

LAMPIRAN

Program pada Arduino IDE

```
#include <EEPROM.h>
#include <ESP8266WiFi.h>
#include <WiFiClient.h>
#include <ESP8266WebServer.h>
#include <ESP8266HTTPClient.h>
#include "HX711.h"
#include <Servo.h>

String ambil = "http://apki.kpmunj.org/aksesdata.php";
String kirim = "http://apki.kpmunj.org/unggah.php";
String id="12345";

const int buzz = D0;
const int serv = D4;
const int intetes = D3;
const int drh = D1;
const int Led_OnBoard = LED_BUILTIN;
const int ledr = D6;
const int ledg = D8;
const int ledb = D7;
const int calibration_factor=236;
int ms_sisa;
float sisa_persen;
int tpma,tpmb;
String statusfus;
int darah;
int a,tetes,tpm, tpmcoba;
const int kal_tetes = 930;
int bc,bcp;
bool bunyi = LOW;
unsigned long curMil; //Millis sekarang
unsigned long prevMil; //Millis sebelumnya
unsigned long durMil; //Durasi millis
unsigned long durMil2; //Durasi millis 2
unsigned long durMil3; //Durasi Millis 3
unsigned long premil,now; //milis alarm
unsigned long prevMilsudut;
```

```

//==Shulthon Hanif Majid / 5215151529=====
//=====SKRIPSWEET=====

const int infus_kosong=75;
int infus_penuh=586;
const int LOADCELL_DOUT_PIN = D2;
const int LOADCELL_SCK_PIN = D5;
const char* ssid = "APKI";
const char* password = "insyaallah";
const char *host = "apki.kpmunj.org";
int sudut=94;
bool pertama=true;

HX711 scale;
Servo myservo;

void setup() {
  delay(1000);
  premil=0;
  pinMode(Led_OnBoard, OUTPUT);
  pinMode(drh, INPUT);
  pinMode(leldr, OUTPUT);
  pinMode(ledg, OUTPUT);
  pinMode(ledb, OUTPUT);
  pinMode(buzz, OUTPUT);
  pinMode(D5, OUTPUT);
  pinMode(serv, OUTPUT);
  pinMode(intetes, OUTPUT);
  pinMode(A0, INPUT);
  tpma=0;
  tpmb=0;
  tetes = 0;
  myservo.attach(serv);
  myservo.write(0);
  scale.begin(LOADCELL_DOUT_PIN, LOADCELL_SCK_PIN);
  scale.set_scale();
  scale.tare();
  scale.set_scale(calibration_factor);

  EEPROM.begin(512);
  Serial.begin(115200);

  Serial.println("=====

```

```

=====");
  Serial.println(" Alat Pemantau dan Kendali Infus Menggunakan Web
Berbasis NodeMCU ESP8266 ");
  Serial.println("_____Oleh: Shulthon Hanif
Majid_____");
  Serial.println("Bismillahirrahmanirrahim..");

Serial.println("=====
=====");
  Serial.println(" ");
  digitalWrite(buzz,HIGH);
  delay(100);
  digitalWrite(buzz,LOW);
  led(1023,1023,1023);
  delay(2000);
  ms_sisa = scale.get_units(1), 1;
  int val = ms_sisa/4;
  int valp = ms_sisa % 4;
  if (val>10){
    EEPROM.write(0, val);
    EEPROM.write(1, valp);
  }
  Serial.println(val);
  ms_sisa = 0;
  while(ms_sisa<30)
  {
    ms_sisa = scale.get_units(5), 1;
    led(1023,0,0);
    delay(100);
    led(0,0,0);
    delay(100);
  }
  digitalWrite(buzz,HIGH);
  delay(100);
  digitalWrite(buzz,LOW);
  delay(20);
  digitalWrite(buzz,HIGH);
  delay(100);
  digitalWrite(buzz,LOW);
  led(0,0,1023);
  delay(5000);
  led(0,0,0);
  bc = EEPROM.read(0);

```

```

bcp = EEPROM.read(1);
if (bc != 0){
  infus_penuh = (bc*4)+bcp;
} else {
  int hs = 586/4;
  int hsp = 586 % 4;
  EEPROM.write(0, hs);
  EEPROM.write(1, hsp);
}
Serial.println(infus_penuh);
myservo.write(sudut);
WIFI_Connect();
Serial.println("");
led(982,160,541);
digitalWrite(Led_OnBoard, HIGH);
digitalWrite(buzz,HIGH);
delay(300);
digitalWrite(buzz,LOW);
delay(20);
digitalWrite(buzz,HIGH);
delay(300);
digitalWrite(buzz,LOW);
led(0,0,0);
prevMil = millis();
}

//PERULANGAN=====
=====

void loop() {
  curMil=millis();

  HTTPClient http;
  String postData;

  Serial.println("=====
  =====");
  //digitalWrite(buzz,LOW);
  // =====Baca Data LoadCell
  ms_sisa = scale.get_units(5), 1;
  sisa_persen = (ms_sisa - infus_kosong)*100/(infus_penuh -
infus_kosong);
  if (sisa_persen<0){
    sisa_persen = 0;

