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## LAMPIRAN A

### Program Arduino Atmega 2560

>>Program Arduino Atmega 2560<<

```
#include <SoftwareSerial.h>
#include <EEPROM.h>
#include <BH1750.h>
#include <Wire.h>
#include <DFRobot_PH.h>
#include <GravityTDS.h>
#include <DHT.h>
#include <OneWire.h>
#include <DallasTemperature.h>
#include <DS3231.h>
```

```
//rx tx
SoftwareSerial dtserial(50,51);
```

```
//PIN ph
#define PH_PIN A2
//PIN DHT
#define DHTPIN 11
#define DHTTYPE DHT22
```

```
//PIN TDS
#define TdsSensorPin A1
```

```
//variable relay
#define r1 10 //pump ph up
#define r2 9 //pump ph down
#define r3 8 //pump nutrisi ab mix
#define r4 7 //saklar lampu A
#define r5 6 //saklar lampu B
#define r6 5 //saklar kipas
#define r7 3 //saklar pompa air
#define r8 4 //Pengaduk
```

```
DS3231 rtc(SDA,SCL);
```

```

BH1750 lightMeter;
DFRobot_PH ph;
DHT dht(DHTPIN, DHTTYPE);
GravityTDS gravityTds;

//pin suhu air
OneWire wiring(12);
DallasTemperature sair(&wiring);

//dht variable
int h;
float t;

//tds
float tdsValue = 0;
float tdsnilai;
float voltage, phValue ;

//cahaya
float lux;

//variable parsing data
bool parsing = false;
String sData, data[17];

//variable kontrol
int modes; //mode
int slA; //saklar lampu a
int slB; //saklar lampu b
int sK; //saklar kipas
int sj = 0; //waktu untuk jalan
int sl = 0; //waktu untuk berhenti
int ss = 0; //waktu pukul 22:00 semua sistem off
int sph; //status saklar ph up/down
float bphup; //batas ph up
float bphdown; //batas ph down
float bic; //batas cahaya yang dibutuhkan
int bpm; //batas minimal nutrisi

```

```
float bsuhu; //batas suhu
int nutrisiair; //batas nutrisi mode manual
float phairs; //bata ph mode manual
float bici; //batas cahaya yang dibutuhkan
```

```
//Waktu
```

```
String wjj1 ="06:30:00";
String wjj2 ="16:55:00";
String wjs1 ="06:35:00";
String wjs2 ="17:00:00";
String wjs3 ="22:00:00";
```

```
//variable waktu awal pada millis
```

```
unsigned long waK = 0; //Waktu awal kirim
unsigned long wphup = 0; //waktu awal ph up
unsigned long wphdown = 0; //waktu awal ph down
unsigned long wN = 0; //waktu awal nutrisi
unsigned long wphA1 = 0; //waktu awal ph air1 untuk menambahkan ph
air
unsigned long wphA2 = 0; //waktu awal ph air2 untuk mengurangi ph
air
unsigned long wppm = 0; //waktu awal ppm
```

```
//boolean status relay
```

```
bool spup = HIGH; //status pomp up
bool spdown = HIGH; //status pomp down
bool spN = HIGH; //status pomp Nutrisi
bool sp = HIGH; //status pengaduk
```

```
//Waktu RTC
```

```
String waktu;
```

```
//VOID SETUP
```

```
void setup() {
sair.begin();
Serial.begin(9600);
```

```

dtserial.begin(9600);
rtc.begin();
sData = "";
ph.begin();
dht.begin();
gravityTds.setPin(TdsSensorPin);
gravityTds.setAref(5.0); //reverensi tegangan pada ADC, arduino
gravityTds.setAdcRange(1024); //1024 untuk 10bit ADC,4096 untuk
12bit ADC
gravityTds.begin();
Wire.begin();
lightMeter.begin();

pinMode(TdsSensorPin, INPUT);

//PIN mode RELAY
pinMode(r1, OUTPUT);
digitalWrite(r1, 1);
pinMode(r2, OUTPUT);
digitalWrite(r2, 1);
pinMode(r3, OUTPUT);
digitalWrite(r3, 1);
pinMode(r4, OUTPUT);
digitalWrite(r4, 0);
pinMode(r5, OUTPUT);
digitalWrite(r5, 0);
pinMode(r6, OUTPUT);
digitalWrite(r6, 0);
pinMode(r7, OUTPUT);
digitalWrite(r7, 0);
pinMode(r8, OUTPUT);
digitalWrite(r8, 0);

//set_awal_waktu
//rtc.setDOW(THURSDAY);
//rtc.setTime(14,20,0);
//rtc.setDate(23,1,2020);
} // akhir void setup

```

```

// awal void waktu
void waktujam(){
//waktu
waktu=rtc.getTimeStr();
// Serial.println(waktu);

if(waktu >= wjj1 && waktu <= wjs1 )
{
sj=1;
}

else if(waktu >= wjs1)
{
sj=0;
}

if(waktu >= wjj2 && waktu <= wjs2 )
{
sj=1;
}

else if(waktu >= wjs2)
{
sj=0;
}

if(waktu >= wjj1 && waktu <= wjs2 )
{
sl=1;
}

else if(waktu >= wjs2)
{
sl=0;
}
if(waktu >= wjj1 && waktu <= wjs3)
{

```



```

ss=1;
}

else if(waktu >= wjs3)
{
ss=0;
}

}
//akhir void jam

//awal void pembacaan sensor
void pembacaanS() {

unsigned long WKS = millis(); // waktu kirim sekarang
if (WKS - waK >= 5000) {

//bh1750
lux = lightMeter.readLightLevel();

//pembacaan suhu air
sair.setResolution(9);
sair.requestTemperatures();
float dsuair = sair.getTempCByIndex(0);

//DHT22
h = dht.readHumidity();
t = dht.readTemperature();

//ph
voltage = analogRead(PH_PIN) / 1024.0 * 5000;
phValue = ph.readPH(voltage, dsuair);

//tds
//temperature = readTemperature(); //add your temperature sensor and
read it
gravityTds.setTemperature(sair.getTempCByIndex(0)); // set the
temperature and execute temperature compensation

```

```

gravityTds.update(); //sample and calculate
tdsValue = gravityTds.getTdsValue(); // then get the value

//sediakan variabel penampung data yang akan dikirim
String datakirim = "#" + String(lux) + "#" + String(t) + "#" + String(h) +
"#" + String(phValue, 2) + "#" + String(tdsValue) + "#" +
String(dsuhair) + "#" + "$";
Serial.println(datakirim);
dtserial.println(datakirim);
Serial.println();

waK = millis();
}

} //akhir void pembacaan sensor

//awal void bacanodemcu
void bacanodemcu() {
//baca data dari node mcu
//selama data ada
while (dtserial.available()>0)
{
char inChar = dtserial.read();
sData += inChar;

if(inChar == '%') {
parsing = true;
}
if(parsing) {
int q = 0;
for (int i = 0; i < sData.length(); i++) {
if (sData[i] == '#') {
q++;
data[q] = "";
}
else
data[q] += sData[i];
}
}
}
}

```

```

}
Serial.println(data[1].toInt());
Serial.println(data[2].toInt());
Serial.println(data[3].toInt());
Serial.println(data[4].toInt());
Serial.println(data[5].toInt());
Serial.println(data[6].toFloat());
Serial.println(data[7].toFloat());
Serial.println(data[8].toFloat());
Serial.println(data[9].toInt());
Serial.println(data[10].toFloat());
Serial.println(data[11].toInt());
Serial.println(data[12].toFloat());
Serial.println();
parsing = false;
sData = "";
}
//persamaan variable dari database kontrol
modes = (data[1].toInt());
slA = (data[2].toInt());
slB = (data[3].toInt());
sK = (data[4].toInt());
sph = (data[5].toInt());
bphup = (data[6].toFloat());
bphdown = (data[7].toFloat());
bic = (data[8].toFloat());
bppm = (data[9].toInt());
bsuhu = (data[10].toFloat());
nutrisiair = (data[11].toInt());
phairs = (data[12].toFloat());
bici = bic * 0.5 ;
}

} // akhir void bacanodemcu

//awal void kontrol
void kontrol() {
//program kontrol

```

```

digitalWrite(r7, ss);

//kontrol otomatis
//mode dalam keadaan 0/off maka kontrol otomatis
if (modes == 0) {
  spN = HIGH;
  spup = HIGH;
  spdown = HIGH;
  sp = HIGH;

  //ketika waktu pukul 06:30 maka pengecekan nutris dan juga ph
  if (sj == 1)
  {
    //pengaduk
    sp = LOW;
    digitalWrite(r8, sp);

    //ph up
    unsigned long wphups = millis(); //waktu sekarang phup
    if ((phValue < bphup) && (wphups - wphup >= 1500)) // pompa
    menyala dan mati selama 1,5 detik
    { spup = !spup;
      digitalWrite(r1, spup);
      wphup = millis();
    }
    else if ((phValue > bphup) && (phValue < bphdown))
    { spup = HIGH;
      digitalWrite(r1, spup);
    }

    //ph down
    unsigned long wphdowns = millis(); //waktu sekarang phdown
    if ((phValue > bphdown) && (wphdowns - wphdown >= 1500)) //
    pompa menyala dan mati selama 1,5 detik
    { spdown = !spdown;

    digitalWrite(r2, spdown);
  }
}

```

```

wphdown = millis();
}
else if ((phValue > bphup) && (phValue < bphdown))
{ spdown = HIGH;
digitalWrite(r2, spdown);
}

//nutrisi air
unsigned long wSN = millis(); //waktu sekarang nutrisi
if ((tdsValue < bppm) && (wSN - wN >= 1500)) // pompa menyala dan
mati selama 1,5 detik
{ spN = !spN;
digitalWrite(r3, spN);
wN = millis();
}
else if (tdsValue > (bppm))
{ spN = HIGH;
digitalWrite(r3, spN);
}
}

//mematikan perintah otomatis nutrisi dan ph
if (sj == 0)
{ spup = HIGH;
spdown = HIGH;
spN = HIGH;
sp = HIGH;

digitalWrite(r1, spup);
digitalWrite(r2, spdown);
digitalWrite(r3, spN);
digitalWrite(r8, sp);
}

//ketika waktu pukul 06:30 dan keadaan cahaya kurang maka lampu a
menyala jika tidak maka lampu b yang menyala
//lampu a dan b
//ketika kondisi cahaya kurang dari nilai bic maka lampu a menyala

```

```
if ((lux < bic) && (sl == 1) && (ss == 1))
{
digitalWrite(r4, 1);
}
```

```
else
{
digitalWrite(r4, 0);
}
```

//ketika kondisi cahaya kurang dari nilai bic/2 maka lampu a dan lampu b menyala

```
if ((lux < bici ) && (sl == 1) && (ss == 1))
{
digitalWrite(r5, 1);
}
```

```
else
{
digitalWrite(r5, 0 );
}
```

```
//suhu
if (t > bsuhu)
{
digitalWrite(r6, 1);
}
else
{
digitalWrite(r6, 0);
}
```

```
} //akhir mode = 0
```

```
//kontrol manual
//mode dalam keadaan 1/on maka kontrol manual
```

```

else if (modes == 1) {
digitalWrite(r4, s1A);
digitalWrite(r5, s1B);
digitalWrite(r6, sK);
digitalWrite(r8, modes);
//pengaturan ph sesuai keinginan
unsigned long wsphA1 = millis(); //waktu sekarang ph air 1
if ((sph == 1) && (phValue < phairs) && (wsphA1 - wphA1 >= 1500))
{ spup = !spup;
digitalWrite(r1, spup);
spdown = HIGH;
digitalWrite(r2, spdown);
// sp = LOW;
// digitalWrite(r8, sp);
wphA1 = millis();
}
else if ((phValue > phairs) && (sph == 1))
{ spup = HIGH;
digitalWrite(r1, spup);
// sp = HIGH;
// digitalWrite(r8, sp);
}
unsigned long wsphA2 = millis(); //waktu sekarang ph air 2
if ((sph == 0) && (phValue > phairs) && (wsphA2 - wphA2 >= 1500))
{ spdown = !spdown;
digitalWrite(r2, spdown);
spup = HIGH;
digitalWrite(r1, spup);
// sp = LOW;
// digitalWrite(r8, sp);
wphA2 = millis();
}
else if ((phValue < phairs) && (sph == 0))
{ spdown = HIGH;
digitalWrite(r2, spdown);
// sp = HIGH;
// digitalWrite(r8, sp);
}
}

```

```

//pengaturan ppm sesuai keinginan
unsigned long wsppm = millis(); //waktu sekarang ppm
if ((tdsValue <= nutrisiair) && (wsppm - wppm >= 1500))
{ spN = !spN;
digitalWrite(r3, spN);
// sp = LOW;
// digitalWrite(r8, sp);
wppm = millis();
}
else if (tdsValue > (nutrisiair))
{ spN = HIGH;
digitalWrite(r3, spN);
// sp = HIGH;
// digitalWrite(r8, sp);
}

} //akhir mode = 1

} //akhir void kontrol

// VOID LOOP
void loop() {

//menjalankan void
pembacaanS();

waktujam();

bacanodemcu();

kontrol();

} //akhir void loop

