

## LAMPIRAN

### LAMPIRAN 1: Program Arduino

#### Angin

```
void get_speed(){
windvelocity();
RPMcalc();
WindSpeed();
}

void get_mata_angin(){
if(digitalRead(utara)==LOW){arah="-> UTARA";arah_index=1;}
else if(digitalRead(tl)==LOW){arah="-> TIMUR LAUT";arah_index=2;}
else if(digitalRead(timur)==LOW){arah="-> TIMUR";arah_index=3;}
else if(digitalRead(tenggara)==LOW){arah="-> TENGGARA";arah_index=4;}
else if(digitalRead(selatan)==LOW){arah="-> SELATAN";arah_index=5;}
else if(digitalRead(bd)==LOW){arah="-> BARAT DAYA";arah_index=6;}
else if(digitalRead(barat)==LOW){arah="-> BARAT" ;arah_index=7;}
else if(digitalRead(bl)==LOW){arah="-> BARAT LAUT ";arah_index=8;}
}

// Measure wind speed
void windvelocity()
{
speedwind = 0;
counter = 0;
attachInterrupt(1, addcount, CHANGE);
unsigned long millis();
long startTime = millis();
while(millis() < startTime + period) {}
detachInterrupt(1);
}

void RPMcalc()
```

```

{
RPM=((counter/jml_celah)*60)/(period/1000); // Calculate revolutions per minute
(RPM)
}
void WindSpeed()
{
speedwind = ((2 * pi * radio * RPM)/60) / 1000; // Calculate wind speed on m/s
}
void addcount()
{
counter++;
}

```

### Arduino

```

#include <Wire.h>
#include <LiquidCrystal_I2C.h>
#include <OneWire.h>
#include <DallasTemperature.h>
LiquidCrystal_I2C lcd(0x27, 16, 2);
#define pin_ds A1
#define pin_relayup 13
#define pin_relaydw 12
#define ONE_WIRE_BUS pin_ds
// Pin definitions
# define windPin 3 // Receive the data from sensor

```

```
// Wind Direction

#define utara 4

#define tl 5

#define timur 6

#define tenggara 7

#define selatan 8

#define bd 9

#define barat 10

#define bl 11

#define up_on digitalWrite(pin_relayup,HIGH)

#define up_off digitalWrite(pin_relayup,LOW)

#define dw_on digitalWrite(pin_relaydw,HIGH)

#define dw_off digitalWrite(pin_relaydw,LOW)

//LiquidCrystal_I2C lcd(0x27, 16, 2);

OneWire oneWire(ONE_WIRE_BUS);

DallasTemperature sensors(&oneWire);

float calibration = 27.00; //change this value to calibrate

int sensorValue = 0;

unsigned long int avgValue;

float b;

int buf[10],temp;
```

```

float suhu,nilai_ph;

// Constants definitions

const float pi = 3.14159265; // pi number

int period = 10000; // Measurement period (milliseconds)

int delaytime = 10000; // Time between samples (milliseconds)

int radio = 90; // Distance from center windmill to outer cup (mm)

int jml_celah = 18; // jumlah celah sensor

// Variable definitions

unsigned int Sample = 0; // Sample number
unsigned int counter = 0; // B/W counter for sensor
unsigned int RPM = 0; // Revolutions per minute
float speedwind = 0; // Wind speed (m/s)
int arah_index=0;
bool mode=false;
long last_millis;
long minute, second;
long sp_minute=2;

String inputString = ""; // a String to hold incoming data

bool stringComplete = false; // whether the string is complete

float sp_ph=7;

int durasi=200;

```

```
String arah;

void setup()

{

Serial.begin(9600);

pinMode(pin_relayup,OUTPUT);

pinMode(pin_relaydw,OUTPUT);

pinMode(3, INPUT_PULLUP);

pinMode(utara,INPUT_PULLUP);

pinMode(tl,INPUT_PULLUP);

pinMode(timur,INPUT_PULLUP);

pinMode(tenggara,INPUT_PULLUP);

pinMode(selatan,INPUT_PULLUP);

pinMode(bd,INPUT_PULLUP);

pinMode(barat,INPUT_PULLUP);

pinMode(bl,INPUT_PULLUP);

up_off;

dw_off;

lcd.begin();

lcd.backlight();

sensors.begin();

Serial.println("MULAI");
```

```

lcd.setCursor(0,0);

lcd.print(" MONITORING ");

lcd.setCursor(0,1);

lcd.print(" PAR CUACA ");

}

void loop()

{

sensors.requestTemperatures();

suhu = sensors.getTempCByIndex(0);

get_speed();

get_mata_angin();

if (stringComplete) {

int a = inputString.indexOf("A");

int b =inputString.indexOf("B");

if (b>0){

sp_ph= inputString.substring(a+1,b).toInt();

}

inputString = "";

stringComplete = false;

}