```

```

}
Serial.print("Sensor Loadcell: ");
Serial.print(ms_sisa);
Serial.print(" gram, ");
Serial.print(sisa_persen);
Serial.println("%");
if (sisa_persen>10) {
  led(0,1023,0);
  statusfus = 3;
}
else if (sisa_persen>0) {
  led(1023,1023,0);
  statusfus = 2;
}
else{
  led(1023,0,0);
  statusfus = 1;
}

//=====Ambil Data Website
//=====1. Data TPM Bawah
Serial.print("Data TPM Web : ");
int tpmbbaru;
postData = "id=";
postData += id;
postData += "&minta=tpmb";
http.begin(ambil);
http.addHeader("Content-Type", "application/x-www-form-
urlencoded"); //Specify content-type header
int httpCode = http.POST(postData);
if (!pertama){
  Alarem();
}
String payload = http.getString();
if (payload != ""){
  tpmbbaru = payload.toInt();
  Serial.print(payload);
} else {
  tpmbbaru = tpmb;
  Serial.print("Kesalahan sambungan");
}
http.end();
Serial.print(" - ");

```

```

//=====2. Data TPM Atas
int tpmabaru;
postData = "id=";
postData += id;
postData += "&minta=tpma";
http.begin(ambil);
http.addHeader("Content-Type", "application/x-www-form-
urlencoded"); //Specify content-type header
httpCode = http.POST(postData);
if (!pertama){
  Alarem();
}
payload = http.getString();
if (payload != ""){
  tpmabaru=payload.toInt();
  Serial.print(payload);
} else {
  tpmabaru=tpma;
  Serial.print("Kesalahan sambungan");
}
http.end();
Serial.println(" tetes/menit");

// =====Baca Tetesan PD
bacatetes();
Serial.print("TPM Terbaca : ");
Serial.print(tpm);
Serial.println(" tetes/menit");
if (!pertama){
  Alarem();
}

// =====KONDISIKAN PENJEPIT SELANG
if (tpm>tpma || tpma != tpmabaru || tpmb != tpmbbaru){
  tpma = tpmabaru;
  tpmb = tpmbbaru;
  penjepit();
  Serial.print("Penjepit Selang: Sudut ");
  Serial.print(sudut);
  Serial.print(", ");
  Serial.print(tpm);
  Serial.println(" tetes/menit");
}

```

```

}

if (statusfus=="1"){
  myservo.write(0);
}

// =====BACA DARAH
darah = digitalRead(drh);
Serial.print("Darah pd Selang: ");
if (darah == 1) {
  led(1023,0,0);
  Serial.println("Darah terdeteksi");
} else {
  Serial.println("Tidak terdeteksi");
}

// =====KIRIM DATA
postData = "id=";
postData += id;
postData += "&tpm=";
postData += tpm;
postData += "&darah=";
postData += darah;
postData += "&sisas=";
postData += sisa_persen;
Serial.print("Kirim Data Web : ");
Serial.print(postData);
Serial.print(">> ");
http.begin(kirim);
http.addHeader("Content-Type", "application/x-www-form-
urlencoded"); //Specify content-type header
httpCode = http.POST(postData);
payload = http.getString();
if (!pertama){
  Alarem();
}
if (payload!=""){
  Serial.println(payload);
} else {
  Serial.println("Kesalahan sambungan");
  WIFI_Connect();
}
http.end();

```

```

    pertama=false;
}

//Set LED RGB
void led(int r, int g, int b){
    analogWrite(ledr, r);
    analogWrite(ledg, g);
    analogWrite(ledb, b);
}

//Koneksi Wifi
void WIFI_Connect()
{
    digitalWrite(Led_OnBoard,1);
    WiFi.disconnect();
    Serial.print("Menghubungkan");
    WiFi.mode(WIFI_STA);
    WiFi.begin(ssid, password);
    while ( WiFi.status() != WL_CONNECTED ) {
        digitalWrite(buzz,LOW);
        led(0,0,1023);
        delay(250);
        Serial.print(".");
        led(0,1023,0);
        delay(250);
    }
    Serial.println("");
    Serial.println("Terhubung ke SSID");
    Serial.print("IP address: ");
    Serial.println(WiFi.localIP());
    if (WiFi.localIP().toString()=="0.0.0.0") {
        WIFI_Connect();
    }
}

void bacatetes() {
    unsigned long prevmil,skrg,satu,dua;
    int mem = 0;
    bool onhitung = true;
    tpm = 0;
    satu = 0;
    dua = 0;
    prevmil = millis();
}

```



```

while (onhitung) {
  delay(1);
  if (!pertama) {
    Alarem();
  }
  a=analogRead(A0);
  if(a<=kal_tetes) {
    if(mem==0) {
      tetes++;
      if(tetes==2) {
        satu = millis();
      } else if(tetes==3) {
        dua = millis();
        int sls = dua - satu;
        tpm = 60000/sls;
        onhitung=false;
      }
    }
    mem=1;
  }
  else {
    mem=0;
  }
  skrg=millis();
  if (skrg-prevmil>=6000) { //TIMEOUT 6 detik
    tpm=0;
    onhitung = false;
  }
  yield();
}
if (tpm>=500) {
  tpm=0;
}
tetes=0;
}

```

```

void Alarem() {
  if (premil<=0) {
    premil=millis();
  }
  now=millis();
  if (statusfus=="3") {
    led(0,1023,0);
  }
}