```



## LAMPIRAN B

### Program NodeMCU ESP8266

```
>> Program NodeMCU ESP8266<<
#include <SoftwareSerial.h>
#include <ESP8266HTTPClient.h>
#include <ESP8266WiFi.h>
#include <WiFiClient.h>

//rx tx
SoftwareSerial dtserial(12, 13);

//variable baca data
float Lux ; // variable intensitas cahaya
float t ; // variable suhu udara
int h ; // variable kelembaban udara
float ph ; // variable ph
int tds ; // variable tds
float Dol ; // variable suhu air

//variable perulangan
int w ;

//variable wifi
const char* id = "Wifi T.Elektronika";
const char* pw = "wifipnc2020";

//const char* id = "IOT";
//const char* pw = "sandigma88";

//inisialisasi variable host adress server
const char* server = "sazking.my.id";

//parsing data arduino mega
bool parsing = false;
String sData,data[7];
```

```

//Variable Waktu millis
unsigned long wkW = 0; //waktu awal kirim web
unsigned long wkH = 0; //waktu awal kirim web
unsigned long wbD = 0; //waktu awal baca database
unsigned long wms = 0; //waktu awal minta data

void setup() {
Serial.begin(9600);
dtserial.begin(9600);

//inisialisasi host
WiFi.hostname("NodeMCU");

//konek wifi
WiFi.begin(id, pw);

//cek koneksi
while(WiFi.status() != WL_CONNECTED)
{
//coba konek terus
Serial.print(".");
delay (500);
}
//apabila terkoneksi
Serial.println("Berhasil Konek Dengan Wifi");

}

void loop() {

//baca data dari mega2560
//selama data ada
// unsigned long wmd=millis(); //waktu minta data
// if(wmd-wms>=3000){

while(dtserial.available(>0)
{
char inChar = dtserial.read();

```

```

sData += inChar;
if(inChar == '$'){
parsing = true;
}
if(parsing){
int q = 0;
for(int i = 0; i < sData.length();i++){
if(sData[i] == '#'){
q++;
data[q]="";
}
else {
data[q]+= sData[i];
}
}
Serial.println(w);
Serial.println(data[1]);
Serial.println(data[2]);
Serial.println(data[3]);
Serial.println(data[4]);
Serial.println(data[5]);
Serial.println(data[6]);
Serial.println();
parsing = false;
sData = "";
}
Lux = data[1].toFloat() ;
t = data[2].toFloat() ;
h = data[3].toInt() ;
ph = data[4].toFloat() ;
tds = data[5].toInt() ;
Dol = data[6].toFloat() ; //Nilai Suhu Air
}
// wms=millis();
// }

//kirim data ke database
WiFiClient client;

```

```

const int httpPort = 80;

//mecari data koneksi
if(!client.connect(server, httpPort))
{
Serial.println("gagal konek ke web");
return ;
}

//apa bila terkoneksi ke web maka kirim data
unsigned long wsW=millis(); //waktu sekarang kirim web
if(wsW-wkW>=5000){

HTTPClient http;
//siapkan linkbaca kirim data
String Linkbaca = "http://" + String(server) + "/kirimdata.php?Lux=" +
String(Lux,1) + "&t=" + String(t,1) + "&h=" + String(h) + "&ph=" +
String(ph,1) + "&tdsb" + String(w) + "&tdsa=" + String(Dol,1)+
"&wb=" + String(tds) ;

//eksekusi link
http.begin(client,Linkbaca);
http.GET();

//tangkap respon kirim data
String respon = http.getString();
Serial.println(respon);

wkW=millis();

}

//mengirim data ke tabel history
unsigned long wsH=millis(); //waktu sekarang kirim web
if(wsH-wkH>=60000){
HTTPClient http;
//siapkan link kirim data

```

```
String Link = "http://" + String(server) + "/simpanhistory.php?Lux=" +  
String(Lux,1) + "&t=" + String(t,1) + "&h=" + String(h) + "&ph=" +  
String(ph,1) + "&tdsb" + String(w) + "&tdsa=" + String(Dol,1)+  
"&wb=" + String(tds) ;
```

```
//eksekusi link  
http.begin(client,Link);  
http.GET();
```

```
//tangkap respon kirim data  
String respon = http.getString();  
Serial.println(respon);
```

```
wkH=millis();
```

```
}
```

```
//pembacaan nilai-nilai untuk sistem kontrol  
unsigned long wsD=millis(); //waktu sekarang baca database  
if(wsD-wbD>=3000){
```

```
//baca status mode  
String Linksmdt;  
HTTPClient httpsmdt;  
Linksmdt = "http://" + String(server) + "/bacasmtdweb.php";  
httpsmdt.begin(client,Linksmdt);  
//ambil isi status mode  
httpsmdt.GET();
```

```
//baca status response  
String rsmdt = httpsmdt.getString();  
Serial.println(rsmdt);  
dtserial.println(rsmdt);  
httpsmdt.end();  
wbD=millis();  
}
```

```
}//akhir void loop
```

## LAMPIRAN C

### Program Website Halaman Login

>>Program Website Halaman Login<<

>>Index <<

```
<?php
session_start();
include "koneksi.php";

?>

<!DOCTYPE html>
<html lang="en">
<style>
html {
background : url("img/b4.jpg");
}
body {
background : url("img/b4.jpg");
}

</style>

<head>

<meta charset="utf-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1,
shrink-to-fit=no">
<meta name="description" content="">
<meta name="author" content="">

<title>Sistem Pertanian Hydroponic</title>

<!-- Custom fonts for this template-->
<link href="vendor/fontawesome-free/css/all.min.css" rel="stylesheet"
type="text/css">
<link
```

```
href="https://fonts.googleapis.com/css?family=Nunito:200,200i,300,300i,400,400i,600,600i,700,700i,800,800i,900,900i"
rel="stylesheet">
```

```
<!-- Custom styles for this template-->
<link href="css/sb-admin-2.min.css" rel="stylesheet">
```

```
</head>
```

```
<body>
```

```
<div class="container" style="display: flex; justify-content: center;
width: 50rem;">
```

```
<!-- Outer Row -->
```

```
<div class="row justify-content-center" >
```

```
<div class="card o-hidden border-10 shadow-lg my-5; card-body p-0"
style="margin-top:250px; width: 25rem;">
```

```
<!-- Nested Row within Card Body -->
```

```
<div class="row justify-content-center" style="margin-top: 15px;">
```

```
<div class="col-lg-10">
```

```
<div class="p-0">
```

```
<div class="text-center">
```

```
<h1 class="h4 text-gray-900 mb-4">Selamat Datang Kembali</h1>
```

```
<p class="h4 text-gray-900 mb-4" style="font-size:15px;">Disistem
Pertanian Hidroponik</p>
```

```
</div>
```

```
<form method="post">
```

```
<div class="form-group">
```

```
<input type="text" class="form-control form-control-user"
name="fusername" placeholder="Username ID">
```

```
</div>
```

```
<div class="form-group">
```

```
<input type="password" class="form-control form-control-user"
name="fpassword" placeholder="Password">
```

```
</div>
```

```

<button type="submit" name="fmasuk" class="btn btn-primary btn-user
btn-block">
Login
</button>
<hr>
</form>
<div class="container" style="text-align:center">
<?php
if (isset($_POST['fmasuk'])) {
$username = $_POST['fusername'];
$password = $_POST['fpassword'];
$sql = mysqli_query($koneksi,"SELECT * FROM tb_login WHERE
username = '$username' AND password = md5('$password')");
$ccek = mysqli_num_rows($sql);
if ($ccek==1) {
$_SESSION['userweb']=$username;
echo "<meta http-equiv=refresh content=0;URL='index2.php'>";

exit;
}
else {
echo"Maaf Username ID dan Password anda salah";
}
}
?>
</div>
</div>
</div>
</div>
</div>
</div>
</div>
</div>
</div>
</div>

```



```
<!-- Bootstrap core JavaScript-->
<script src="vendor/jquery/jquery.min.js"></script>
<script src="vendor/bootstrap/js/bootstrap.bundle.min.js"></script>

<!-- Core plugin JavaScript-->
<script src="vendor/jquery-easing/jquery.easing.min.js"></script>

<!-- Custom scripts for all pages-->
<script src="js/sb-admin-2.min.js"></script>

</body>

</html>
```

## LAMPIRAN D

### Program Website Tampilan Halaman Utama

>>Program Website Tampilan Halaman Utama<<

#### >>Index 2<<

```
<!DOCTYPE html>
<html lang="en">
<style>
html {
background : url("img/b3.png");
}
body {
background : url("img/b3.png");
}

</style>
<head>

<meta charset="utf-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1,
shrink-to-fit=no">
<meta name="description" content="">
<meta name="author" content="">

<title>Sistem Pertanian Hydroponic</title>

<!-- Custom fonts for this template-->

<script type="text/javascript" src="assets/js/jquery-
3.4.0.min.js"></script>
<script type="text/javascript" src="assets/js/mdb.min.js"></script>

<link href="vendor/fontawesome-free/css/all.min.css" rel="stylesheet"
type="text/css">
<link rel="stylesheet" type="text/css" href="css/bootstrap.min.css">
</link
```

```
href="https://fonts.googleapis.com/css?family=Nunito:200,200i,300,300i,400,400i,600,600i,700,700i,800,800i,900,900i"
rel="stylesheet">
```

```
<!-- Custom styles for this template-->
<link href="css/sb-admin-2.min.css" rel="stylesheet">
```

```
<!-- meanggil data grafik dan monitoring-->
```

```
<script type="text/javascript">
```

```
// grafik
```

```
var refreshid = setInterval(function() {
$('#respondht').load('datadht.php');
},1000);
```

```
var refreshid = setInterval(function() {
$('#responic').load('dataic.php');
},1000);
```

```
var refreshid = setInterval(function() {
$('#responnds').load('datatds.php');
},1000);
```

```
var refreshid = setInterval(function() {
$('#responph').load('dataph.php');
},1000);
```

```
var refreshid = setInterval(function() {
$('#responDo').load('dataDo.php');
},1000);
```

```
// monitoring
```

```
var refreshid = setInterval(function() {
$('#dhtsuhu').load('datasuhu.php');
},1000);
```

```
var refreshid = setInterval(function() {
$('#dhtkelembaban').load('datakelembaban.php');
},1000);
```

```
var refreshid = setInterval(function(){
    $('#lux').load('datalux.php');
},1000);
```

```
var refreshid = setInterval(function(){
    $('#ppm').load('datappm.php');
},1000);
```

```
var refreshid = setInterval(function(){
    $('#pH').load('dataphair.php');
},1000);
```

```
var refreshid = setInterval(function(){
    $('#Do').load('dataDoair.php');
},1000);
```

```
var refreshid = setInterval(function(){
    $('#responds').load('dataid.php');
},1000);
```

```
$(document).ready(function(){
    setInterval(function(){
        $('#rjam').load('cekjam.php');
    }, 1000);
});
```

```
</script>
```

```
</head>
```

```
<body >
```

```
<!-- Page Wrapper -->
```

```
<div id="wrapper" >
```

```
<!-- Sidebar -->
```

```
<div class="navbar-nav sidebar sidebar-dark accordion" style="background-color: green;" >
```

```
<!-- Sidebar - Brand -->
```

```
<a class="sidebar-brand d-flex align-items-center justify-content-center">
```

```
<div class="sidebar-brand-icon rotate-n-15">
```

```
<i class="fa fa-seedling"></i>
```

```
</div>
```

```
<div class="sidebar-brand-text mx-3" style="font-size: 20px;">MENU</div>
```

```
</a>
```

```
<hr class="sidebar-divider my-0">
```

```
<!-- Dashboard MONITORING HIDROPONIC -->
```

```
<li class="nav-item active" style="item-align: center;">
```

```
<a class="nav-link" href="index2.php" >
```

```
<div style="text-align: center;">
```

```
<h1 class="fa fa-desktop "></h1>
```

```
</div>
```

```
<h1 style="font-size: 15px; text-align: center; ">MONITORING HYDROPONIC</h1></a>
```

```
</li>
```

```
<hr class="sidebar-divider my-0">
```

```
<!-- Dashboard SISTEM KONTROL -->
```

```
<li class="nav-item active">
```

```
<a class="nav-link" href="index3.php">
```

```
<div style="text-align: center;">
```

```
<h1 class="fa fa-cogs"></h1>
```

```
</div>
```

```
<h1 style="font-size: 15px; text-align: center; ">SYSTEM CONTROL</h1></a>
```

```
</li>
```

```

<hr class="sidebar-divider my-0">

<!-- Dashboard TABEL HISTORY -->
<li class="nav-item active">
<a class="nav-link" href="index4.php">
<div style=" text-align: center;">
<h1 class="fa fa-table "></h1>
<h1 class="fa fa-history "></h1>
</div>
<h1 style="font-size: 15px; text-align: center; ">TABLE
HISTORY</h1></a>
</li>

<hr class="sidebar-divider my-0">

<!-- LOGOUT -->
<li class="nav-item active">
<a class="nav-link" href="index.php">
<div style=" text-align: center;">
<h1 class="fa fa-table "></h1>
<h1 class="fa fa-history "></h1>
</div>
<h1 style="font-size: 15px; text-align: center; ">LOGOUT</h1></a>
</li>

<hr class="sidebar-divider my-0">
</div>
<!-- End of Sidebar -->

<!-- Content Wrapper -->
<div id="content-wrapper" class="d-flex flex-column">

<!-- Main Content -->
<div id="content">

<!-- Topbar -->
<nav class="navbar navbar-expand navbar-light bg-white topbar mb-4
static-top shadow">

```

```

<!-- Topbar Navbar -->
<ul class="navbar-nav ml-auto">

<!-- Nav Item - User Information -->
<li class="nav-item dropdown no-arrow">
<a class="nav-link dropdown-toggle" href="logout.php"
id="userDropdown" role="button"
data-toggle="dropdown" aria-haspopup="true" aria-expanded="false">
<span class="mr-2 d-none d-lg-inline" style="font-size: 20px;; color:
black;">Petani</span>

</a>
<!-- Dropdown - User Information -->
<div class="dropdown-menu dropdown-menu-right shadow animated--
grow-in"
aria-labelledby="userDropdown">
<div class="dropdown-divider"></div>
<a class="dropdown-item" href="logout.php" style="font-size: 15px;">
<i class="fas fa-sign-out-alt fa-sm fa-fw mr-4 text-gray-600"></i>
Logout
</a>
</div>
</li>

</ul>

</nav>

<!-- End of Topbar -->

<!-- Begin Page Content -->
<div class="container-fluid" style="background:url('img/b2.jpg');">