```

```

lcd.setCursor(0,0);

lcd.print("V:");

lcd.print(speedwind);

lcd.print(" m/s T:");

lcd.print(suhu);

lcd.print("C ");

lcd.setCursor(0,1);

lcd.print(arah);

lcd.print( " ");

String data = "A"+String(speedwind)+"B"+String(suhu)+"C"+
String(arah_index)+"D";

data=data+data.length()+"E";

Serial.println(data);

}

String karakter(int a){

String bb = String(a);

if (a<10){bb="0"+bb;}

return bb;

}

```



## Serial

```
void serialEvent() {  
  while (Serial.available()) {  
    char inChar = (char)Serial.read();  
    inputString += inChar;  
    if (inChar == '\n') {  
      stringComplete = true;  
    }  
  }  
}
```





## LAMPIRAN 2: Program Wemos D1 Mini

### Function

```
String bacaStatus() {
String data = requestUrl("/php/status");
int a = data.indexOf("@");
int b = data.indexOf("$");
data = data.substring(a+1,b);
return data; //nyala - mati
}

String requestUrl(String url) {
if (!client.connect(host, httpPort)) {
//Serial.println("connection failed");
led_off;
return "";
}
led_on;
client.print(String("GET ") + url + " HTTP/1.1\r\n" +
"Host: " + host + "\r\n" +
"User-Agent: BuildFailureDetectorESP8266\r\n" +
"Connection: close\r\n\r\n");
String body = "";
while (client.connected()) {
while (client.available()) {
char c = client.read();
body += String(c);
}
}
return body;
}
```

## Wemos

```
#include <ESP8266WiFi.h>
const char* ssid = "windsock";
const char* password = "windsock123";
const char* host = "wind.onlinehourmeter.com";
const int httpPort = 80;
String speed;
String suhu;
String arah;
#define led_on digitalWrite(BUILTIN_LED,LOW)
#define led_off digitalWrite(BUILTIN_LED,HIGH)
WiFiClient client;
void setup() {
pinMode(BUILTIN_LED,OUTPUT);
led_off;
Serial.begin(9600);
WiFi.mode(WIFI_STA);
WiFi.begin(ssid, password);
while (WiFi.status() != WL_CONNECTED) {
delay(500);
Serial.print(".");
}
led_on;
}
void loop() {
if (Serial.available()>1) {
String data_masuk = Serial.readStringUntil('\n');
Serial.println(data_masuk);
int a = data_masuk.indexOf("A");
int b = data_masuk.indexOf("B");
int c = data_masuk.indexOf("C");
```

```
int d = data_masuk.indexOf("D");
int e = data_masuk.indexOf("E");
int fcs = data_masuk.substring(d + 1, e).toInt();
int jumlah_data = data_masuk.substring(a, d + 1).length();
if (fcs == jumlah_data && fcs > 0 && jumlah_data > 0){
speed= data_masuk.substring(a+1,b);
suhu=data_masuk.substring(b+1,c);
arah=data_masuk.substring(c+1,d);
requestUrl("/php/update?kecepatan=" + String(speed) + "&suhu=" +
String(suhu)+ "&arah=" + String(arah));
}
}
}
```



### LAMPIRAN 3: Program Website

#### Footer

```
<footer class="sticky-footer bg-white">
<div class="container my-auto">
<div class="copyright text-center my-auto">
<span>Copyright &copy; Universitas Muhammadiyah Gresik 2019</span>
</div>
</div>
</footer>
```

#### Index

```
<?php
session_start();
if (empty($_SESSION['user'])) {
exit(header("Location: login.php"));
}
?>
<!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>Monitoring Kondisi Cuaca</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,400,400
```

```

i,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 id="page-top">
<!-- Page Wrapper -->
<div id="wrapper">
<!-- Sidebar -->
<?php include 'leftside.php'?>
<!-- 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">
<!-- Sidebar Toggle (Topbar) -->
<button id="sidebarToggleTop" class="btn btn-link d-md-none rounded-circle mr-3">
<i class="fa fa-bars"></i>
</button>
<!-- Topbar Search -->
<form class="d-none d-sm-inline-block form-inline mr-auto ml-md-3 my-2 my-md-0 mw-100 navbar-search">
<div class="input-group">
<input type="text" class="form-control bg-light border-0 small"
placeholder="Search for..." aria-label="Search" aria-describedby="basic-addon2">
<div class="input-group-append">
<button class="btn btn-primary" type="button">