```

```

}else if (statusfus=="2"){
    led(1023,1023,0);
    if (now-premil>=1000){
        bunyi=!bunyi;
        digitalWrite(buzz,bunyi);
        premil=millis();
    }
} else if (statusfus=="1" || tpm==0 || darah==1){
    led(1023,0,0);
    if (now-premil>=500){
        bunyi=!bunyi;
        digitalWrite(buzz,bunyi);
        premil=millis();
    }
}
}

void penjepit(){
    if (prevMilsudut<=0){
        prevMilsudut = millis();
    }
    Serial.println("");
    Serial.println("Menyesuaikan tetesan dengan web...");
    while(statusfus!="1" &&(tpm<tpmb || tpm>tpma)){
        digitalWrite(buzz,LOW);
        if (!pertama){
            Alarem();
        }
        curMil=millis();

        if(curMil-prevMilsudut>=1000){
            if (tpm<tpmb){
                //BUKA SELANG
                if ((tpmb-tpm)>30) {
                    sudut -= 2;
                } else {
                    sudut--;
                }
            } else if (tpm>tpma){
                //JEPIT SELANG
                if ((tpm-tpma)>30) {
                    sudut += 2;
                } else {

```

```
        sudut++;  
    }  
    }  
    myservo.write(sudut);  
    prevMilsudut=millis();  
    bacatetes();  
  
    Serial.print(sudut);  
    Serial.print(", ");  
    Serial.println(tpm);  
    if (tpm == 0 && sudut<=76){  
        sudut=77;  
        break;  
    }  
    }  
  
    yield();  
    }  
    }
```



Program pada Web

1. Halaman Utama

```
<!doctype html>
<html lang="en">
  <head><meta http-equiv="Content-Type" content="text/html;
charset=utf-8">
  <title>Alat Pemantau dan Kendali Infus - UNJ</title>

  <meta name="viewport" content="width=device-width, initial-
scale=1, shrink-to-fit=no">
  <script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min
.js"></script>
  <link rel="stylesheet" href="style.css" type="text/css"
media="all"/>

  <link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/css/boots
trap.min.css" />
  <script
src="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/js/bootstr
ap.min.js"></script>

<script>
$(document).ready(function() {
  setInterval(function(){get_data()},1500);
  function get_data()
  {
    jQuery.ajax({
      type:"GET",
      url: "read_db.php",
      data:"",
      beforeSend: function() {
      },
      complete: function() {
      },
      success:function(data) {
        $("table.pasien").html(data);
      }
    });
  }
});
}
```

```

    });
  </script>
</head>
<body>
  <!-- header (logo section) -->
<div class="container">

<nav class="navbar navbar-expand-lg navbar-dark bg-dark sticky-top">
  <button class="navbar-toggler" type="button" data-
toggle="collapse" data-target="#navbarTogglerDemo03" aria-
controls="navbarTogglerDemo03" aria-expanded="false" aria-
label="Toggle navigation">
  <span class="navbar-toggler-icon"></span>
</button>
<span class="navbar-brand mb-0 h1">APKI UNJ</span>
<div class="collapse navbar-collapse" id="navbarTogglerDemo03">
  <ul class="navbar-nav mr-auto mt-2 mt-lg-0">
    <li class="nav-item active">
      <a class="nav-link" href="/">Home</a>
    </li>
    <li class="nav-item">
      <a class="nav-link" href="panduan.php">Panduan</a>
    </li>
    <li class="nav-item">
      <a class="nav-link" href="about.php">Tentang</a>
    </li>
  </ul>

  <div class="btn-group">
    <button type="button" data-toggle="modal" data-
target="#login_Modal" class="btn btn-sm btn-light">Login</button>
  </div>
</div>
</nav>

<header class="header">
  <h1><a href="/">APKI</a></h1>
  <div class="description">Alat Pemantau dan Kendali Infus
Menggunakan Web Berbasis NodeMCU ESP8266</div>
</header>

<div align="right">
  <button type="button" data-toggle="modal" data-

```

```

target="#add_data_Modal" class="btn btn-sm btn-warning">Tambah
Pasien</button>
</div>
<br/>
<div class="table-responsive">
<table class="pasien"/>
</div>
</div>
</body>
</html>

```

```

<div id="login_Modal" class="modal fade">
<div class="modal-dialog">
<div class="modal-content">
<div class="modal-header">
<h5 class="modal-title">Akses Masuk</h5>
<button type="button" class="close" data-
dismiss="modal" aria-label="Close">
<span aria-hidden="true">&times;</span>
</button>
</div>
<form method="post" id="login_form">
<div class="modal-body">
<div class="form-group">
<label for="exampleDropdownFormEmail1">Alamat email</label>
<input type="email" class="form-control" id="email"
placeholder="email@example.com"/>
</div>
<div class="form-group">
<label for="exampleDropdownFormPassword1">Kata sandi</label>
<input type="password" class="form-control" id="password"
placeholder="Password"/>
</div>
<div class="form-group">
<div class="form-check">
<input type="checkbox" class="form-check-input"
id="dropdownCheck"/>
<label class="form-check-label" for="dropdownCheck">Ingat
saya</label>
</div>
</div>
<a class="" href="#">Baru? Daftar di sini</a> |
<a class="" href="#">Lupa kata sandi?</a>