```

```

<!-- jam dan id -->
<div class="container" style="background-color: transparent;">
<table class="table table bordered" style="text-align: center">
<tr style="background-color: transparent; color: black">
<th>
<div class="col-xl-3 col-md-6 mb-4">
<div class="shadow h-100 py-2" style="background-color: white; width:
20rem;">
<div class="card-body">
<div class="row no-gutters align-items-center">
<div class="col-auto">
<i class="fa fa-clock fa-2x text-black-300"></i>
</div>
<div class="col mr-2">
<div class="container" style="font-size: 15px;font-weight: bold;"
id="rjam">00:00:00</div>
</div>

</div>
</div>
</div>
</div>
</div>
</th>
<th style="width: 20px;">
<div class="col-xl-3 col-md-6 mb-4">
<div class="shadow h-100 py-2" style="background-color: white; width:
20rem;">
<div class="card-body">
<div class="row no-gutters align-items-center">
<div class="col-auto">
<i class="fa fa-book fa-2x text-black-300"></i>
</div>
<div class="col mr-2">
<div class="container" style="font-size: 15px; font-weight: bold;"
id="responids">ID</div>
</div>

</div>

```



```

</div>
</div>
</div>
</th>
</tr>
</table>
</div>
<!-- akhir jam dan id -->

```

```

<!-- monitoring kondisi tanaman -->
<div class="container" style="text-align: center; background-color:white;
width: 82rem;" >
<h1 class="h3 mb-0"style="font-size: 35px;; color:
black;">MONITORING KONDISI TANAMAN</h1>
<p style="font-size: 20px; color: black;"> (Pembacaan Nilai Sensor
Secara RealTime Setiap 5 Detik Sekali) </p>
</div>

```

```

<!-- Content Row -->
<div class="row"style="margin-left:13px">
<div class="container" style="display: flex; justify-content: center">

```

```

<!-- tampilan card suhu -->
<div class="card text-black mb-3" style="width: 25rem; text-align:
center; margin-right : 20px;">
<div class="card-header" style="font-size: 20px; color : white;
background-color: green;">SUHU</div>
<div class="h5 mb-0 font-weight-bold " id="dhtsuhu" style="font-size:
20px; color: black;">>C</div>
</div>
<!-- akhir card suhu -->

```

```

<!-- tampilan card kelembaban -->
<div class="card text-black mb-3" style="width: 25rem; text-align:
center; margin-right : 20px;">

```

```
<div class="card-header" style="font-size: 20px; color : white;
background-color: green;">KELEMBABAN</div>
<div class="h5 mb-0 font-weight-bold" id="dhtkelembaban"
style="font-size: 20px; color: black;">%RH</div>
</div>
```

```
<!-- akhir card kelembaban -->
```

```
<!-- tampilan card kelembaban -->
<div class="card text-black mb-3" style="width: 25rem; text-align:
center; margin-right : 20px;">
<div class="card-header" style="font-size: 20px; color : white;
background-color: green;">INTENSITAS CAHAYA</div>
<div class="h5 mb-0 font-weight-bold" id="lux" style="font-size: 20px;
color: black;">LUX</div>
<p></p>
</div>
```

```
<!-- akhir card kelembaban -->
</div>
```

```
<div class="container" style="display: flex; justify-content: center">
<!-- tampilan card nutrisi air -->
<div class="card text-black mb-3" style="width: 25rem; text-align:
center; margin-right : 20px;">
<div class="card-header" style="font-size: 20px; color : white;
background-color: green;">NUTRISI AIR</div>
<div class="h5 mb-0 font-weight-bold" id="ppm" style="font-size: 20px;
color: black;">PPM</div>
</div>
<!-- akhir card nutrisi air -->
```

```
<!-- tampilan card ph air -->
<div class="card text-black mb-3" style="width: 25rem; text-align:
center; margin-right : 20px;">
<div class="card-header" style="font-size: 20px; color : white;
background-color: green;">PH AIR</div>
```

```
<div class="h5 mb-0 font-weight-bold" id="pH" style="font-size: 20px; color: black;">pH</div>
</div>
```

```
<!-- akhir card ph air -->
```

```
<!-- tampilan card suhu air -->
<div class="card text-black mb-3" style="width: 25rem; text-align: center; margin-right : 20px;">
<div class="card-header" style="font-size: 20px; color : white; background-color: green;">SUHU AIR</div>
<div class="h5 mb-0 font-weight-bold" id="Do" style="font-size: 20px; color: black;"> °C</div>
<p></p>
</div>
```

```
<!-- akhir card suhu air -->
</div>
```

```
<!-- End monitoring -->
</div>
```

```
<!-- Begin Page Content -->
<div class="container-fluid">
```

```
<!-- grafik nilai sensor -->
<div class="container" style="text-align: center; background-color:white; width: 82rem;" >
<h1 class="h3 mb-0 " style="font-size: 35px ; color: black;">GRAFIK NILAI SENSOR DALAM 30 MENIT TERAKHIR</h1>
<p style="font-size: 20px ; color: black;"> (Pembacaan Grafik Data Nilai Sensor Setiap 1 Menit Sekali) </p>
</div>
```

```
<!-- div untuk grafik -->
<div class="row">
<div class="container">
```

```
<div class="container" id="responDht" style="width: 80%; text-align:center" ></div>
</div>
</div>
```

```
<div class="row">
<div class="container">
<div class="container" id="responic" style="width: 80%; text-align:center" ></div>
</div>
</div>
```

```
<div class="row">
<div class="container">
<div class="container" id="responTds" style="width: 80%; text-align:center" ></div>
</div>
</div>
```

```
<div class="row">
<div class="container">
<div class="container" id="responph" style="width: 80%; text-align:center" ></div>
</div>
</div>
```

```
<div class="row">
<div class="container">
<div class="container" id="responDo" style="width: 80%; text-align:center" ></div>
</div>
</div>
```

```
</div>
```

```
</div>
```

```
</div>
```

```
</div>
```

```
</div>
```

```
<!-- Footer -->
```

```

<footer class="sticky-footer bg-white">
<div class="container my-auto">
<div class="copyright text-center my-auto" style="font-size: 15px">
<span>TUGAS AKHIR JTE &copy; POLITEKNIK NEGERI
CILACAP 2022</span>
</div>
</div>
</footer>
<!-- End of Footer -->

</div>
<!-- End of Content Wrapper -->

</div>
<!-- End of Page Wrapper -->

<!-- Scroll to Top Button-->
<a class="scroll-to-top rounded" href="#page-top">
<i class="fas fa-angle-up"></i>
</a>

<!-- Logout Modal-->
<div class="modal fade" id="logoutModal" tabindex="-1" role="dialog"
aria-labelledby="exampleModalLabel"
aria-hidden="true">
<div class="modal-dialog" role="document">
<div class="modal-content">
<div class="modal-header">
<h5 class="modal-title" id="exampleModalLabel">Ready to
Leave?</h5>
<button class="close" type="button" data-dismiss="modal" aria-
label="Close">
<span aria-hidden="true">×</span>
</button>
</div>
<div class="modal-body">Select "Logout" below if you are ready to end
your current session.</div>
<div class="modal-footer">

```

```
<button class="btn btn-secondary" type="button" data-  
dismiss="modal">Cancel</button>  
<a class="btn btn-primary" href="login.html">Logout</a>  
</div>  
</div>  
</div>  
</div>  
  
<!-- Bootstrap core JavaScript-->  
<script src="vendor/jquery/jquery.min.js"></script>  
<script src="vendor/bootstrap/js/bootstrap.bundle.min.js"></script>  
  
<!-- Core plugin JavaScript-->  
<script src="vendor/jquery-easing/jquery.easing.min.js"></script>  
  
<!-- Custom scripts for all pages-->  
<script src="js/sb-admin-2.min.js"></script>  
  
<!-- Page level plugins -->  
<script src="vendor/chart.js/Chart.min.js"></script>  
  
<!-- Page level custom scripts -->  
<script src="js/demo/chart-area-demo.js"></script>  
<script src="js/demo/chart-pie-demo.js"></script>  
  
</body>  
  
</html>
```

## LAMPIRAN E

### Program Website Tampilan Halaman Sistem Kontrol

>>Program Tampil Sistem Kontrol<<

>>Index3<<

```
<!-- membaca stataus php -->
<?php
//include konnek php
include "koneksi.php";

//data sql kontrol
$sql = mysqli_query($konek, "SELECT * FROM tb_kontrol");
$data = mysqli_fetch_array($sql);

//ambil semua status saklar
$modes = $data['modes'];
$lampa = $data['lampa'];
$lampb = $data['lampb'];
$skipas = $data['skipas'];
$spH = $data['spH'];

//ambil semua nilai
$bphup = $data['bphup'];
$bphdown = $data['bphdown'];
$bic = $data['bic'];
$bppm = $data['bppm'];
$bsuhu = $data['bsuhu'];
$boksigen = $data['boksigen'];
$phairs = $data['phairs'];
$nutrisiair = $data['nutrisiair'];

?>

<!DOCTYPE html>
<html lang="en">

<head>
```

```

<meta charset="utf-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1,
shrink-to-fit=no">
<meta name="description" content="">
<meta name="author" content="">

<title>Sistem Pertanian Hydroponic</title>

<!-- susunan templet-->

<script type="text/javascript" src="assets/js/jquery-
3.4.0.min.js"></script>
<script type="text/javascript" src="assets/js/mdb.min.js"></script>

<link href="vendor/fontawesome-free/css/all.min.css" rel="stylesheet"
type="text/css">
<link rel="stylesheet" type="text/css" href="css/bootstrap.min.css">
<link
href="https://fonts.googleapis.com/css?family=Nunito:200,200i,300,300
i,400,400i,600,600i,700,700i,800,800i,900,900i"
rel="stylesheet">

<!-- bootstrap -->
<link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/css/bootstrap.mi
n.css" rel="stylesheet" integrity="sha384-
1BmE4kWBq78iYhF1dvKuhfTAU6auU8tT94WrHftjDbrCEXSU1oBoq
yl2QvZ6jIW3" crossorigin="anonymous">

<!-- Custom styles for this template-->
<link href="css/sb-admin-2.min.css" rel="stylesheet">

<!-- banyaknya data yang tersimpan pada phpmyadmin -->
<script type="text/javascript">
var refreshid = setInterval(function(){
$('#responds').load('dataid.php');

```



```
},1000);
```

```
$(document).ready(function(){  
  setInterval(function(){  
    $("#rjam").load('cekjam.php');  
  }, 1000);  
});
```

```
function mode(value)  
{  
  if(value==true) value="ON";  
  else value="OFF";  
  document.getElementById('mode').innerHTML = value;
```

```
//ajax untuk merubah nilai status  
var xmlhttp = new XMLHttpRequest();  
xmlhttp.onreadystatechange = function()  
{  
  if(xmlhttp.readyState == 4 && xmlhttp.status == 200)  
  {  
    //ambil respon dari web setelah mengambil nilai  
    document.getElementById('mode').innerHTML = xmlhttp.responseText;  
  }  
}  
//eksekusi file php merubah nilai database  
xmlhttp.open("GET", "mode.php?mode=" + value, true);  
//kirim data  
xmlhttp.send();  
}
```

```
function lampu(value)  
{  
  if(value==true) value="ON";  
  else value="OFF";  
  document.getElementById('lampu').innerHTML = value;
```

```
//ajax untuk merubah nilai status  
var xmlhttp = new XMLHttpRequest();
```

```

xmlhttp.onreadystatechange = function()
{
if(xmlhttp.readyState == 4 && xmlhttp.status == 200)
{
//ambil respon dari web setelah mengambil nilai
document.getElementById('lampua').innerHTML =
xmlhttp.responseText;
}
}
//eksekusi file php merubah nilai database
xmlhttp.open("GET", "lampua.php?lampua=" + value, true);
//kirim data
xmlhttp.send();
}

function lampub(value)
{
if(value==true) value="ON";
else value="OFF";
document.getElementById('lampub').innerHTML = value;

//ajax untuk merubah nilai status
var xmlhttp = new XMLHttpRequest();
xmlhttp.onreadystatechange = function()
{
if(xmlhttp.readyState == 4 && xmlhttp.status == 200)
{
//ambil respon dari web setelah mengambil nilai
document.getElementById('lampub').innerHTML =
xmlhttp.responseText;
}
}
//eksekusi file php merubah nilai database
xmlhttp.open("GET", "lampub.php?lampub=" + value, true);
//kirim data
xmlhttp.send();
}

```

```

function kipas(value)
{
if(value==true) value="ON";
else value="OFF";
document.getElementById('kipas').innerHTML = value;

//ajax untuk merubah nilai status
var xmlhttp = new XMLHttpRequest();
xmlhttp.onreadystatechange = function()
{
if(xmlhttp.readyState == 4 && xmlhttp.status == 200)
{
//ambil respon dari web setelah mengambil nilai
document.getElementById('kipas').innerHTML = xmlhttp.responseText;
}
}
//eksekusi file php merubah nilai database
xmlhttp.open("GET", "kipas.php?kipas=" + value, true);
//kirim data
xmlhttp.send();
}

function sph(value)
{
if(value==true) value="UP";
else value="DOWN";
document.getElementById('sph').innerHTML = value;

//ajax untuk merubah nilai status
var xmlhttp = new XMLHttpRequest();
xmlhttp.onreadystatechange = function()
{
if(xmlhttp.readyState == 4 && xmlhttp.status == 200)
{
//ambil respon dari web setelah mengambil nilai
document.getElementById('sph').innerHTML = xmlhttp.responseText;
}
}
}

```

```

//eksekusi file php merubah nilai database
xmlhttp.open("GET", "sph.php?sph=" + value, true);
//kirim data
xmlhttp.send();
}

function phup(value)
{

document.getElementById('phup').innerHTML = value;

//ajax untuk merubah nilai status
var xmlhttp = new XMLHttpRequest();
xmlhttp.onreadystatechange = function()
{
if(xmlhttp.readyState == 4 && xmlhttp.status == 200)
{
//ambil respon dari web setelah mengambil nilai
document.getElementById('phup').innerHTML = xmlhttp.responseText;
}
}
//eksekusi file php merubah nilai database
xmlhttp.open("GET", "phup.php?phup=" + value, true);
//kirim data
xmlhttp.send();
}

function phdown(value)
{

document.getElementById('phdown').innerHTML = value;

//ajax untuk merubah nilai status
var xmlhttp = new XMLHttpRequest();
xmlhttp.onreadystatechange = function()
{
if(xmlhttp.readyState == 4 && xmlhttp.status == 200)
{