```

```

<i class="fas fa-search fa-sm"></i>
</button>
</div>
</div>
</form>
</nav>
<!-- End of Topbar -->
<!-- Begin Page Content -->
<div class="container-fluid">
<!-- Page Heading -->
<div class="d-sm-flex align-items-center justify-content-between mb-4">
<h1 class="h3 mb-0 text-gray-800">Dashboard</h1>
<a href="/php/delete_log" class="d-none d-sm-inline-block btn btn-sm btn-
primary shadow-sm"><i class="fas fa-download fa-sm text-white-50"></i> Hapus
Log</a>
</div>
<!-- Content Row -->
<div class="row">
<div class="col-xl-8 col-lg-7">
<div class="alert alert-primary" role="alert" id="arah_mata_angin">
Arah Mata Angin : Utara
</div>
</div>
</div>
</div>
<!-- Content Row -->
<div class="row">
<!-- Area Chart -->
<div class="col-xl-8 col-lg-7">
<div class="card shadow mb-4">
<!-- Card Header - Dropdown -->
<div class="card-header py-3 d-flex flex-row align-items-center justify-content-

```



```

between">
<h6 class="m-0 font-weight-bold text-primary">Grafik Kecepatan Angin (M/S)
</h6>
</div>
<!-- Card Body -->
<div class="card-body">
<div class="chart-area">
<canvas id="chartKecepatan"></canvas>
</div>
</div>
</div>
</div>
<!-- Pie Chart -->
<div class="col-xl-4 col-lg-5">
<div class="card shadow mb-4">
<!-- Card Header - Dropdown -->
<div class="card-header py-3 d-flex flex-row align-items-center justify-content-
between">
<h6 class="m-0 font-weight-bold text-primary">Data Kecepatan Angin
(M/S)</h6>
</div>
<!-- Card Body -->
<div class="card-body">
<table style="width:100%">
<tr>
<th>Tanggal</th>
<th>Jam</th>
<th>Data</th>
</tr>
<tr>
<td id="kecepatan_tgl">-</td>

```



```

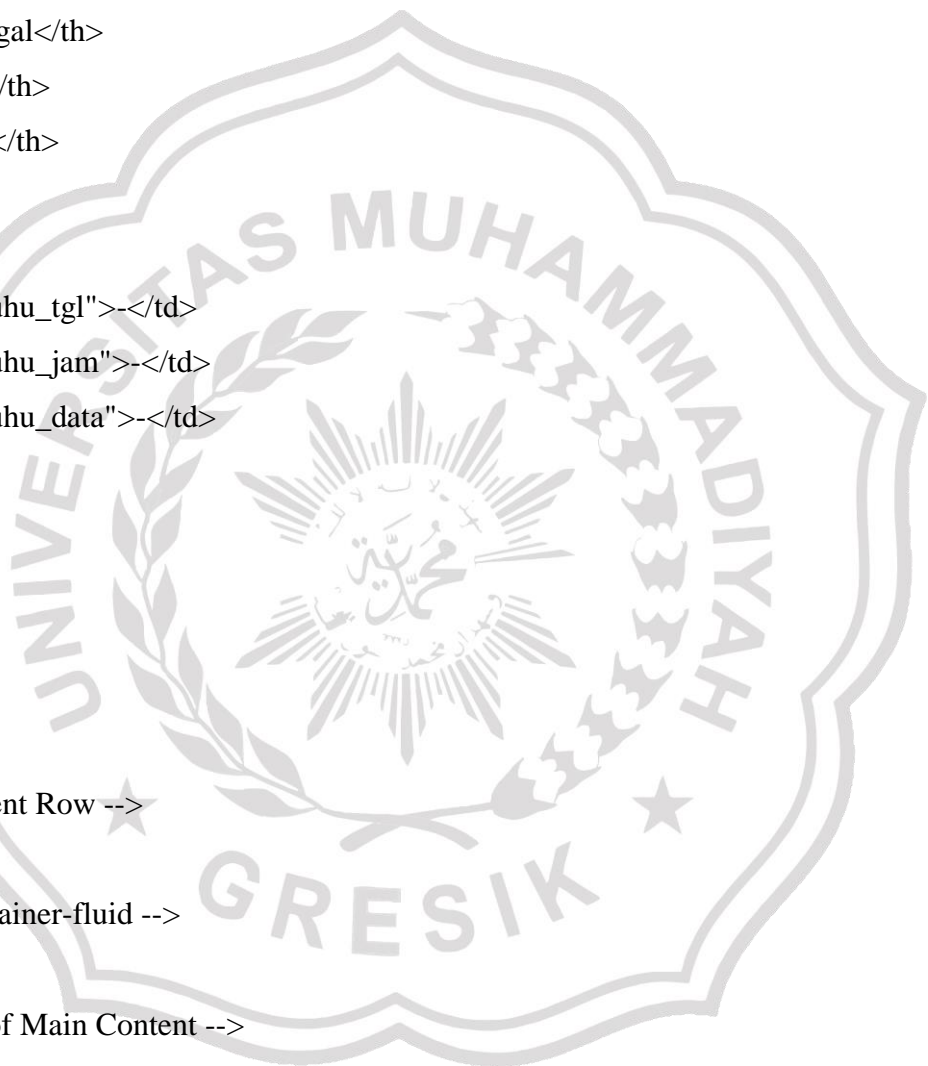
<td id="kecepatan_jam">-</td>
<td id="kecepatan_data">-</td>
</tr>
</table>
</div>
</div>
</div>
</div>
<div class="row">
<!-- Area Chart -->
<div class="col-xl-8 col-lg-7">
<div class="card shadow mb-4">
<!-- Card Header - Dropdown -->
<div class="card-header py-3 d-flex flex-row align-items-center justify-content-between">
<h6 class="m-0 font-weight-bold text-primary">Grafik Suhu Udara (C) </h6>
</div>
<!-- Card Body -->
<div class="card-body">
<div class="chart-area">
<canvas id="chartSuhu"></canvas>
</div>
</div>
</div>
</div>
</div>
<!-- Pie Chart -->
<div class="col-xl-4 col-lg-5">
<div class="card shadow mb-4">
<!-- Card Header - Dropdown -->
<div class="card-header py-3 d-flex flex-row align-items-center justify-content-between">