```

```

    </div>
    <div class="modal-footer">
        <button type="button" class="btn btn-secondary" data-
dismiss="modal">Batal</button>
        <input type="submit" name="login" id="login" value="Login"
class="btn btn-primary"/>
    </div>
</form>
</div>
</div>
</div>

<div id="add_data_Modal" class="modal fade">
    <div class="modal-dialog">
        <div class="modal-content">
            <div class="modal-header">
                <h5 class="modal-title">Tambah Data Pasien Infus</h5>
                <button type="button" class="close" data-dismiss="modal" aria-
label="Close">
                    <span aria-hidden="true">&times;</span>
                </button>
            </div>
            <form method="post" id="insert_form">
                <div class="modal-body">
                    <label>ID</label>
                    <input type="text" name="id" id="id" class="form-control" />
                    <br />
                    <label>Nama Pasien</label>
                    <input type="text" name="nama" id="nama" class="form-control"
/>
                    <br />
                    <label>Jenis Infus</label>
                    <select name="jenis" id="jenis" class="form-control">
                        <option value='25'>25mL</option>
                        <option value='100'>100mL</option>
                        <option value='500'>500mL</option>
                    </select>
                    <br />
                    <label>Catatan:</label>
                    <textarea name="catatan" id="catatan" class="form-
control"></textarea>
                </div>
            <div class="modal-footer">

```

```

        <button type="button" class="btn btn-secondary" data-
dismiss="modal">Batal</button>
        <input type="submit" name="insert" id="insert"
value="Tambahkan" class="btn btn-primary"/>
    </div>
</form>
</div>
</div>
</div>

```

```

<div id="dataModal" class="modal fade">
  <div class="modal-dialog">
    <div class="modal-content">
      <div class="modal-header">
        <h5 class="modal-title">Detail Info Pasien</h5>
        <button type="button" class="close" data-dismiss="modal" aria-
label="Close">
          <span aria-hidden="true">&times;</span>
        </button>
      </div>
      <div class="modal-body" id="employee_detail">

      </div>
      <div class="modal-footer">
        <button type="button" class="btn btn-secondary" data-
dismiss="modal">Batal</button>
      </div>
    </div>
  </div>
</div>

```

```

<div id="dataTPM" class="modal fade">
  <div class="modal-dialog">
    <div class="modal-content">
      <div class="modal-header">
        <h5 class="modal-title">Tetesan Per Menit Infus Pasien</h5>
        <button type="button" class="close" data-dismiss="modal" aria-
label="Close">
          <span aria-hidden="true">&times;</span>
        </button>
      </div>
    </div>
  </div>

```



```

    </button>
</div>
<div class="modal-body" id="tpm_detail">

</div>

<div class="modal-footer">
    <button type="button" class="btn btn-secondary" data-
dismiss="modal">Batal</button>
</div>
</div>
</div>
</div>
</div>
<script>
$(document).ready(function(){

$('#login_form').on("submit", function(event){
event.preventDefault();
if($('#email').val() == "")
{
alert("Email is required");
}
else if($('#password').val() == '')
{
alert("Password is required");
}

else
{
$.ajax({
url:"login.php",
method:"POST",
data:$('#login_form').serialize(),
beforeSend:function(){
},
success:function(data) {
$('#login_form')[0].reset();
$('#login_Modal').modal('hide');
$('#login').val("Masuk");
$('#table').html(data);
}
});
}
});

```

```

    }
  });

$('#insert_form').on("submit", function(event){
  event.preventDefault();
  if($('#id').val() == "")
  {
    alert("ID is required");
  }
  else if($('#nama').val() == "")
  {
    alert("Nama Pasien is required");
  }
  else if($('#jenis').val() == '')
  {
    alert("Jenis Infus is required");
  }
  else if($('#status').val() == '')
  {
    alert("Status is required");
  }
  else
  {
    $.ajax({
      url:"InsertDB.php",
      method:"POST",
      data:$('#insert_form').serialize(),
      beforeSend:function(){
        $('#insert').val("Menambahkan");
      },
      success:function(data){
        $('#insert_form')[0].reset();
        $('#add_data_Modal').modal('hide');
        $('#insert').val("Tambahkan");
        $('#table').html(data);
      }
    });
  }
});

```

```

$(document).on('click', '.view_data', function(){
    //$('#dataModal').modal();
    var id = $(this).attr("id");
    $.ajax({
        url:"lihat.php",
        method:"POST",
        data:{id:id},
        success:function(data){
            $('#employee_detail').html(data);
            $('#dataModal').modal('show');
        }
    });
});

$(document).on('click', '.tpm_data', function(){
    var id = $(this).attr("id");
    $.ajax({
        url:"aturtpm.php",
        method:"POST",
        data:{id:id},
        success:function(data){
            $('#tpm_detail').html(data);
            $('#dataTPM').modal('show');
            $('.toast').toast(option);
        }
    });
});
});
</script>

```

2. Koneksi Database

```

<?php
    //Shulthon Hanif Majid (08567562326)

    //Connect to database
    $servername = "apki.kpmunj.org";
    $username = "u5572326_apki_user";
    $password = "akunapkiresmi";
    $dbname = "u5572326_apki_coba";

    // Create connection

```

```

$conn = new mysqli($servername, $username, $password, $dbname);

// Check connection
if ($conn->connect_error) {
    die("Database Connection failed: " . $conn->connect_error);
}
?>