```

```

//ambil respon dari web setelah mengambil nilai
document.getElementById('phdown').innerHTML =
xmlhttp.responseText;
}
}
//eksekusi file php merubah nilai database
xmlhttp.open("GET", "phdown.php?phdown=" + value, true);
//kirim data
xmlhttp.send();

}

function ics(value)
{

document.getElementById('ics').innerHTML = value;

//ajax untuk merubah nilai status
var xmlhttp = new XMLHttpRequest();
xmlhttp.onreadystatechange = function()
{
if(xmlhttp.readyState == 4 && xmlhttp.status == 200)
{
//ambil respon dari web setelah mengambil nilai
document.getElementById('ics').innerHTML = xmlhttp.responseText;
}
}
//eksekusi file php merubah nilai database
xmlhttp.open("GET", "ics.php?ics=" + value, true);
//kirim data
xmlhttp.send();
}

function ppms(value)
{

document.getElementById('ppms').innerHTML = value;

```

```

//ajax untuk merubah nilai status
var xmlhttp = new XMLHttpRequest();
xmlhttp.onreadystatechange = function()
{
if(xmlhttp.readyState == 4 && xmlhttp.status == 200)
{
//ambil respon dari web setelah mengambil nilai
document.getElementById('ppms').innerHTML = xmlhttp.responseText;
}
}
//eksekusi file php merubah nilai database
xmlhttp.open("GET", "ppms.php?ppms=" + value, true);
//kirim data
xmlhttp.send();

}

function suhus(value)
{

document.getElementById('suhus').innerHTML = value;

//ajax untuk merubah nilai status
var xmlhttp = new XMLHttpRequest();
xmlhttp.onreadystatechange = function()
{
if(xmlhttp.readyState == 4 && xmlhttp.status == 200)
{
//ambil respon dari web setelah mengambil nilai
document.getElementById('suhus').innerHTML = xmlhttp.responseText;
}
}
//eksekusi file php merubah nilai database
xmlhttp.open("GET", "suhus.php?suhus=" + value, true);
//kirim data
xmlhttp.send();

}

```

```

function phair(value)
{

document.getElementById('phair').innerHTML = value;

//ajax untuk merubah nilai status
var xmlhttp = new XMLHttpRequest();
xmlhttp.onreadystatechange = function()
{
if(xmlhttp.readyState == 4 && xmlhttp.status == 200)
{
//ambil respon dari web setelah mengambil nilai
document.getElementById('phair').innerHTML = xmlhttp.responseText;
}
}
//eksekusi file php merubah nilai database
xmlhttp.open("GET", "phair.php?phair=" + value, true);
//kirim data
xmlhttp.send();

}

function nutrisis(value)
{

document.getElementById('nutrisis').innerHTML = value;

//ajax untuk merubah nilai status
var xmlhttp = new XMLHttpRequest();
xmlhttp.onreadystatechange = function()
{
if(xmlhttp.readyState == 4 && xmlhttp.status == 200)
{
//ambil respon dari web setelah mengambil nilai
document.getElementById('nutrisis').innerHTML =
xmlhttp.responseText;
}
}
}

```

```

}
//eksekusi file php merubah nilai database
xmlhttp.open("GET", "nutrisis.php?nutrisis=" + value, true);
//kirim data
xmlhttp.send();

}

</script>
</head>

<body >

<!-- Page Wrapper -->
<div id="wrapper" >

<!-- Sidebar -->
<div class="navbar-nav sidebar sidebar-dark accordion"style="
background-color: green;" >

<!-- Sidebar - Brand -->
<a class="sidebar-brand d-flex align-items-center justify-content-
center">
<div class="sidebar-brand-icon rotate-n-15">
<i class="fa fa-seedling"></i>
</div>
<div class="sidebar-brand-text mx-3"style="font-size:
20px;">MENU</div>
</a>

<hr class="sidebar-divider my-0">

<!-- Dashboard MONITORING HIDROPONIC -->
<li class="nav-item active" style="item-align: center;">
<a class="nav-link" href="index2.php" >
<div style=" text-align: center;">
<h1 class="fa fa-desktop "></h1>

```



```
</div>
<h1 style="font-size: 15px; text-align: center; ">MONITORING
HYDROPONIC</h1></a>
</li>
```

```
<hr class="sidebar-divider my-0">
```

```
<!-- Dashboard SISTEM KONTROL -->
<li class="nav-item active">
<a class="nav-link" href="index3.php">
<div style=" text-align: center;">
<h1 class="fa fa-cogs"></h1>
</div>
<h1 style="font-size: 15px; text-align: center; ">SYSTEM
CONTROL</h1></a>
</li>
```

```
<hr class="sidebar-divider my-0">
```

```
<!-- Dashboard TABEL HISTORY -->
<li class="nav-item active">
<a class="nav-link" href="index4.php">
<div style=" text-align: center;">
<h1 class="fa fa-table "></h1>
<h1 class="fa fa-history "></h1>
</div>
<h1 style="font-size: 15px; text-align: center; ">TABLE
HISTORY</h1></a>
</li>
```

```
<hr class="sidebar-divider my-0">
```

```
<!-- LOGOUT -->
<li class="nav-item active">
<a class="nav-link" href="index.php">
<div style=" text-align: center;">
```

```
<h1 class="fa fa-table "></h1>
<h1 class="fa fa-history "></h1>
</div>
<h1 style="font-size: 15px; text-align: center; ">LOGOUT</h1></a>
</li>
```

```
<hr class="sidebar-divider my-0">
```

```
</div>
<!-- End of Sidebar -->
```

```
<!-- Content Wrapper -->
<div id="content-wrapper" class="d-flex flex-column">
```

```
<!-- Main Content -->
<div id="content">
```

```
<!-- Topbar -->
<nav class="navbar navbar-expand navbar-light bg-white topbar mb-4
static-top shadow">
```

```
<!-- Topbar Navbar -->
<ul class="navbar-nav ml-auto">
```

```
<!-- Nav Item - User Information -->
<li class="nav-item dropdown no-arrow">
<a class="nav-link dropdown-toggle" href="#" id="userDropdown"
role="button"
data-toggle="dropdown" aria-haspopup="true" aria-expanded="false">
<span class="mr-2 d-none d-lg-inline "style="font-size: 20px; color:
black;">Petani</span>

</a>
<!-- Dropdown - User Information -->
```

```

<div class="dropdown-menu dropdown-menu-right shadow animated--
grow-in"
aria-labelledby="userDropdown">
<div class="dropdown-divider"></div>
<a class="dropdown-item" href="logout.php" style="font-size: 15px;">
<i class="fas fa-sign-out-alt fa-sm fa-fw mr-4 text-gray-800"></i>
Logout
</a>
</div>
</li>

</ul>

</nav>

<!-- End of Topbar -->

<div class="container-fluid" style="background:url('img/b3.png');">

<!-- jam dan id -->
<div class="container" style="background-color: transparent;">
<table class="table table-bordered" style="text-align: center">
<tr style="background-color: transparent; color: black">
<th>
<div class="col-xl-3 col-md-6 mb-4">
<div class="shadow h-100 py-2" style="background-color: white; width:
20rem;">
<div class="card-body">
<div class="row no-gutters align-items-center">
<div class="col-auto">
<i class="fa fa-clock fa-2x text-black-300"></i>
</div>
<div class="col mr-2">
<div class="container" style="font-size: 15px;font-weight: bold;"
id="rjam">00:00:00</div>
</div>

</div>

```

```

</div>
</div>
</div>
</th>
<th style="width: 20px;">
<div class="col-xl-3 col-md-6 mb-4">
<div class="shadow h-100 py-2" style="background-color: white; width:
20rem;">
<div class="card-body">
<div class="row no-gutters align-items-center">
<div class="col-auto">
<i class="fa fa-book fa-2x text-black-300"></i>
</div>
<div class="col mr-2">
<div class="container" style="font-size: 15px; font-weight: bold;"
id="responids">ID</div>
</div>

</div>
</div>
</div>
</div>
</th>
</tr>
</table>
</div>
<!-- akhir jam dan id -->

<!-- Begin Setting ulang otomatis -->
<!-- setting ulang automanis -->
<div class="container" style="text-align: center; background-
color:white; width: 94rem;" >
<h1 class="h3 mb-0 " style="font-size: 35px ; color: black;">SETTING
ULANG AUTOMATIS SYSTEM</h1>
<p style="font-size: 20px ; color: black;"> (Pengaturan Ulang Sistem
Kerja Automatis Sehingga Alat Dapat Digunakan Berbagai Tanaman
Lainnya) </p>
</div>

```

```

<!-- kartu sistem otomatis ph up -->
<div class="container" style="display: flex; justify-content: center">
<div class="card text-black mb-3" style="width: 30rem; text-align:
center; margin-right : 20px;">
<div class="card-header" style="font-size: 20px; color : white;
background-color: green;">Batas MIN PH Up</div>
<div class="card-body">

<!-- range /slider -->
<label for="phup" class="form-label" style="font-size: 15px"> Batas
Range <span id="phup"> <?php echo $bphup; ?></span> pH Air Untuk
Up</label>
<input type="range" class="form-range" id="phup" min="0" max="14"
step="0.1" value="<?php echo $bphup; ?>"
onchange="phup(this.value)">
<!-- akhir range /slider -->

</div>
</div>
<!-- akhir kartu pH up -->

<!-- kartu sistem otomatis ph Down -->

<div class="card text-black mb-3" style="width: 30rem; text-align:
center; margin-right : 20px;">
<div class="card-header" style="font-size: 20px; color : white;
background-color: green;">Batas MAX PH Down</div>
<div class="card-body">

<!-- range /slider -->
<label for="phdown" class="form-label" style="font-size: 15px"> Batas
Range <span id="phdown"><?php echo $bphdown; ?></span> pH Air
Untuk Down</label>
<input type="range" class="form-range" id="phdown" min="0"
max="14" step="0.1" value="<?php echo $bphdown; ?>"
onchange="phdown(this.value)">
<!-- akhir range /slider -->

```

```

</div>
</div>
<!-- akhir kartu pH Down -->

<!-- kartu sistem otomatis intensitas cahaya -->

<div class="card text-black mb-3" style="width: 30rem; text-align:
center;">
<div class="card-header" style="font-size: 20px; color : white;
background-color: green;">Batas MIN Intensitas Cahaya</div>
<div class="card-body">

<!-- range /slider -->
<label for="phdown" class="form-label" style="font-size: 15px"> Batas
Min <span id="ics"><?php echo $bic; ?></span> Lux untuk Cahaya
</label>
<input type="range" class="form-range" id="phdown" min="0"
max="100" step="0.1" value="<?php echo
$bic; ?>"onchange="ics(this.value)">
<!-- akhir range /slider -->

</div>
</div>
<!-- akhir kartu intensitas cahaya -->
</div>

<!-- kartu sistem otomatis batas minimum nutrisi air -->
<div class="container" style="display: flex; justify-content: center">
<div class="card text-black mb-3" style="width: 30rem; text-align:
center; margin-right : 20px;">
<div class="card-header" style="font-size: 20px; color : white;
background-color: green;">Batas MIN Nutrisi</div>
<div class="card-body">

<!-- range /slider -->
<label for="nutrisi" class="form-label" style="font-size: 15px"> Batas
Min <span id="ppms"><?php echo $bppm; ?></span> PMM Untuk
Nutrisi </label>

```

```

<input type="range" class="form-range" id="nutrisi" min="0"
max="2000" step="1" value="<?php echo $bppm; ?>"
onchange="ppms(this.value)">
<!-- akhir range /slider -->

</div>
</div>

<!-- akhir kartu batas minimum nutrisi air -->

<!-- kartu sistem otomatis batas max suhu -->

<div class="card text-black mb-3" style="width: 30rem; text-align:
center;margin-right : 20px;">
<div class="card-header" style="font-size: 20px; color : white;
background-color: green;">Batas MAX Suhu</div>
<div class="card-body">

<!-- range /slider -->
<label for="suhu" class="form-label"style="font-size: 15px"> Batas
Max <span id="suhus"><?php echo $bsuhu; ?></span>° C Untuk
Suhu</label>
<input type="range" class="form-range" id="suhu"min="0" max="50"
step="0.1" value="<?php echo $bsuhu; ?>"
onchange="suhus(this.value)">
<!-- akhir range /slider -->

</div>
</div>

<!-- akhir kartu batas max suhu -->

</div>

<!-- Begin Control Manual -->
<div class="container-fluid">

```

```

<!-- control manual -->
<div class="container" style="text-align: center; margin-top: 30px;
background-color:white; width: 94rem;" >
<h1 class="h3 mb-0 " style="font-size: 35px; color: black;">CONTROL
MANUAL</h1>
<p style="font-size: 20px; color: black;"> (Pengaturan Sistem Alat
Sesuai Kebutuhan Tanaman Yang Diharapkan Disetiap saat) </p>
</div>

```

```

<!-- kartu mode manual -->
<div class ="container" style="display: flex; justify-content: center">
<div class="card text-black mb-3" style="width: 25rem; text-align:
center;">
<div class="card-header" style="font-size: 20px;color : white;
background-color: red;">Mode Manual</div>
<div class="card-body">

```

```

<!-- switch -->
<div class="form-check form-switch" style="margin-left:50px; font-size:
25px;">
<input class="form-check-input" type="checkbox" role="switch"
id="flexSwitchCheckDefault" onchange="mode(this.checked)"
<?php if($modes == 1) echo "checked"; ?> >
<label class="form-check-label" for="flexSwitchCheckDefault"> <span
id="mode"><?php if($modes == 1) echo "ON"; else echo "OFF"; ?>
</span> </label>
</div>
<!-- akhir switch -->

```

```

</div>
</div>
</div>
<!-- akhir kartu mode manual -->
<!-- kartu saklar lampu A -->
<div class ="container"style="display: flex; justify-content: center">