```

```

<h6 class="m-0 font-weight-bold text-primary">Data Suhu Udara (C)</h6>
</div>
<!-- Card Body -->
<div class="card-body">
<table style="width:100%">
<tr>
<th>Tanggal</th>
<th>Jam</th>
<th>Data</th>
</tr>
<tr>
<td id="suhu_tgl"></td>
<td id="suhu_jam"></td>
<td id="suhu_data"></td>
</tr>
</table>
</div>
</div>
</div>
</div>
<!-- Content Row -->
</div>
<!-- /.container-fluid -->
</div>
<!-- End of Main Content -->
<!-- Footer -->
<?php include 'footer.php'; ?>
<!-- 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></span></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>
</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 type="text/javascript">
window.onload = function(){
updateChart();
updateTable();
updateArah();
}
function updateChart() {
$.get("/php/last_20?tipe=kecepatan", function(data){
var data_last = JSON.parse(data);
window.chartKecepatan.data.labels = data_last.tanggal;
window.chartKecepatan.data.datasets[0].data = data_last.data;
window.chartKecepatan.update();
});
$.get("/php/last_20?tipe=suhu", function(data){
var data_last = JSON.parse(data);
window.chartSuhu.data.labels = data_last.tanggal;
window.chartSuhu.data.datasets[0].data = data_last.data;
window.chartSuhu.update();
});
setTimeout(updateChart, 1000);
}
function updateTable() {
$.post("/php/last_row?tipe=kecepatan", {tipe: 'kecepatan'}, function(result){
var obj = JSON.parse(result);
if (obj.length == undefined) {
$("#kecepatan_tgl").text(obj.tanggal);