```

3. Membaca Database

```

<!DOCTYPE html>
<html>
  <head><meta http-equiv="Content-Type" content="text/html;
  charset=utf-8">
    <link rel="stylesheet"
  href="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/css/boots
  trap.min.css" />
  </head>
  <?php
    require('ConnectDB.php');
  ?>
  <body>
    <table class="table table-striped table-hover">
      <thead class="thead-dark">
        <tr>
          <th scope="col">No</th>
          <th scope="col">ID</th>
          <th scope="col">Nama Pasien</th>
          <th scope="col">Jenis Infus</th>
          <th scope="col">Sisa Cairan Infus</th>
          <th scope="col">Jumlah Tetesan</th>
          <th scope="col">Pengaturan Tetesan</th>
          <th scope="col">Darah</th>
          <th scope="col">Status</th>
          <th scope="col">Opsi</th>
        </tr>
      </thead>
      <?php
        $urut = 0;
        $table = mysqli_query($conn, "SELECT
  s1.id,s1.nama,s1.status,s1.jenis,s2.tpm_a,s2.tpm_b, s3.tpm,
  s3.sisa, s3.darah, s1.catatan, s3.tanggal, s3.waktu FROM pasien s1
  JOIN datakeluar AS s2 ON s2.id=s1.id JOIN (SELECT

```

```

id,tpm,sisa,darah,tanggal, waktu FROM datamasuk WHERE no IN
(SELECT MAX(no) FROM datamasuk GROUP BY id)) AS s3 ON s3.id =
s1.id");
    while($row = mysqli_fetch_array($stable))
    {
        $surut++;
        $quer1="SELECT tanggal,waktu FROM (SELECT * FROM
datamasuk WHERE id = ".$row['id']." ORDER BY no DESC LIMIT 2) AS
waktunya ORDER BY no ASC LIMIT 1";
        $quer2="SELECT tanggal,waktu FROM (SELECT * FROM
datamasuk WHERE id = ".$row['id']." ORDER BY no DESC LIMIT 2) AS
waktunya ORDER BY no DESC LIMIT 1";
        $result = mysqli_query($conn,"SELECT NOW()");
        while($rew = mysqli_fetch_array($result))
        {
            $awal = $rew[0];
        }
        $result2 = mysqli_query($conn,$quer2);
        while($reww = mysqli_fetch_array($result2))
        {
            $akhir = $reww['tanggal'].' '.$reww['waktu'];
        }
        $seheh="SELECT
TIME_TO_SEC(TIMEDIFF('".$awal."','".$akhir."'))";
        $akhirnya = mysqli_query($conn,$seheh);
        while($rewws = mysqli_fetch_array($akhirnya))
        {
            if ($rewws[0]/60 > 0.2){
                $koneksi = "UPDATE pasien SET status ='Tidak
Aktif' WHERE id='".$row['id']."'";
            } else {
                $koneksi = "UPDATE pasien SET status
='Aktif' WHERE id='".$row['id']."'";
            };
            $apdet = mysqli_query($conn,$koneksi);
        }
    }

?>
<tbody>
<tr>
    <td><?php echo $surut; ?></td>
    <td><?php echo $row["id"]; ?></td>
    <td><?php echo $row["nama"]; ?></td>

```

```

        <td><?php echo $row["jenis"]; ?> mL</td>
        <td><?php if ($row["sisa"] >"10") {echo "<div
class='progress' style='height: 30px; font-size:14px;'"><div
class='progress-bar bg-success progress-bar-striped'
role='progressbar' style='width: "; echo $row["sisa"]; echo "%;'
aria-valuenow='"; echo $row["sisa"]; echo "' aria-valuemin='0'
aria-valuemax='100'">"; echo $row["sisa"]; echo "%</div></div>";}
else if ($row["sisa"] >"0") {echo "<div class='alert alert-
warning' role='alert'"><strong>Peringatan siaga!</strong><br/>Sisa
"; echo $row["sisa"]; echo "% </div>";} else {echo "<div
class='alert alert-danger'
role='alert'"><strong>Bahaya!</strong><br/>Cairan infus habis.
</div>";} ?></td>
        <td><?php if ($row["tpm"] == "0") {echo "<div class='alert
alert-danger' role='alert'"><strong>Bahaya!</strong><br/>Cairan
tidak menetes</div>";} else {echo $row["tpm"]; echo " tetes /
menit";} ?></td>
        <td><?php echo $row["tpm_b"]; ?> - <?php echo
$row["tpm_a"]; ?><br/>tetes / menit</td>
        <td><?php if ($row["darah"] == "0") {echo "Tidak
Terdeteksi";} else {echo "<div class='alert alert-danger'
role='alert'"><strong>Bahaya!</strong><br/>Darah
Terdeteksi</div>";} ?></td>
        <td><?php
        if ($row["status"] == "Aktif") {
            echo "<div class='text-center'"><div class='"; if
($row["sisa"] >"10"){echo "spinner-grow text-success";} else if
($row["sisa"] >"0"){echo "spinner-grow text-warning";} else{echo
"spinner-grow text-danger";}"; echo " m-1' role='status'"><span
class='sr-only'">Menetes...</span></div></div>";
            if ($row["sisa"] >"0" && $row["sisa"] <"11"){echo
"<audio controls='controls' autoplay='autoplay'
style='display:none'"><source src='audio/Beep.wav'
type='audio/mpeg'">Your browser does not support the audio
element.</audio>";}
            if ($row["darah"] == "1" || $row["tpm"] == "0" ||
$row["sisa"] == "0"){echo "<audio controls='controls'
autoplay='autoplay' style='display:none'"><source
src='audio/Smoke_Alarm.wav' type='audio/mpeg'">Your browser does
not support the audio element.</audio>";}
        } else {echo "Koneksi Terputus";}
        ?></td>
        <td><input type="button" name="atur" value="Atur TPM"