```



```

<div class="card text-black mb-3" style="width: 25rem; text-align:
center; margin-right : 20px;">
<div class="card-header" style="font-size: 20px;color : white;
background-color: green;">Saklar Lampu A</div>
<div class="card-body">

```

```

<!-- switch -->
<div class="form-check form-switch" style="margin-left:50px; font-size:
25px;">
<input class="form-check-input" type="checkbox" role="switch"
id="flexSwitchCheckDefault"onchange="lampua(this.checked)"
<?php if($lampua == 1) echo "checked"; ?> >
<label class="form-check-label" for="flexSwitchCheckDefault"> <span
id="lampua"><?php if($lampua == 1) echo "ON"; else echo"OFF"; ?>
</span> </label>
</div>
<!-- akhir switch -->

```

```

</div>
</div>

```

```

<!-- akhir kartu saklar lampu A -->

```

```

<!-- kartu saklar lampu B -->
<div class="card text-black mb-3" style="width: 25rem; text-align:
center;margin-right : 20px;">
<div class="card-header" style="font-size: 20px;color : white;
background-color: green;">Saklar Lampu B</div>
<div class="card-body">

```

```

<!-- switch -->
<div class="form-check form-switch" style="margin-left:50px; font-size:
25px;">
<input class="form-check-input" type="checkbox" role="switch"
id="flexSwitchCheckDefault"onchange="lampub(this.checked)"
<?php if($lampub == 1) echo "checked"; ?> >
<label class="form-check-label" for="flexSwitchCheckDefault"> <span
id="lampub"><?php if($lampub == 1) echo "ON"; else echo"OFF"; ?>

```

```
</span> </label>
</div>
<!-- akhir switch -->
```

```
</div>
</div>
```

```
<!-- akhir kartu saklar lampu B -->
```

```
<!-- kartu saklar kipas -->
<div class="card text-black mb-3" style="width: 25rem; text-align:
center;">
<div class="card-header" style="font-size: 20px; color : white;
background-color: green;">Saklar Kipas</div>
<div class="card-body">
```

```
<!-- switch -->
<div class="form-check form-switch" style="margin-left:50px; font-size:
25px;">
<input class="form-check-input" type="checkbox" role="switch"
id="flexSwitchCheckDefault"onchange="kipas(this.checked)"
<?php if($skipas == 1) echo "checked"; ?> >
<label class="form-check-label" for="flexSwitchCheckDefault"> <span
id="kipas"><?php if($skipas == 1) echo "ON"; else echo"OFF"; ?>
</span> </label>
</div>
<!-- akhir switch -->
```

```
</div>
</div>
<!-- akhir kartu kipas -->
</div>
```

```
<!-- kartu pemilihan menaikkan ph atau menurunkan ph -->
<div class ="container"style="display: flex; justify-content: center">
<div class="card text-black mb-3" style="width: 25rem; text-align:
center;">
```

```

<div class="card-header" style="font-size: 20px; color : white;
background-color: green;">Saklar UP/DOWN pH</div>
<div class="card-body">

<!-- switch -->
<div class="form-check form-switch" style="margin-left:50px; font-size:
25px;">
<input class="form-check-input" type="checkbox" role="switch"
id="flexSwitchCheckDefault"onchange="sph(this.checked)"
<?php if($spH == 1) echo "checked"; ?> >
<label class="form-check-label" for="flexSwitchCheckDefault"> <span
id="sph"><?php if($spH == 1) echo "UP"; else echo"DOWN"; ?>
</span> </label>
</div>
<!-- akhir switch -->

</div>
</div>
<!-- akhir pemilihan menaikkan ph atau menurunkan ph -->
</div>

<!-- kartu pengatur ph air -->
<div class ="container"style="display: flex; justify-content: center">
<div class="card text-black mb-3" style="width: 30rem; text-align:
center; margin-right : 20px;">
<div class="card-header" style="font-size: 20px; color : white;
background-color: green;">PH Air</div>
<div class="card-body">

<!-- range /slider -->
<label for="phair" class="form-label"style="font-size: 15px"> Nilai PH
Air <span id="phair"><?php echo $phairs; ?></span> pH</label>
<input type="range" class="form-range" id="phair"min="0" max="14"
step="0.1" value="<?php echo $phairs; ?>"
onchange="phair(this.value)">
<!-- akhir range /slider -->

</div>

```

```

</div>
<!-- akhir kartu pengatur ph air -->

<!-- kartu nutrisi air -->
<div class="card text-black mb-3" style="width: 30rem; text-align:
center;">
<div class="card-header" style="font-size: 20px; color : white;
background-color: green;">Nutrisi Air</div>
<div class="card-body">

<!-- range /slider -->
<label for="ppm" class="form-label" style="font-size: 15px"> Nilai
Nutrisi <span id="nutrisis"><?php echo $nutrisi; ?></span>
PMM</label>
<input type="range" class="form-range" id="ppm" min="0"
max="2000" step="1" value="<?php echo $nutrisi; ?>"
onchange="nutrisis(this.value)">
<!-- akhir range /slider -->

</div>
</div>
<!-- akhir kartu nutrisi air -->
</div>

</div>
</div>
<!-- Footer -->
<footer class="sticky-footer bg-white">
<div class="container my-auto">
<div class="copyright text-center my-auto" style="font-size: 15px">
<span>TUGAS AKHIR JTE &copy; POLITEKNIK NEGERI
CILACAP 2022</span>
</div>
</div>
</div>
</footer>

```

```

<!-- End of Footer -->

</div>
<!-- End of Content Wrapper -->

</div>
<!-- End of Page Wrapper -->

<!-- Scroll to Top Button-->
<a class="scroll-to-top rounded" href="#page-top">
<i class="fas fa-angle-up"></i>
</a>

<!-- Logout Modal-->
<div class="modal fade" id="logoutModal" tabindex="-1" role="dialog"
aria-labelledby="exampleModalLabel"
aria-hidden="true">
<div class="modal-dialog" role="document">
<div class="modal-content">
<div class="modal-header">
<h5 class="modal-title" id="exampleModalLabel">Ready to
Leave?</h5>
<button class="close" type="button" data-dismiss="modal" aria-
label="Close">
<span aria-hidden="true">×</span>
</button>
</div>
<div class="modal-body">Select "Logout" below if you are ready to end
your current session.</div>
<div class="modal-footer">
<button class="btn btn-secondary" type="button" data-
dismiss="modal">Cancel</button>
<a class="btn btn-primary" href="login.html">Logout</a>
</div>
</div>
</div>
</div>

```

```
<!-- Bootstrap core JavaScript-->
<script src="vendor/jquery/jquery.min.js"></script>
<script src="vendor/bootstrap/js/bootstrap.bundle.min.js"></script>

<!-- Core plugin JavaScript-->
<script src="vendor/jquery-easing/jquery.easing.min.js"></script>

<!-- Custom scripts for all pages-->
<script src="js/sb-admin-2.min.js"></script>

<!-- Page level plugins -->
<script src="vendor/chart.js/Chart.min.js"></script>

<!-- Page level custom scripts -->
<script src="js/demo/chart-area-demo.js"></script>
<script src="js/demo/chart-pie-demo.js"></script>
<script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/js/bootstrap.bundle.min.js" integrity="sha384-
ka7Sk0Gln4gmtz2MlQnikT1wXgYsOg+OMhuP+IIRH9sENBO0LRn5
q+8nbTov4+1p" crossorigin="anonymous"></script>

</body>

</html>
```

## LAMPIRAN F

### Program Website Tampilan Halaman Table History

>>Program Tampilan Halaman Table History<<

#### >>Index 4<<

```
<!DOCTYPE html>
<html lang="en">

<head>

<meta charset="utf-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1,
shrink-to-fit=no">
<meta name="description" content="">
<meta name="author" content="">

<title>Sistem Pertanian Hydroponic</title>

<!-- Custom fonts for this template-->
<link rel="stylesheet" type="text/css"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.mi
n.css">
<link rel="stylesheet" type="text/css"
href="https://cdn.datatables.net/1.10.16/css/dataTables.bootstrap4.min.c
ss">

<script type="text/javascript" src="assets/js/jquery-
3.4.0.min.js"></script>
<script type="text/javascript" src="assets/js/mdb.min.js"></script>

<link href="vendor/fontawesome-free/css/all.min.css" rel="stylesheet"
type="text/css">
<link rel="stylesheet" type="text/css" href="css/bootstrap.min.css">
<link
href="https://fonts.googleapis.com/css?family=Nunito:200,200i,300,300
i,400,400i,600,600i,700,700i,800,800i,900,900i"
```

```

rel="stylesheet">

<!-- Custom styles for this template-->
<link href="css/sb-admin-2.min.css" rel="stylesheet">
<link rel="stylesheet" href="css/style.css">

<script type="text/javascript">
var refreshid = setInterval(function(){
$('#responids').load('dataid.php');
},1000);

$(document).ready(function(){
setInterval(function(){
$('#rjam').load('cekjam.php');
}, 1000);
});

</script>

</head>

<body >

<!-- Page Wrapper -->
<div id="wrapper" >

<!-- Sidebar -->
<div class="navbar-nav sidebar sidebar-dark accordion" style="
background-color: green;" >

<!-- Sidebar - Brand -->
<a class="sidebar-brand d-flex align-items-center justify-content-
center">
<div class="sidebar-brand-icon rotate-n-15">
<i class="fa fa-seedling"></i>
</div>
<div class="sidebar-brand-text mx-3"style="font-size:
20px;">MENU</div>

```



```
</a>
```

```
<hr class="sidebar-divider my-0">
```

```
<!-- Dashboard MONITORING HIDROPONIC -->
```

```
<li class="nav-item active" style="item-align: center;">
```

```
<a class="nav-link" href="index2.php" >
```

```
<div style=" text-align: center;">
```

```
<h1 class="fa fa-desktop "></h1>
```

```
</div>
```

```
<h1 style="font-size: 15px; text-align: center; ">MONITORING  
HYDROPONIC</h1></a>
```

```
</li>
```

```
<hr class="sidebar-divider my-0">
```

```
<!-- Dashboard SISTEM KONTROL -->
```

```
<li class="nav-item active">
```

```
<a class="nav-link" href="index3.php">
```

```
<div style=" text-align: center;">
```

```
<h1 class="fa fa-cogs"></h1>
```

```
</div>
```

```
<h1 style="font-size: 15px; text-align: center; ">SYSTEM  
CONTROL</h1></a>
```

```
</li>
```

```
<hr class="sidebar-divider my-0">
```

```
<!-- Dashboard TABEL HISTORY -->
```

```
<li class="nav-item active">
```

```
<a class="nav-link" href="index4.php">
```

```
<div style=" text-align: center;">
```

```
<h1 class="fa fa-table "></h1>
```

```
<h1 class="fa fa-history "></h1>
```

```
</div>
```

```
<h1 style="font-size: 15px; text-align: center; ">TABLE  
HISTORY</h1></a>  
</li>
```

```
<hr class="sidebar-divider my-0">
```

```
<!-- LOGOUT -->  
<li class="nav-item active">  
<a class="nav-link" href="index.php">  
<div style=" text-align: center;">  
<h1 class="fa fa-table "></h1>  
<h1 class="fa fa-history "></h1>  
</div>  
<h1 style="font-size: 15px; text-align: center; ">LOGOUT</h1></a>  
</li>
```

```
<hr class="sidebar-divider my-0">
```

```
</div>  
<!-- End of Sidebar -->
```

```
<!-- Content Wrapper -->  
<div id="content-wrapper" class="d-flex flex-column">
```

```
<!-- Main Content -->  
<div id="content">
```

```
<!-- Topbar -->  
<nav class="navbar navbar-expand navbar-light bg-white topbar mb-4  
static-top shadow">
```

```
<!-- Topbar Navbar -->  
<ul class="navbar-nav ml-auto">  
<!-- Nav Item - User Information -->  
<li class="nav-item dropdown no-arrow">  
<a class="nav-link dropdown-toggle" href="#" id="userDropdown"  
role="button"  
data-toggle="dropdown" aria-haspopup="true" aria-expanded="false">
```

```

<span class="mr-2 d-none d-lg-inline "style="font-size: 20px; color:
black;">Petani</span>

</a>
<!-- Dropdown - User Information -->
<div class="dropdown-menu dropdown-menu-right shadow animated--
grow-in"
aria-labelledby="userDropdown">
<div class="dropdown-divider"></div>
<a class="dropdown-item" href="logout.php" style="font-size: 15px;">
<i class="fas fa-sign-out-alt fa-sm fa-fw mr-4 text-gray-800"></i>
Logout
</a>
</div>
</li>

</ul>

</nav>

<!-- End of Topbar -->

<div class="container-fluid"style="background:url('img/b5.jpg');">

<!-- jam dan id -->
<div class="container" style="background-color: transparent;">
<table class="table table bordered" style="text-align: center">
<tr style="background-color: transparent; color: black">
<td>
<div class="col-xl-3 col-md-6 mb-4">
<div class="shadow h-100 py-2" style="background-color: white; width:
20rem;">
<div class="card-body">
<div class="row no-gutters align-items-center">
<div class="col-auto">
<i class="fa fa-clock fa-2x text-black-300"></i>
</div>

```

```

<div class="col mr-2">
<div class="container" style="font-size: 15px;font-weight: bold;"
id="rjam">00:00:00</div>
</div>

</div>
</div>
</div>
</div>
</td>
<td style="width: 20px;">
<div class="col-xl-3 col-md-6 mb-4">
<div class="shadow h-100 py-2" style="background-color: white; width:
20rem;">
<div class="card-body">
<div class="row no-gutters align-items-center">
<div class="col-auto">
<i class="fa fa-book fa-2x text-black-300"></i>
</div>
<div class="col mr-2">
<div class="container" style="font-size: 15px; font-weight: bold;"
id="responids">ID</div>
</div>

</div>
</div>
</div>
</div>
</td>
</tr>
</table>
</div>
<!-- akhir jam dan id -->

<!-- table data sensor -->
<div class="container" style="text-align: center; background-color:white;
width: 100rem;" >

