudah melalui proses review.

Artikel dinyatakan **DITERIMA dengan Revisi** dan akan dipublikasikan pada Jurnal STRING Vol. 9 No. 1 Agustus 2024.

Demikian surat ini untuk dapat digunakan sebagaimana mestinya, atas perhatian dan kerjasamanya kami ucapkan terima kasih.

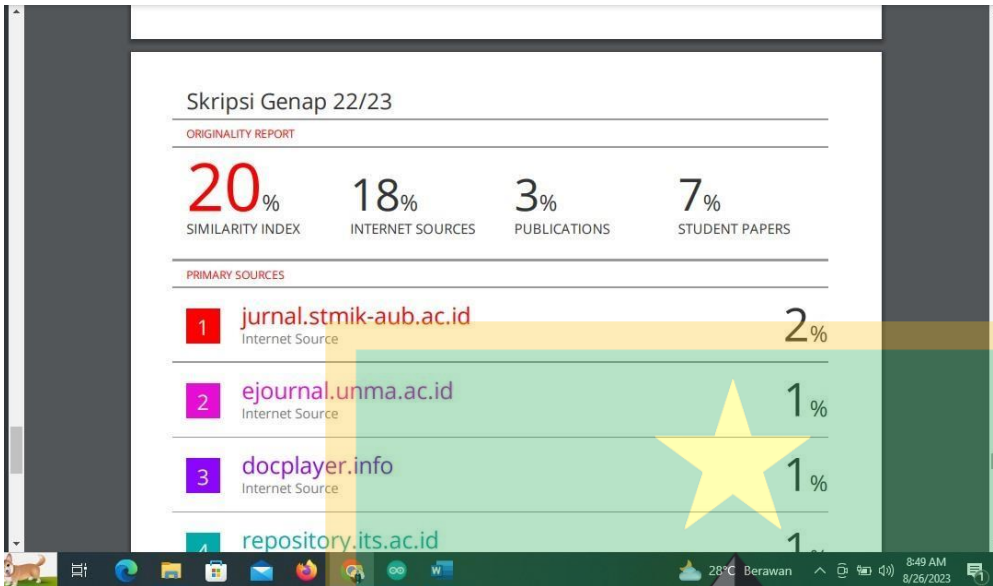
Jakarta, 23 Juli 2023

Editor in Chief


Yuni Wibawanti, M.T

NIDN 0302067701

UNIVERSITAS NASIONAL
STRING
Satuan Tulisan Riset dan Inovasi Teknologi



```
#define BLYNK_TEMPLATE_ID "TMPLQC-IOIWH"  
#define BLYNK_DEVICE_NAME "PEMILAH SAMPAH ORGANIK DAN ANORGANIK"  
#define BLYNK_AUTH_TOKEN "VafnGR7QJkHb92IAilqNAWEc-xKNkJ-B"
```

```
#define BLYNK_PRINT Serial  
#include <ESP8266_Lib.h>  
#include <BlynkSimpleShieldEsp8266.h>
```

```
char auth[] = BLYNK_AUTH_TOKEN;  
char ssid[] = "blynk projek";  
char pass[] = "blynk skripsi";
```

```
//char ssid[] = "Lp2m ARAY";  
//char pass[] = "98765432abc";
```

```
// Hardware Serial on Mega, Leonardo, Micro...
```

```
#define EspSerial Serial2  
  
#define ESP8266_BAUD 9600
```

```
ESP8266 wifi(&EspSerial);  
BlynkTimer timer;
```

```
#include <Wire.h>  
#include <LiquidCrystal_I2C.h>  
LiquidCrystal_I2C lcd(0x3F, 16, 2);  
#include <Ultrasonic.h>
```

```
Ultrasonic ultrasonic1(30, 31);  
Ultrasonic ultrasonic2(32, 33);  
Ultrasonic ultrasonic3(34, 35);
```

```
#include <Servo.h>
```

```
Servo myservo1, myservo2;  
int kanan1 = 100;  
int kiri1 = 0;  
int awal1 = 50;  
int kanan2 = 100;  
int kiri2 = 0;  
int awal2 = 50;  
int baca = 3;
```



```
const int buzzer = 48;  
const int I = 3;  
const int C = 4;  
const int IR1 = 5;  
const int IR2 = 6;
```

```
int s1, s2, s3, ir1, ir2, h1, h2, induktif, kapasitif;  
String sts1, sts2, sts3;  
String stsampah;
```

```
void sendSensor()  
{  
  s1 = 17 - ultrasonic1.read();  
  s2 = 17 - ultrasonic2.read();  
  s3 = 17 - ultrasonic3.read();  
  
  induktif = digitalRead(I);  
  kapasitif = digitalRead(C);  
  ir1 = digitalRead(IR1);  
  ir2 = digitalRead(IR2);  
  
  if (s1 <= 0) {  
    s1 = 0;  
  }  
  if (s2 <= 0) {  
    s2 = 0;  
  }  
}
```




```
if (s3 <= 0) {  
  s3 = 0;  
}
```

```
if (ir1 == LOW) {  
  h1++;  
  if (h1 >= baca) {  
    if (induktif == 1) {  
      buz();  
      Serial.println("Organik");  
      stsampah = "Organik";  
      myservo1.write(kanan1);  
      delay(1000);  
      myservo1.write(awal1);  
    }  
    else {  
      buzz();  
      Serial.println("nonorganik");  
      stsampah = "NonOrganik";  
      myservo1.write(kiri1);  
      delay(1000);  
      myservo1.write(awal1);  
    }  
    h1 = 0;  
  }  
} else if (ir2 == LOW) {  
  h2++;
```




```
if (h2 >= baca) {  
  if (kapasitif == 0) {  
    buzzz();  
    stsampah = "Besi";  
    Serial.println("Besi");  
    myservo2.write(kanan2);  
    delay(1000);  
    myservo2.write(awal2);
```

```
  }  
  else {  
    buzzzz();  
    Serial.println("nonbesi");  
    stsampah = "NonBesi";  
    myservo2.write(kiri2);  
    delay(1000);  
    myservo2.write(awal2);
```

```
  }  
  h2 = 0;  
}
```

```
}  
else {  
  h2 = 0;  