```

```

id="<?php echo $row["id"]; ?>" class="btn btn-primary btn-sm
tpm_data" /><br/><br/><input type="button" name="view"
value="Detail" id="<?php echo $row["id"]; ?>" class="btn btn-
secondary btn-sm view_data" /></td>
</tr>
</tbody>
<?php
}
?>
</table>
</body>
</html>

```

4. Menulis Database

```

<?php
require('ConnectDB.php');
//Get current date and time
date_default_timezone_set('Asia/Jakarta');
$d = date("Y-m-d");
$t = date("H:i:s");

if(!empty($_POST['id']) and !empty($_POST['tpm_a'])
and !empty($_POST['tpm_b']))
{
$id=$_POST['id'];
$tpm_a=$_POST['tpm_a'];
$tpm_b=$_POST['tpm_b'];
$sql = "UPDATE datakeluar SET tpm_a = '". $tpm_a ." ' WHERE
id='". $idd ." ";
$sql1 = "UPDATE datakeluar SET tpm_b = '". $tpm_b ." ' WHERE
id='". $idd ." ";
$sql2 = "UPDATE datakeluar SET tanggal = '". $d ." ' WHERE
id='". $idd ." ";
$sql3 = "UPDATE datakeluar SET waktu = '". $t ." ' WHERE
id='". $idd ." ";
if ($conn->query($sql) && $conn->query($sql1) &&
$conn->query($sql2) && $conn->query($sql3)) {
echo "<script type='text/javascript'> document.location =
'index.php'; </script>";
} else {
echo "Error: " . $sql . "<br/>" . $conn->error;
}
}

```

```

}

if(!empty($_POST['id'])and !empty($_POST['nama'])
and !empty($_POST['jenis']))
{
$id = $_POST['id'];
$name = $_POST['nama'];
$jenis = $_POST['jenis'];
$status = $_POST['status'];
$catatan = $_POST['catatan'];
$sql = "INSERT INTO pasien
(id,nama, jenis, tanggal_pembuatan,waktu_pembuatan, status, catatan)
VALUES ('".$id."', '".$name."', '".$jenis."', '".$d."', '".$t."',
'".$status."', '".$catatan."')";
$sql1 = "INSERT INTO datakeluar (id,tpm_a,tpm_b,tanggal,waktu)
VALUES ('".$id."', '0', '0', '".$d."', '".$t."')";
$sql2 = "INSERT INTO datamasuk
(id,tpm,darah,sisa,tanggal,waktu) VALUES ('".$id."', '0', '0', '0',
'".$d."', '".$t."')";

if ($conn->query($sql) && $conn->query($sql1) &&
$conn->query($sql2)) {
echo "<label class='text-success'>Data Inserted</label>";
} else {
echo "Error: " . $sql . "<br/>" . $conn->error;
}
}

$conn->close();
?>

```

5. Unggah Data

```

<?php
require('ConnectDB.php');
//Get current date and time
date_default_timezone_set('Asia/Jakarta');
$d = date("Y-m-d");
$t = date("H:i:s");

if(!empty($_POST['id']))
{