```

```

<h1 class="h3 mb-0" style="font-size: 35px; color: black;">TABLE
NILAI SENSOR</h1>
<p style="font-size: 20px"; color: black;"> (Hasil Pembacaan Data Nilai
Sensor Setiap 1 Menit Sekali) </p>
</div>

```

```

<!-- data table -->

```

```

<div class="container" style="color: black; background-color:white;
width: 100rem;">

```

```

<div class="row">

```

```

<div class="col-md-12">

```

```

<table id="table_id" class="table table-striped table-bordered"
cellspacing="0" width="100%" style="color: black;">

```

```

<thead>

```

```

<tr style="color: black;">

```

```

<th>No</th>

```

```

<th>Waktu</th>

```

```

<th>Suhu</th>

```

```

<th>Kelembaban</th>

```

```

<th>Intensitas Cahaya</th>

```

```

<th>TDS Meter</th>

```

```

<th>PH Meter</th>

```

```

<th>Suhu Air</th>

```

```

</tr>

```

```

</thead>

```

```

<tbody>

```

```

<?php

```

```

//include koneksi

```

```

include "koneksi.php";

```

```

$no = 0;

```

```

$ambil = mysqli_query($koneksi,"SELECT * FROM tb_history ");

```

```

while($data = mysqli_fetch_array($ambil)){

```

```

$no++;

```

```

?>

```

```

<tr>
<td><?php echo $no;?></td>
<td><?php echo $data[1];?></td>
<td><?php echo $data[2].° C;?></td>
<td><?php echo $data[3].% RH;?></td>
<td><?php echo $data[4]. LUX;?></td>
<td><?php echo $data[5]. PPM;?></td>
<td><?php echo $data[6]. pH;?></td>
<td><?php echo $data[7].° C;?></td>

</tr>
<?php } ?>

</tbody>
</table>

</div>
</div>
</div>

<script type="text/javascript" src="https://code.jquery.com/jquery-
3.2.1.min.js"></script>
<script type="text/javascript"
src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/js/bootstrap.min.j
s"></script>
<script type="text/javascript"
src="https://cdn.datatables.net/1.10.16/js/jquery.dataTables.min.js"></sc
ript>
<script type="text/javascript"
src="https://cdn.datatables.net/1.10.16/js/dataTables.bootstrap4.min.js">
</script>
<script type="text/javascript">
$(document).ready( function () {
$('#table_id').DataTable();
} );
</script>

</div>

```

```

</div>
<!-- Footer -->
<footer class="sticky-footer bg-white">
<div class="container my-auto">
<div class="copyright text-center my-auto" style="font-size: 15px">
<span>TUGAS AKHIR JTE &copy; POLITEKNIK NEGERI
CILACAP 2022</span>
</div>
</div>
</footer>
<!-- End of Footer -->

</div>
<!-- End of Content Wrapper -->

</div>
<!-- End of Page Wrapper -->

<!-- Scroll to Top Button-->
<a class="scroll-to-top rounded" href="#page-top">
<i class="fas fa-angle-up"></i>
</a>

<!-- Logout Modal-->
<div class="modal fade" id="logoutModal" tabindex="-1" role="dialog"
aria-labelledby="exampleModalLabel"
aria-hidden="true">
<div class="modal-dialog" role="document">
<div class="modal-content">
<div class="modal-header">
<h5 class="modal-title" id="exampleModalLabel">Ready to
Leave?</h5>
<button class="close" type="button" data-dismiss="modal" aria-
label="Close">
<span aria-hidden="true">×</span>
</button>
</div>

```

```

<div class="modal-body">Select "Logout" below if you are ready to end
your current session.</div>
<div class="modal-footer">
<button class="btn btn-secondary" type="button" data-
dismiss="modal">Cancel</button>
<a class="btn btn-primary" href="login.html">Logout</a>
</div>
</div>
</div>
</div>

<!-- Bootstrap core JavaScript-->
<script src="vendor/jquery/jquery.min.js"></script>
<script src="vendor/bootstrap/js/bootstrap.bundle.min.js"></script>

<!-- Core plugin JavaScript-->
<script src="vendor/jquery-easing/jquery.easing.min.js"></script>

<!-- Custom scripts for all pages-->
<script src="js/sb-admin-2.min.js"></script>

<!-- Page level plugins -->
<script src="vendor/chart.js/Chart.min.js"></script>

<!-- Page level custom scripts -->
<script src="js/demo/chart-area-demo.js"></script>
<script src="js/demo/chart-pie-demo.js"></script>

<script type="text/javascript" src="https://code.jquery.com/jquery-
3.2.1.min.js"></script>
<script type="text/javascript"
src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/js/bootstrap.min.j
s"></script>
<script type="text/javascript"
src="https://cdn.datatables.net/1.10.16/js/jquery.dataTables.min.js"></sc
ript>

```



```
<script type="text/javascript"
src="https://cdn.datatables.net/1.10.16/js/dataTables.bootstrap4.min.js">
</script>
<script type="text/javascript">
$(document).ready( function () {
$('#table_id').DataTable();
} );

</body>

</html>
```

## LAMPIRAN G

Program Pendukung Website

>>Program Pendukung Pada Website<<

>>bacasmdtweb.php (baca semua data pada web kontrol) <<

```
<?php
//include koneksi
include "koneksi.php";
$sql = mysqli_query($konek, "SELECT * FROM tb_kontrol");
$data = mysqli_fetch_array($sql);
//ambil semua status saklar
$modes = $data['modes'];
$lampa = $data['lampa'];
$lampb = $data['lampb'];
$skipas = $data['skipas'];
$sj = $data['sj'];
$sl = $data['sl'];
$ss = $data['ss'];
$spH = $data['spH'];

//ambil semua nilai
$bphup = $data['bphup'];
$bphdown = $data['bphdown'];
$bic = $data['bic'];
$bppm = $data['bppm'];
$bsuhu = $data['bsuhu'];
$boksigen = $data['boksigen'];
$phairs = $data['phairs'];
$nutrisiair = $data['nutrisiair'];

//respon balik nodemcu
echo
".'#$modes.'#$lampa.'#$lampb.'#$skipas.'#$sj.'#$sl.'#$ss.'#$spH.
'#$bphup.'#$bphdown.'#$bic.'#$bppm.'#$bsuhu.'#$boksigen.'#$n
utrisiair.'#$phairs.'#.%';

?>
```

### >>cekjam.php (Tampilkan Jam Pada Setiap Halaman) <<

```
<?php
//konek database
include "koneksi.php";
//tampilkan jam otomatis
date_default_timezone_set("Asia/Jakarta");
$jam = date('H:i:s');
echo $jam;
?>
```

### >>datadht.php (Tampilkan Grafik Nilai Dht Pada Monitoring) <<

```
<?php
//include koneksi
include "koneksi.php";
//baca data dari table tb_semuasensor
//baca id tertinggi
$sql_ID = mysqli_query($konek, "SELECT MAX(ID) FROM
tb_history");
//tangkap data
$data_ID = mysqli_fetch_array($sql_ID);
//ambil id terakhir / terbesar
$ID_akhir = $data_ID["MAX(ID)"];
$ID_awal = $ID_akhir - 30;

//baca informasi tanggal untuk semua data- sumbu x
$waktu = mysqli_query($konek, "SELECT waktu FROM tb_history
WHERE ID>='$ID_awal' and ID<='$ID_akhir' ORDER BY ID ASC");
//baca informasi suhu untuk semua data sumbu y
$suhu = mysqli_query($konek, "SELECT suhu FROM tb_history
WHERE ID>='$ID_awal' and ID<='$ID_akhir' ORDER BY ID ASC");
//baca informasi kelembaban untuk semua data sumbu y
$kelembaban = mysqli_query($konek, "SELECT kelembaban FROM
tb_history WHERE ID>='$ID_awal' and ID<='$ID_akhir' ORDER BY
ID ASC");
```

```

?>
<!-- tampilkan grafik -->
<div class="panel panel-primary">
<div class="panel-heading" style="font-size : 18px; background-color:
green;">
Grafik Suhu Dan Kelembaban
</div>
<div class="panel-body">
<!-- siapkan canvas untuk grafik -->

<canvas id="myChart"></canvas>
<!-- gambar grafik -->
<script type="text/javascript">
//baca ID canvas tempat grafik
var canvas = document.getElementById('myChart');
//letakkan data tanggal dan suhu untuk grafik
var data = {
labels : [
<?php
while($data_waktu = mysqli_fetch_array($waktu))
{
echo "'".$data_waktu['waktu'].',';
}
?>
],
datasets : [
{
label : "Suhu",
fill: true,
backgroundColor: "rgba(214,137,24, .2)",
borderColor: "rgba(214,137,24, 1)",
lineTension: 0.3,
pointRadius: 5,
data : [
<?php
while($data_suhu = mysqli_fetch_array($suhu))
{
echo $data_suhu['suhu'].','; }

```

```

?>
]
},
{
label : "Kelembaban",
fill: true,
backgroundColor: "rgba(119,103,119, .2)",
borderColor: "rgba(119,103,119, 1)",
lineTension: 0.3,
pointRadius: 5,
data : [
<?php
while($data_kelembaban = mysqli_fetch_array($kelembaban))
{
echo $data_kelembaban['kelembaban'].!';
}
?>
]
}
]
};

//option grafik
var option = {
showLines : true,
animation : {duration :0}
};

//cetak grafik kedalam canvas
var myLineChart = Chart.Line(canvas, {
data : data,
options : option
});
</script>
</div>

</div>

```

## >>dataDO.php (Tampilkan Grafik Nilai Suhu Air) <<

```
<?php
//include koneksi
include "koneksi.php";
//baca data dari table tb_semuasensor
//baca id tertinggi
$sql_ID = mysqli_query($konek, "SELECT MAX(ID) FROM
tb_history");
//tangkap data
$data_ID = mysqli_fetch_array($sql_ID);
//ambil id terakhir / terbesar
$ID_akhir = $data_ID['MAX(ID)'];
$ID_awal = $ID_akhir - 30;

//baca informasi tanggal untuk semua data- sumbu x
$waktu = mysqli_query($konek, "SELECT waktu FROM tb_history
WHERE ID>='$ID_awal' and ID<='$ID_akhir' ORDER BY ID ASC");
//baca informasi suhu untuk semua data sumbu y
$Do = mysqli_query($konek, "SELECT Do FROM tb_history WHERE
ID>='$ID_awal' and ID<='$ID_akhir' ORDER BY ID ASC");

?>
<!-- tampilkan grafik -->
<div class="panel panel-primary">
<div class="panel-heading" style="font-size : 18px; background-color:
green;">
Grafik Suhu Air
</div>
<div class="panel-body">
<!-- siapkan canvas untuk grafik -->

<canvas id="Chart"></canvas>
<!-- gambar grafik -->
<script type="text/javascript">
//baca ID canvas tempat grafik
var canvas = document.getElementById('Chart');
//letakkan data tanggal dan suhu untuk grafik
```

```

var data = {
labels : [
<?php
while($data_waktu = mysqli_fetch_array($waktu))
{
echo "".$data_waktu['waktu'].",";
}
?>
],
datasets : [{
label : "Suhu Air",
fill: true,
backgroundColor: "rgba(7,173,39, .2)",
borderColor: "rgba(7,173,39, 1)",
lineTension: 0.3,
pointRadius: 5,
data : [
<?php
while($data_Do = mysqli_fetch_array($Do))
{
echo $data_Do['Do'].',';
}
?>
]]]
};
//option grafik
var option = {
showLines : true,
animation : {duration :0}
};
//cetak grafik kedalam canvas
var myLineChart = Chart.Line(canvas, {
data : data,
options : option
});
</script>
</div>
</div>

```

**>>dataDOair.php (Tampilkan Nilai Suhu Air Pada Monitoring) <<**

```
<?php
//include koneksi
include "koneksi.php";
//baca data dari table tb_semuasensor
//baca id tertinggi
$sql_ID = mysqli_query($koneksi, "SELECT MAX(ID) FROM
tb_semuasensor");
//tangkap data
$data_ID = mysqli_fetch_array($sql_ID);
//ambil id terakhir / terbesar
$ID_akhir = $data_ID['MAX(ID)'];

//baca informasi kelembaban
$Do = mysqli_query($koneksi, "SELECT Do FROM tb_semuasensor
WHERE ID='$ID_akhir' ORDER BY ID ASC");

while($data_Do = mysqli_fetch_array($Do))
{
echo $data_Do['Do'].' °C';
}
?>
```

**>>dataic.php (Tampilkan Grafik Nilai Intesitas Cahaya ) <<**

```
<?php
//include koneksi
include "koneksi.php";
//baca data dari table tb_semuasensor
//baca id tertinggi
$sql_ID = mysqli_query($koneksi, "SELECT MAX(ID) FROM
tb_history");
//tangkap data
$data_ID = mysqli_fetch_array($sql_ID);
```



```

//ambil id terakhir / terbesar
$ID_akhir = $data_ID['MAX(ID)'];
$ID_awal = $ID_akhir - 30;

//baca informasi tanggal untuk semua data- sumbu x
$waktu = mysqli_query($koneksi, "SELECT waktu FROM tb_history
WHERE ID>='$ID_awal' and ID<='$ID_akhir' ORDER BY ID ASC");
//baca informasi suhu untuk semua data sumbu y
$ic = mysqli_query($koneksi, "SELECT ic FROM tb_history WHERE
ID>='$ID_awal' and ID<='$ID_akhir' ORDER BY ID ASC");

?>
<!-- tampilkan grafik -->
<div class="panel panel-primary">
<div class="panel-heading" style="font-size : 18px;background-color:
green;">
Grafik Intensitas Cahaya
</div>
<div class="panel-body">
<!-- siapkan canvas untuk grafik -->

<canvas id="myChartic"></canvas>
<!-- gambar grafik -->
<script type="text/javascript">
//baca ID canvas tempat grafik
var canvas = document.getElementById('myChartic');
//letakkan data tanggal dan suhu untuk grafik
var data = {
labels : [
<?php
while($data_waktu = mysqli_fetch_array($waktu))
{
echo "'".$data_waktu['waktu']."' , ' ;
}
?>
],
datasets : [{