  h1 = 0;  
}
```

```
if (s1 > 10) {  
  sts1 = "penuh_T1";
```



```
buz();  
} else if (s1 > 5) {  
  sts1 = "sedang_T1";  
} else {  
  sts1 = "kosong_T1";  
}
```

```
if (s2 > 10) {  
  buz();  
  sts2 = "penuh_T2";  
} else if (s2 > 5) {  
  sts2 = "sedang_T2";  
} else {  
  sts2 = "kosong_T2";  
}
```

```
if (s3 > 10) {  
  buz();  
  sts3 = "penuh_T3";  
} else if (s3 > 5) {  
  sts3 = "sedang_T3";  
} else {  
  sts3 = "kosong_T3";  
}
```

```
Blynk.virtualWrite(V0, stsampah);  
Blynk.virtualWrite(V1, s1);
```



```
Blynk.virtualWrite(V2, s2);  
Blynk.virtualWrite(V3, s3);
```

```
lcd.setCursor(0, 0);  
lcd.print("S1:");  
lcd.print(s1);  
lcd.print(" ");  
lcd.setCursor(6, 0);  
lcd.print("S2:");  
lcd.print(s2);  
lcd.print(" ");  
lcd.setCursor(11, 0);  
lcd.print("S3:");  
lcd.print(s3);  
lcd.print(" ");  
lcd.setCursor(0, 1);  
lcd.print(stsampah);  
lcd.print(" ");
```

```
Serial.print("s1: ");  
Serial.println(s1);  
Serial.print("s2: ");  
Serial.println(s2);  
Serial.print("s3: ");  
Serial.println(s3);
```

```
Serial.print("ir1: ");  
Serial.println(ir1);  
Serial.print("ir2: ");
```



```
Serial.println(ir2);  
Serial.println(h1);  
Serial.println(h2);  
Serial.println(sts1);  
Serial.println(sts2);  
Serial.println(sts3);  
Serial.println("induktif = " + String (induktif));  
Serial.println("kapasitif = " + String (kapasitif));
```

```
}
```

```
void setup()  
{  
  // Debug console  
  Serial.begin(115200);  
  EspSerial.begin(ESP8266_BAUD);  
  delay(10);  
  lcd.begin();  
  lcd.setCursor(0, 0);  
  lcd.print("Welcome ");  
  
  myservo1.attach(8);  
  myservo2.attach(9);  
  myservo1.write(awal1); // attaches the servo on pin 9 to the servo object  
  myservo2.write(awal2); // attaches the servo on pin 9 to the servo object  
  pinMode(I, INPUT);  
  pinMode(C, INPUT);  
  pinMode(IR1, INPUT);  
  pinMode(IR2, INPUT);
```



```
pinMode(buzzer, OUTPUT);
```

```
Blynk.begin(auth, wifi, ssid, pass);  
// Setup a function to be called every second  
timer.setInterval(1000L, sendSensor);  
}  
void buzzzz() {  
  digitalWrite(buzzer, HIGH);  
  delay(200);  
  digitalWrite(buzzer, LOW);  
  delay(200);  
  digitalWrite(buzzer, HIGH);  
  delay(200);  
  digitalWrite(buzzer, LOW);  
  delay(200);  
  digitalWrite(buzzer, HIGH);  
  delay(200);  
  digitalWrite(buzzer, LOW);  
  delay(200);  
  digitalWrite(buzzer, HIGH);  
  delay(200);  
  digitalWrite(buzzer, LOW);  
  delay(200);  
}  
void buzzz() {  
  digitalWrite(buzzer, HIGH);  
  delay(200);  
  digitalWrite(buzzer, LOW);  
  delay(200);  
  digitalWrite(buzzer, HIGH);  
  delay(200);  
}
```



```
delay(200);
digitalWrite(buz
zer, LOW);
delay(200);
digitalWrite(buz
er, HIGH);
delay(200);

digitalWrite(buzzer, LOW);
}

void buzz() {
digitalWrite(buz
er, HIGH);
delay(200);
digitalWrite(buz
zer, LOW);
delay(200);
digitalWrite(buz
er, HIGH);
delay(200);
digitalWrite(buzzer, LOW);
}

void buz() {
digitalWrite(buz
er, HIGH);
delay(200);
digitalWrite(buzzer, LOW);
}

void loop()
{
```



```
Blynk.run();  
timer.run();  
}
```