```



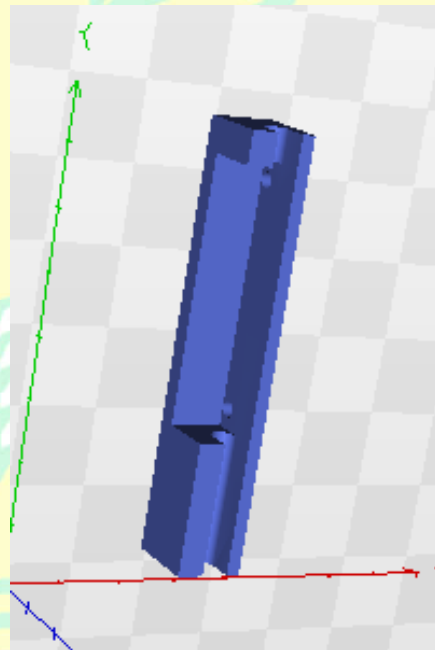
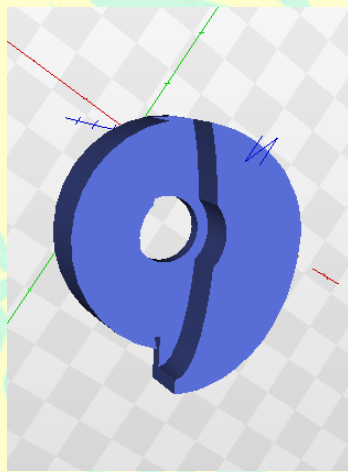
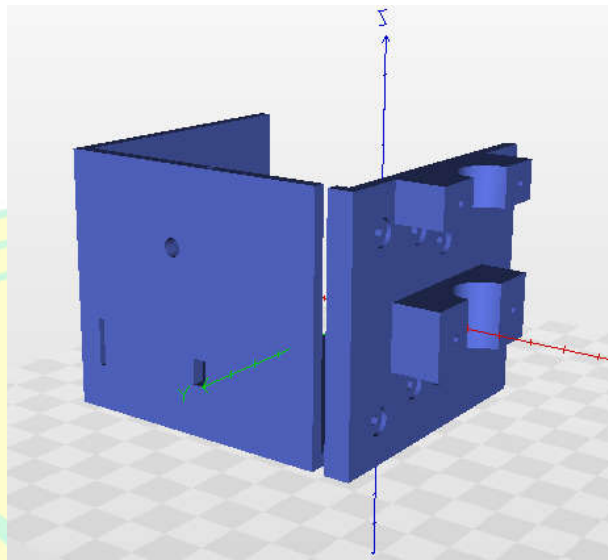
```
$id=$_POST['id'];
$tpm=$_POST['tpm'];
$darah=$_POST['darah'];
$sisas=$_POST['sisas'];
$sql = "INSERT INTO datamasuk (id,tpm,darah,sisa,tanggal,waktu)
VALUES ('.$id.', '$tpm.', '$darah.', '$sisas.', '$d.',
'.$t.')";

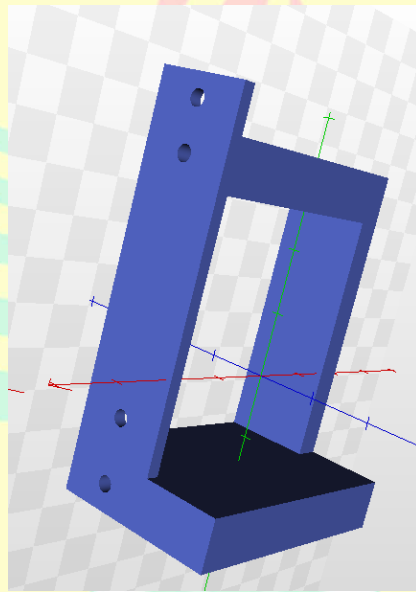
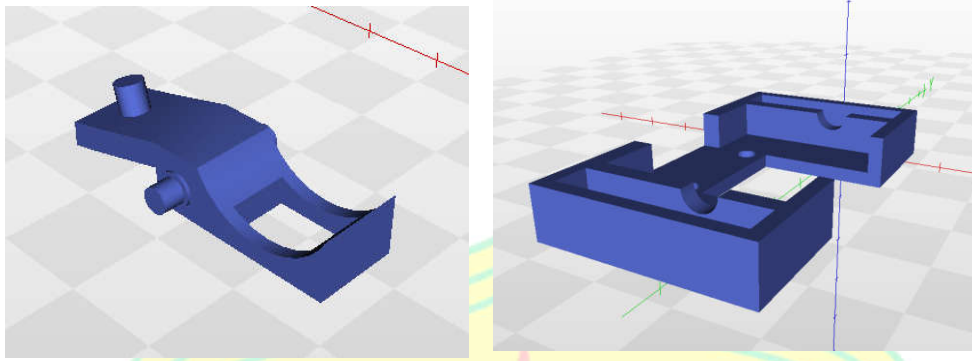
if ($conn->query($sql)) {
    echo "Sukses";
} else {
    echo "Error: " . $sql . "<br/>" . $conn->error;
}

$conn->close();
?>
```