```

```

label : "LUX",
fill: true,
backgroundColor: "rgba(215,54,27, .2)",
borderColor: "rgba(215,54,27, 1)",
lineTension: 0.3,
pointRadius: 5,
data : [
<?php
while($data_ic = mysqli_fetch_array($ic))
{
echo $data_ic['ic'].',';
}
?>
]
}]
};
//option grafik
var option = {
showLines : true,
animation : {duration :0}
};
//cetak grafik kedalam canvas
var myLineChart = Chart.Line(canvas, {
data : data,
options : option
});
</script>
</div>
</div>

```

**>>dataid.php (Tampilkan Jmlah Data Yang Tersimpan ) <<**

```

<?php
//include koneksi
include "koneksi.php";
//baca data dari table tb_senuasensor
//baca id tertinggi

```

```

$sql_ID = mysqli_query($koneksi, "SELECT MAX(ID) FROM
tb_history");
//tangkap data
$data_ID = mysqli_fetch_array($sql_ID);
//ambil id terakhir / terbesar
$ID_akhir = $data_ID["MAX(ID)"];

//baca informasi id
$ids = mysqli_query($koneksi, "SELECT id FROM tb_history WHERE
ID='$ID_akhir' ORDER BY ID ASC");

while($data_ids = mysqli_fetch_array($ids))
{
echo $data_ids['id'].' ID';

// mengosongkan table
if($data_ids['id']>2880) {

mysqli_query($koneksi, "TRUNCATE table tb_history");

echo "Data Terkosongkan";
}
}
?>

```

### **>>datakelembaban.php (Tampilkan Nilai Kelembaban) <<**

```

?php
//include koneksi
include "koneksi.php";
//baca data dari table tb_semuasensor
//baca id tertinggi
$sql_ID = mysqli_query($koneksi, "SELECT MAX(ID) FROM
tb_semuasensor");
//tangkap data
$data_ID = mysqli_fetch_array($sql_ID);
//ambil id terakhir / terbesar

```

```

$ID_akhir = $data_ID['MAX(ID)'];

//baca informasi kelembaban
$kelembaban = mysqli_query($koneksi, "SELECT kelembaban FROM
tb_senuasensor WHERE ID='$ID_akhir' ORDER BY ID ASC");

while($data_kelembaban = mysqli_fetch_array($kelembaban))
{
    echo $data_kelembaban['kelembaban'].'% RH';
}
?>

```

**>>datalux.php (Tampilkan Nilai Lux Pada Monitoring ) <<**

```

<?php
//include koneksi
include "koneksi.php";
//baca data dari table tb_senuasensor
//baca id tertinggi
$sql_ID = mysqli_query($koneksi, "SELECT MAX(ID) FROM
tb_senuasensor");
//tangkap data
$data_ID = mysqli_fetch_array($sql_ID);
//ambil id terakhir / terbesar
$ID_akhir = $data_ID['MAX(ID)'];

//baca informasi kelembaban
$ic = mysqli_query($koneksi, "SELECT ic FROM tb_senuasensor
WHERE ID='$ID_akhir' ORDER BY ID ASC");

while($data_ic = mysqli_fetch_array($ic))
{
    echo $data_ic['ic'].' LUX!';
}
?>

```

**>>dataph.php (Tampilkan Grafik Nilai pH ) <<**

```

<?php
//include koneksi
include "koneksi.php";
//baca data dari table tb_semuasensor
//baca id tertinggi
$sql_ID = mysqli_query($koneksi, "SELECT MAX(ID) FROM
tb_history");
//tangkap data
$data_ID = mysqli_fetch_array($sql_ID);
//ambil id terakhir / terbesar
$ID_akhir = $data_ID['MAX(ID)'];
$ID_awal = $ID_akhir - 30;

//baca informasi tanggal untuk semua data- sumbu x
$waktu = mysqli_query($koneksi, "SELECT waktu FROM tb_history
WHERE ID>='$ID_awal' and ID<='$ID_akhir' ORDER BY ID ASC");
//baca informasi suhu untuk semua data sumbu y
$ph = mysqli_query($koneksi, "SELECT ph FROM tb_history WHERE
ID>='$ID_awal' and ID<='$ID_akhir' ORDER BY ID ASC");

?>
<!-- tampilkan grafik -->
<div class="panel panel-primary">
<div class="panel-heading" style="font-size : 18px; background-color:
green;">
Grafik pH Air
</div>
<div class="panel-body">
<!-- siapkan canvas untuk grafik -->

<canvas id="myChartph"></canvas>
<!-- gambar grafik -->
<script type="text/javascript">
//baca ID canvas tempat grafik
var canvas = document.getElementById('myChartph');
//letakkan data tanggal dan suhu untuk grafik
var data = {
labels : [

```

```

<?php
while($data_waktu = mysqli_fetch_array($waktu))
{
echo "".$data_waktu['waktu'].'';
}
?>
],
datasets : [{
label : "pH Air",
fill: true,
backgroundColor: "rgba(142,30,154, .2)",
borderColor: "rgba(142,30,154, 1)",
lineTension: 0.3,
pointRadius: 5,
data : [
<?php
while($data_ph = mysqli_fetch_array($ph))
{
echo $data_ph['ph'].'';
}
?>
]
}]
};

//option grafik
var option = {
showLines : true,
animation : {duration :0}
};

//cetak grafik kedalam canvas
var myLineChart = Chart.Line(canvas, {
data : data,
options : option
});
</script>
</div>

```

</div>

**>>dataphair.php (Tampilkan Nilai pH Pada Monitoring) <<**

```
<?php
//include koneksi
include "koneksi.php";
//baca data dari table tb_semuasensor
//baca id tertinggi
$sql_ID = mysqli_query($koneksi, "SELECT MAX(ID) FROM
tb_semuasensor");
//tangkap data
$data_ID = mysqli_fetch_array($sql_ID);
//ambil id terakhir / terbesar
$ID_akhir = $data_ID['MAX(ID)'];

//baca informasi kelembaban
$ph = mysqli_query($koneksi, "SELECT ph FROM tb_semuasensor
WHERE ID='$ID_akhir' ORDER BY ID ASC");

while($data_ph = mysqli_fetch_array($ph))
{
    echo $data_ph['ph'].' pH';
}
?>
```

**>>datappm.php (Tampilkan Nilai Nutrisi Pada Monitoring) <<**

```
<?php
//include koneksi
include "koneksi.php";
//baca data dari table tb_semuasensor
//baca id tertinggi
$sql_ID = mysqli_query($koneksi, "SELECT MAX(ID) FROM
tb_semuasensor");
//tangkap data
```

```

$data_ID = mysqli_fetch_array($sql_ID);
//ambil id terakhir / terbesar
$ID_akhir = $data_ID['MAX(ID)'];

//baca informasi kelembaban
$tds = mysqli_query($koneksi, "SELECT tds FROM tb_semuasensor
WHERE ID='$ID_akhir' ORDER BY ID ASC");

while($data_tds = mysqli_fetch_array($tds))
{
    echo $data_tds['tds'].' PPM';
}
?>

```

### >>datasuhu.php (Tampilkan Nilai Suhu Pada Monitoring ) <<

```

<?php
//include koneksi
include "koneksi.php";
//baca data dari table tb_semuasensor
//baca id tertinggi
$sql_ID = mysqli_query($koneksi, "SELECT MAX(ID) FROM
tb_semuasensor");
//tangkap data
$data_ID = mysqli_fetch_array($sql_ID);
//ambil id terakhir / terbesar
$ID_akhir = $data_ID['MAX(ID)'];

//baca informasi suhu
$suhu = mysqli_query($koneksi, "SELECT suhu FROM tb_semuasensor
WHERE ID='$ID_akhir' ORDER BY ID ASC");

while($data_suhu = mysqli_fetch_array($suhu))
{
    echo $data_suhu['suhu'].'° C';
}?>

```



## >>datatds.php (Tampilkan Grafik Nilai Nutrisi) <<

```
<?php
//include koneksi
include "koneksi.php";
//baca data dari table tb_semuasensor
//baca id tertinggi
$sql_ID = mysqli_query($konek, "SELECT MAX(ID) FROM
tb_history");
//tangkap data
$data_ID = mysqli_fetch_array($sql_ID);
//ambil id terakhir / terbesar
$ID_akhir = $data_ID["MAX(ID)"];
$ID_awal = $ID_akhir - 30;

//baca informasi tanggal untuk semua data- sumbu x
$waktu = mysqli_query($konek, "SELECT waktu FROM tb_history
WHERE ID>='$ID_awal' and ID<='$ID_akhir' ORDER BY ID ASC");
//baca informasi suhu untuk semua data sumbu y
$tds = mysqli_query($konek, "SELECT tds FROM tb_history WHERE
ID>='$ID_awal' and ID<='$ID_akhir' ORDER BY ID ASC");

?>
<!-- tampilkan grafik -->
<div class="panel panel-primary">
<div class="panel-heading" style="font-size : 18px; background-color:
green;">
Grafik Nutrisi Air
</div>
<div class="panel-body">
<!-- siapkan canvas untuk grafik -->

<canvas id="myCharttds"></canvas>
<!-- gambar grafik -->
<script type="text/javascript">
//baca ID canvas tempat grafik
```

```

var canvas = document.getElementById('myCharttds');
//letakkan data tanggal dan suhu untuk grafik
var data = {
  labels : [
    <?php
while($data_waktu = mysqli_fetch_array($waktu))
{
echo "".$data_waktu['waktu'].",";
}
?>
],
  datasets : [{
    label : "PPM",
    fill: true,
    backgroundColor: "rgba(41,19,203, .2)",
    borderColor: "rgba(41,19,203, 1)",
    lineTension: 0.3,
    pointRadius: 5,
    data : [
    <?php
while($data_tds = mysqli_fetch_array($tds))
{
echo $data_tds['tds'].',';
}
?>
]
}]
};

//option grafik
var option = {
  showLines : true,
  animation : {duration :0}
};

//cetak grafik kedalam canvas
var myLineChart = Chart.Line(canvas, {
  data : data,

```

```
options : option
});
</script>

</div>

</div>
```

### >>ics.php (Batas Nilai Kontrol Intensitas Cahaya) <<

```
<?php
//koneksi database
include "koneksi.php";
//tangkap para meter stat yg ada pada ajax
$ics = $_GET['ics'];

//update nilai

mysqli_query($konek, "UPDATE tb_kontrol SET bic='$ics'");
//respond
echo $ics;
?>
```

### >>kipas.php (Saklar Kontrol Kipas) <<

```
<?php
//koneksi database
include "koneksi.php";
//tangkap para meter stat yg ada pada ajax
$kipas = $_GET['kipas'];
if($kipas == "ON")
{
mysqli_query($konek, "UPDATE tb_kontrol SET skipas=1");
//respon
echo "ON";
}
else
```

```

{
mysqli_query($koneksi, "UPDATE tb_kontrol SET skipas=0");
//respon
echo "OFF";
}

?>

```

**>>kirimdata.php (Simpan Data Base Tb Semuasensor) <<**

```

<?php
//koneksi data base
include "koneksi.php";
//baca data dari table tb_semuasensor
//baca id tertinggi
$sql_ID = mysqli_query($koneksi, "SELECT MAX(ID) FROM
tb_semuasensor");
//tangkap data
$data_ID = mysqli_fetch_array($sql_ID);
//ambil id terakhir / terbesar
$ID_akhir = $data_ID['MAX(ID)'];

//tangkap para meter
$suhu = $_GET['t'];
$kelembaban = $_GET['h'];
$Lux = $_GET['Lux'];
$tds = $_GET['wb'];
$ph = $_GET['ph'];
$DO = $_GET['tdsa'];

//simpan ke tb_semuasensor
//atur ID selalu dimulai dari 1
mysqli_query($koneksi, "ALTER TABLE tb_semuasensor
AUTO_INCREMENT=1");

//simpan nilai sensor

```

```

$simpan = mysqli_query($koneksi,"INSERT INTO `tb_senuasensor`
(`suhu`,`kelembaban`,`ic`,`tds`,`ph`,`Do`) VALUES ('$suhu',
'$kelembaban', '$Lux', '$tds', '$ph', '$DO')");
// membaca id
$ids = mysqli_query($koneksi, "SELECT id FROM tb_senuasensor
WHERE ID='$ID_akhir' ORDER BY ID ASC");
//beri respon ke nodemcu
if($simpan)
echo "Berhasil disimpan";
else
echo "Gagal tersimpan";

while($data_ids = mysqli_fetch_array($ids))
{

// mengosongkan table
if($data_ids['id']>100) {

mysqli_query($koneksi, "TRUNCATE table tb_senuasensor");

echo "Data Terkosongkan";
}
}
?>

```

### >>koneksi.php (Koneksi Data Base) <<

```

<?php
//buat koneksi ke database
$koneksi = mysqli_connect("localhost", "root", "", "nilaisensor");
?>

```

### >>lampua.php (Saklar Kontrol Lampu A) <<

```

<?php
//koneksi database

```

```

include "koneksi.php";
//tangkap para meter stat yg ada pada ajax
$lampua = $_GET['lampua'];
if($lampua == "ON")
{
mysql_query($koneksi, "UPDATE tb_kontrol SET lampa=1");
//respon
echo "ON";
}
else
{
mysql_query($koneksi, "UPDATE tb_kontrol SET lampa=0");
//respon
echo "OFF";
}

?>

```

**>>lampub.php (Saklar Kontrol Lampu B) <<**

```

<?php
//koneksi database
include "koneksi.php";
//tangkap para meter stat yg ada pada ajax
$lampub = $_GET['lampub'];
if($lampub == "ON")
{
mysql_query($koneksi, "UPDATE tb_kontrol SET lampb=1");
//respon
echo "ON";
}
else
{
mysql_query($koneksi, "UPDATE tb_kontrol SET lampb=0");
//respon
echo "OFF";
}

?>

```

**>>logout.php (Kembali Ke Halaman Login) <<**

```
<?php
session_start();
$_SESSION['userweb']="";
header ("location:index.php");
exit;
?>
```

**>>mode.php (Pengatur Mode Automatis / Manual) <<**

```
<?php
//koneksi database
include "koneksi.php";
//tangkap para meter stat yg ada pada ajax
$mode = $_GET['mode'];
if($mode == "ON")
{
mysql_query($konek, "UPDATE tb_kontrol SET modes=1");
//respon
echo "ON";
}
else
{
mysql_query($konek, "UPDATE tb_kontrol SET modes=0");
//respon
echo "OFF";
}

?>
```

**>>nutrisis.php (Batas Kontrol Manual Nilai Nutrisi) <<**

```
<?php
//koneksi database
include "koneksi.php";
//tangkap para meter stat yg ada pada ajax
```

```

$nutrisis = $_GET['nutrisis'];

//data tb kontrol
$sql = mysqli_query($koneksi, "SELECT * FROM tb_kontrol");
$data = mysqli_fetch_array($sql);
//ambil data mode
$modes = $data['modes'];

//data tb semua sensor
$sql_ID = mysqli_query($koneksi, "SELECT MAX(ID) FROM
tb_semuasensor");
//tangkap data
$data_ID = mysqli_fetch_array($sql_ID);
//ambil id terakhir / terbesar
$ID_akhir = $data_ID['MAX(ID)'];
//data sql sensor
$sql_i = mysqli_query($koneksi, "SELECT * FROM tb_semuasensor
WHERE ID='$ID_akhir' ORDER BY ID ASC");
$dat = mysqli_fetch_array($sql_i);
//ambil data tds dan data phair yan terbaca oleh sensor
$tds = $dat['tds'];

if($modes==1)
{
//update nilai
mysqli_query($koneksi, "UPDATE tb_kontrol SET nutrisiair='$nutrisis'");
//respond
echo $nutrisis;
}
else
{
//update nilai
mysqli_query($koneksi, "UPDATE tb_kontrol SET nutrisiair='$tds'");
//respond
echo $tds;
}
?>

```

**>>phair.php (Batas Kontrol Manual Nilai pH) <<**



```

<?php
//koneksi database
include "koneksi.php";
//tangkap para meter stat yg ada pada ajax
$phair = $_GET['phair'];

//data tb kontrol
$sql = mysqli_query($konek, "SELECT * FROM tb_kontrol");
$data = mysqli_fetch_array($sql);
//ambil data mode
$mod = $data['modes'];

//data tb semua sensor
$sql_ID = mysqli_query($konek, "SELECT MAX(ID) FROM
tb_semuasensor");
//tangkap data
$data_ID = mysqli_fetch_array($sql_ID);
//ambil id terakhir / terbesar
$ID_akhir = $data_ID['MAX(ID)'];

//data sql sensor
$sql = mysqli_query($konek, "SELECT * FROM tb_semuasensor
WHERE ID='$ID_akhir' ORDER BY ID ASC");
$dat = mysqli_fetch_array($sql);
//ambil data tds dan data phair yan terbaca oleh sensor
$ph = $dat['ph'];

if($mod==1)
{
//update nilai
mysqli_query($konek, "UPDATE tb_kontrol SET phairs='$phair'");
//respond
echo $phair;
}
else
{
//update nilai

```

```

mysqli_query($koneksi, "UPDATE tb_kontrol SET phairs='$ph'");
//respond
echo $ph;
}
?>

```

**>>phdown.php (Batas Kontrol Otomatis Nilai pH Down) <<**

```

<?php
//koneksi database
include "koneksi.php";
//tangkap para meter stat yg ada pada ajax
$phd = $_GET['phdown'];

//update nilai

mysqli_query($koneksi, "UPDATE tb_kontrol SET bphdown='$phd'");
//respond
echo $phd;
?>

```

**>>phup.php (Batas Kontrol Otomatis Nilai pH Up) <<**

```

<?php
//koneksi database
include "koneksi.php";
//tangkap para meter stat yg ada pada ajax
$phup = $_GET['phup'];

//update nilai

mysqli_query($koneksi, "UPDATE tb_kontrol SET bphup='$phup'");
//respond
echo $phup;
?>

```

**>>ppms.php (Batas Min Kontrol Otomatis Nilai Nutrisi) <<**

```

<?php
//koneksi database
include "koneksi.php";
//tangkap para meter stat yg ada pada ajax
$ppms = $_GET['ppms'];

//update nilai

mysqli_query($konek, "UPDATE tb_kontrol SET bppm='$ppms'");
//respond
echo $ppms;
?>

```

### >>simpanhistory.php (Menyimpan Data Ke Table History) <<

```

<?php
//koneksi data base
include "koneksi.php";

//tangkap para meter
$suhu = $_GET['t'];
$kelembaban = $_GET['h'];
$Lux = $_GET['Lux'];
$stds = $_GET['wb'];
$ph = $_GET['ph'];
$DO = $_GET['tdsa'];

//simpan ke tb_semuasensor
//atur ID selalu dimulai dari 1
mysqli_query($konek, "ALTER TABLE tb_history
AUTO_INCREMENT=1");

//simpan nilai sensor
$simpan = mysqli_query($konek, "INSERT INTO `tb_history` (`suhu`,
`kelembaban`, `ic`, `tds`, `ph`, `Do`) VALUES ('$suhu', '$kelembaban',
'$Lux', '$stds', '$ph', '$DO')");

```

```
//beri respon ke nodemcu
if($simpan)
echo "Berhasil disimpan ke history";
else
echo "Gagal disimpan ke history";
?>
```

### >>sph.php (Set pH Kontrol Manual) <<

```
<?php
//koneksi database
include "koneksi.php";
//tangkap para meter stat yg ada pada ajax
$sph = $_GET['sph'];
if($sph == "UP")
{
mysqli_query($konek, "UPDATE tb_kontrol SET sph=1");
//respon
echo "UP";
}
else
{
mysqli_query($konek, "UPDATE tb_kontrol SET sph=0");
//respon
echo "DOWN";
}

?>
```

### >>suhus.php (Batas Min Kontrol Otomatis Nilai Suhu) <<

```
<?php
//koneksi database
include "koneksi.php";
//tangkap para meter stat yg ada pada ajax
$suhus = $_GET['suhus'];

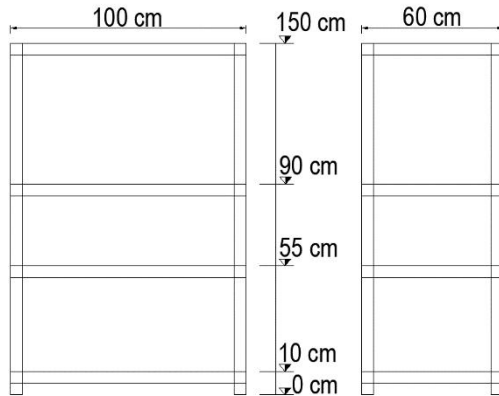
//update nilai
```

```
mysql_query($koneksi, "UPDATE tb_kontrol SET bsuhu='$suhu'");  
//respond  
echo $suhu;  
?>
```

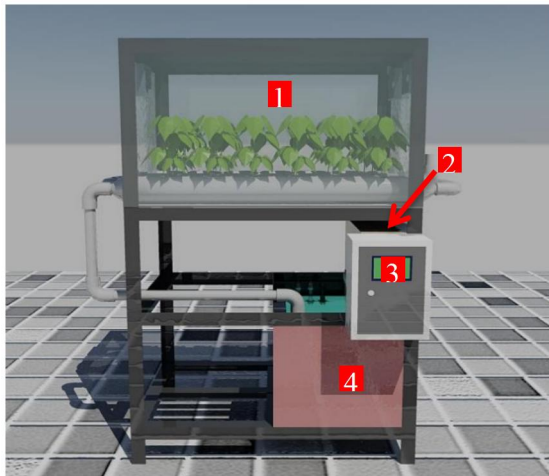
## LAMPIRAN H

### Desain Mekanik Dan Hasil Desain Mekanik Alat

#### Desain 2D Mekanik Alat



#### Desain 3D Mekanik Alat



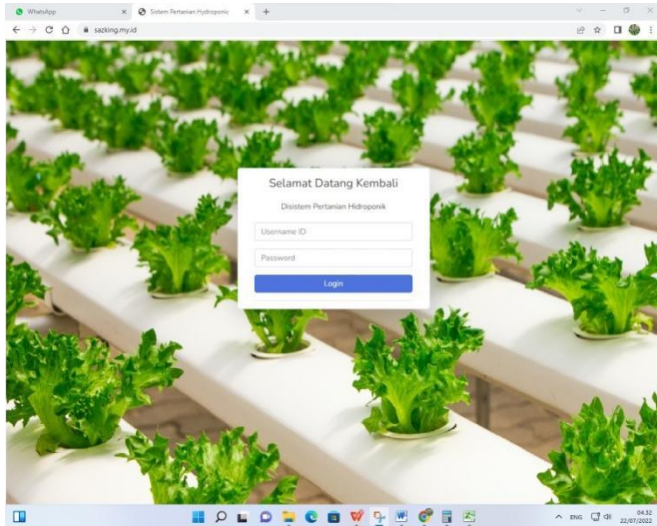
## Hasil Mekanik Alat



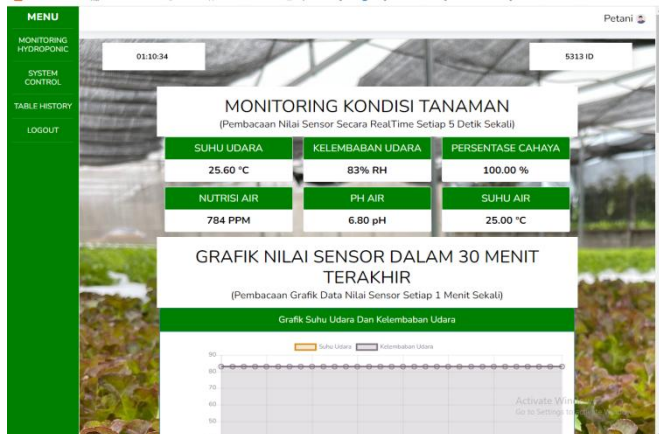
# LAMPIRAN I

## Tampilan Website

Tampilan 1 Halaman Login

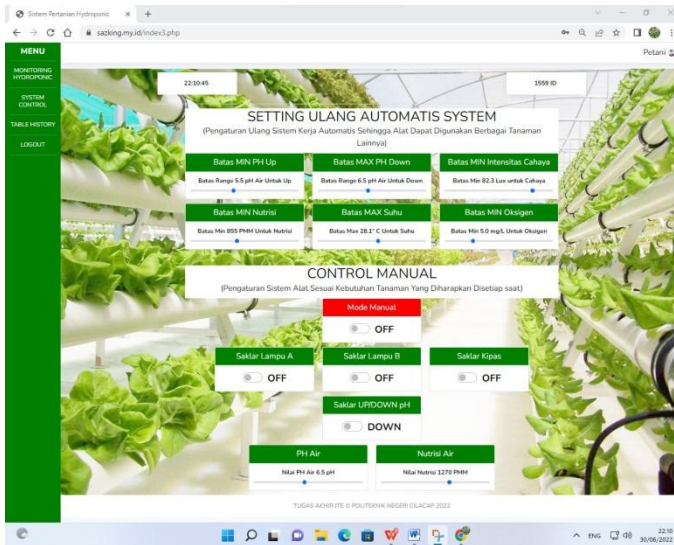


Tampilan 2 Halaman Utama

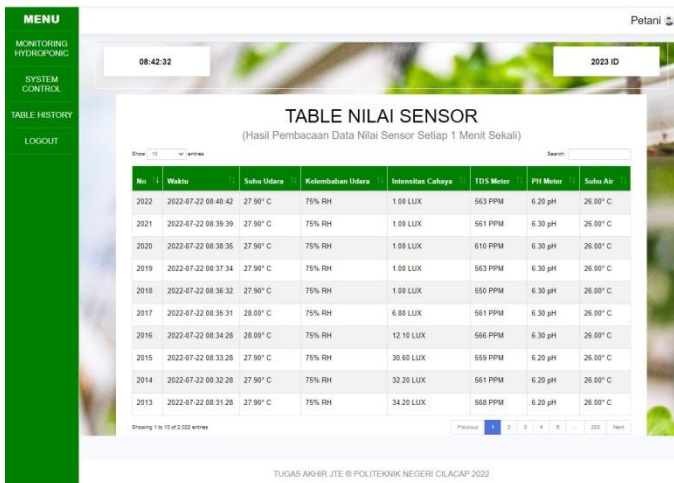




## Tampilan 3 Halaman Sistem Kontrol



## Tampilan 4 Halaman Tabel Kontrol



## LAMPIRAN J

### Hasil Tanaman Dimedia Tanam

2 Hari Setelah Pindah Media Tanam



5 Hari Setelah Pindah Media Tanam



17 Hari Setelah Pindah Media tanam



## BIODATA PENULIS



Nama : Sabri Aziz Zulfadhli  
Tempat / Tanggal Lahir : Cilacap, 10 Juli 2000  
Alamat : Jln. Dr. Cipto No. 45, RT02/01,  
Kebonmanis, Kec. Cilacap Utara, Kab.  
Cilacap  
Telp/Hp : 085702198227  
Hobi : Batminton, Mendaki Gunung  
Moto : “Semua orang akan mendapat giliran  
untuk bersinar dengan bersabar”

### **Riwayat Pendidikan :**

- SD 03 Kebonmanis Tahun 2006 – 2012
- SMP Negeri 4 Cilacap Tahun 2012 – 2015
- SMK Negeri 2 Cilacap Tahun 2015 – 2018
- Politeknik Negeri Cilacap Tahun 2019 – 2022

Penulis telah mengikuti sidang Tugas Akhir pada tanggal 1 Agustus 2022 sebagai salah satu persyaratan untuk memperoleh gelar Ahli Madya (A.Md).