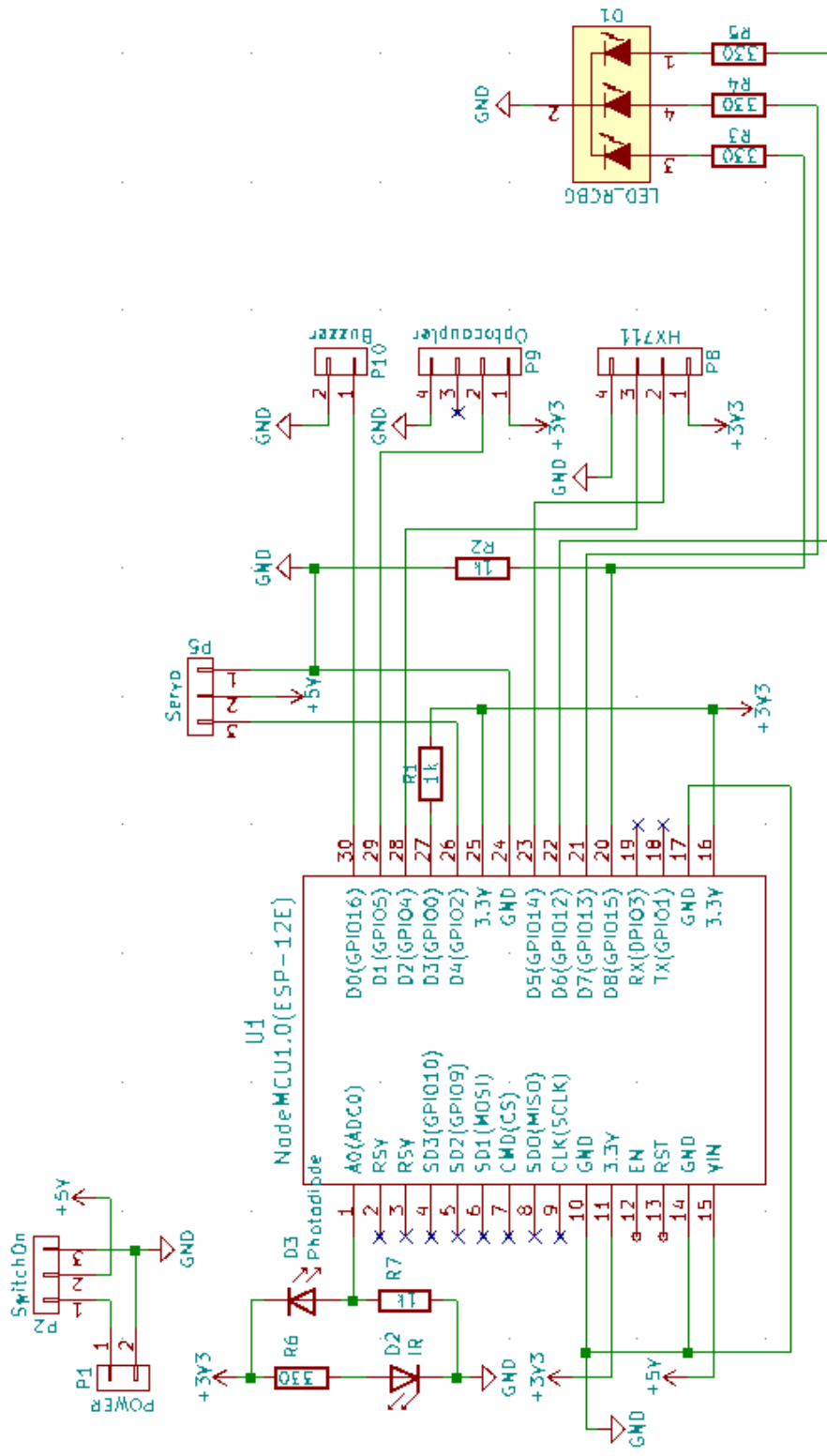
Desain Alat



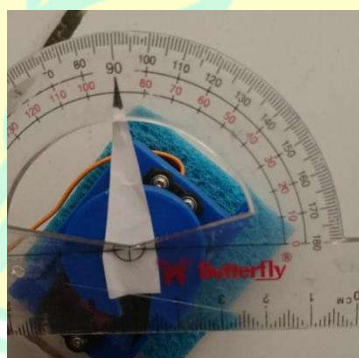
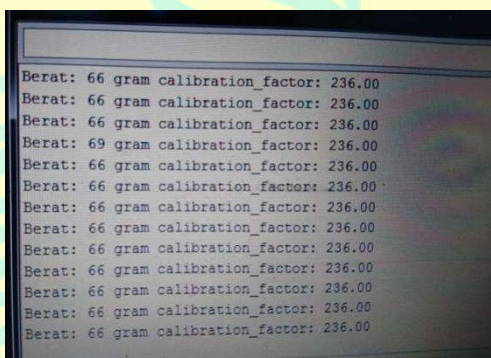


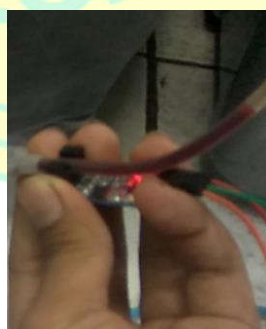
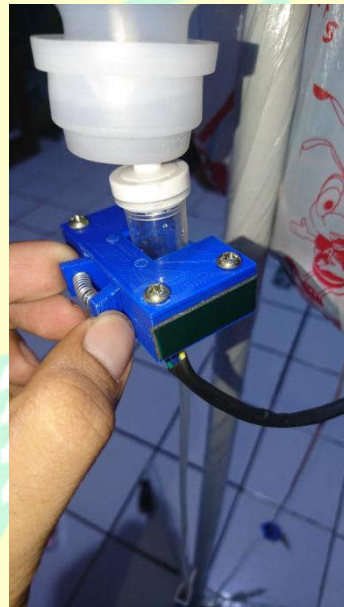
UNIVERSITAS NEGERI JAKARTA

Skematik Sistem Keseluruhan



Dokumentasi





RIWAYAT HIDUP



Shulthon Hanif Majid, lahir di Tangerang pada tanggal 23 Agustus 1997, anak pertama 4 bersaudara dari pasangan Bapak Agus Purwanto dan Ibu Waliyah. Tempat tinggal beralamatkan di Jalan Pam II No. 22, RT 014/08, Cempaka Baru, Kemayoran, Jakarta Pusat. Peneliti menempuh pendidikan formal dimulai dari pendidikan

Sekolah Dasar di SDN 01 Jerukagung pada Tahun 2003-2004, melanjutkan di SDN 03 Cempaka Baru lulus pada tahun 2009. Kemudian melanjutkan ke jenjang pendidikan Sekolah Menengah Pertama di SMP Negeri 10 Jakarta lulus pada tahun 2012, serta melanjutkan pendidikan di SMK Negeri 39 Jakarta jurusan Audio Video yang lulus pada tahun 2015. Pada tahun yang sama, diterima sebagai mahasiswa di Program Studi Pendidikan Teknik Elektronika, Fakultas Teknik, Universitas Negeri Jakarta melalui Seleksi Nasional Masuk Perguruan Tinggi Negeri (SNMPTN).