```

```

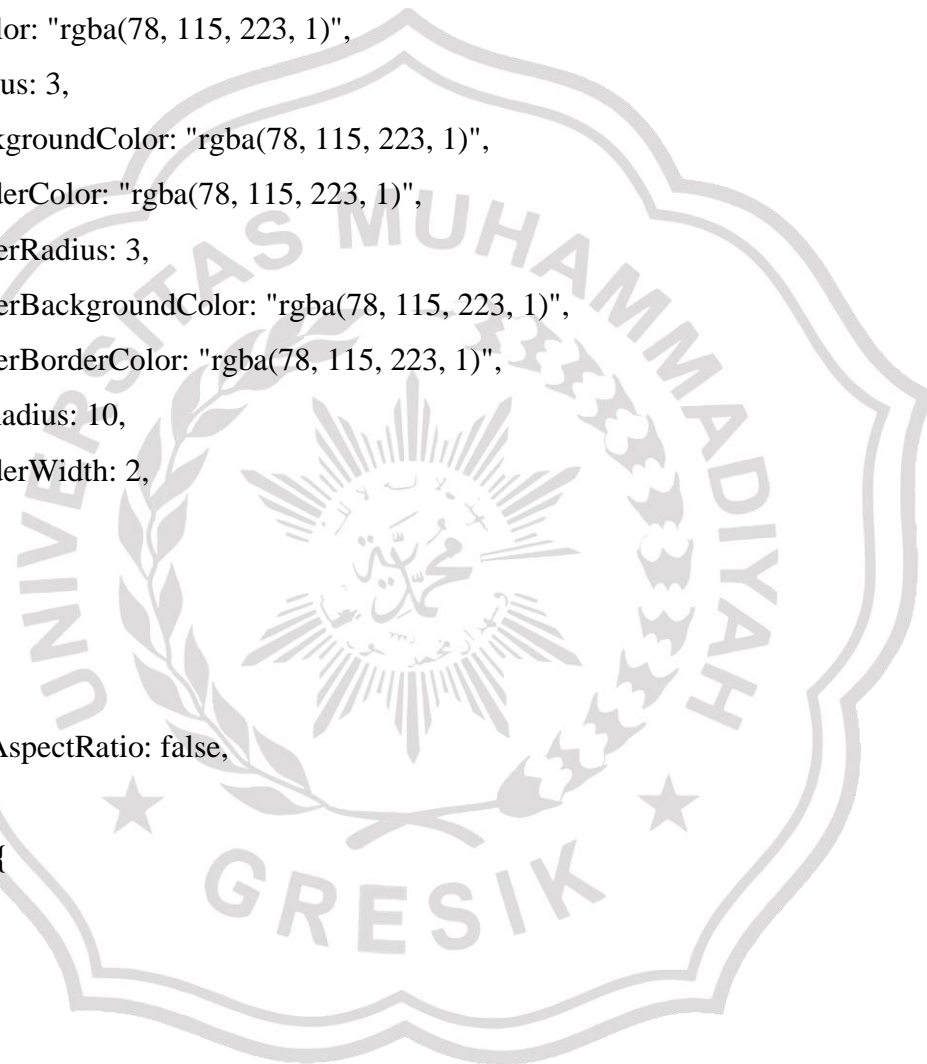
$("#kecepatan_jam").text(obj.jam);
$("#kecepatan_data").text(obj.data);
}
});
$.post("/php/last_row?tipe=suhu", {tipe: 'suhu'}, function(result){
var obj = JSON.parse(result);
if (obj.length == undefined) {
$("#suhu_tgl").text(obj.tanggal);
$("#suhu_jam").text(obj.jam);
$("#suhu_data").text(obj.data);
}
});
setTimeout(updateTable, 1000);
}
function updateArah() {
$.post("/php/last_row?tipe=arah", {tipe: 'arah'}, function(result){
var obj = JSON.parse(result);
if (obj.length == undefined) {
var arah = obj .data;
arah = "Mata Angin: "+ arah
$("#arah_mata_angin").text(arah);
}
});
setTimeout(updateArah, 1000);
}
Chart.defaults.global.defaultFontFamily = 'Nunito', '-apple-system,system-
ui,BlinkMacSystemFont,"Segoe UI",Roboto,"Helvetica Neue",Arial,sans-serif';
Chart.defaults.global.defaultFontColor = '#858796';
window.chartKecepatan = new
Chart(document.getElementById("chartKecepatan"), {
type: 'line',

```

```

data: {
labels: [],
datasets: [{
label: "Kecepatan (M/S)",
lineTension: 0.3,
backgroundColor: "rgba(78, 115, 223, 0.05)",
borderColor: "rgba(78, 115, 223, 1)",
pointRadius: 3,
pointBackgroundColor: "rgba(78, 115, 223, 1)",
pointBorderColor: "rgba(78, 115, 223, 1)",
pointHoverRadius: 3,
pointHoverBackgroundColor: "rgba(78, 115, 223, 1)",
pointHoverBorderColor: "rgba(78, 115, 223, 1)",
pointHitRadius: 10,
pointBorderWidth: 2,
data: [],
}],
},
options: {
maintainAspectRatio: false,
layout: {
padding: {
left: 10,
right: 25,
top: 25,
bottom: 0
}
},
scales: {
xAxes: [{
time: {

```

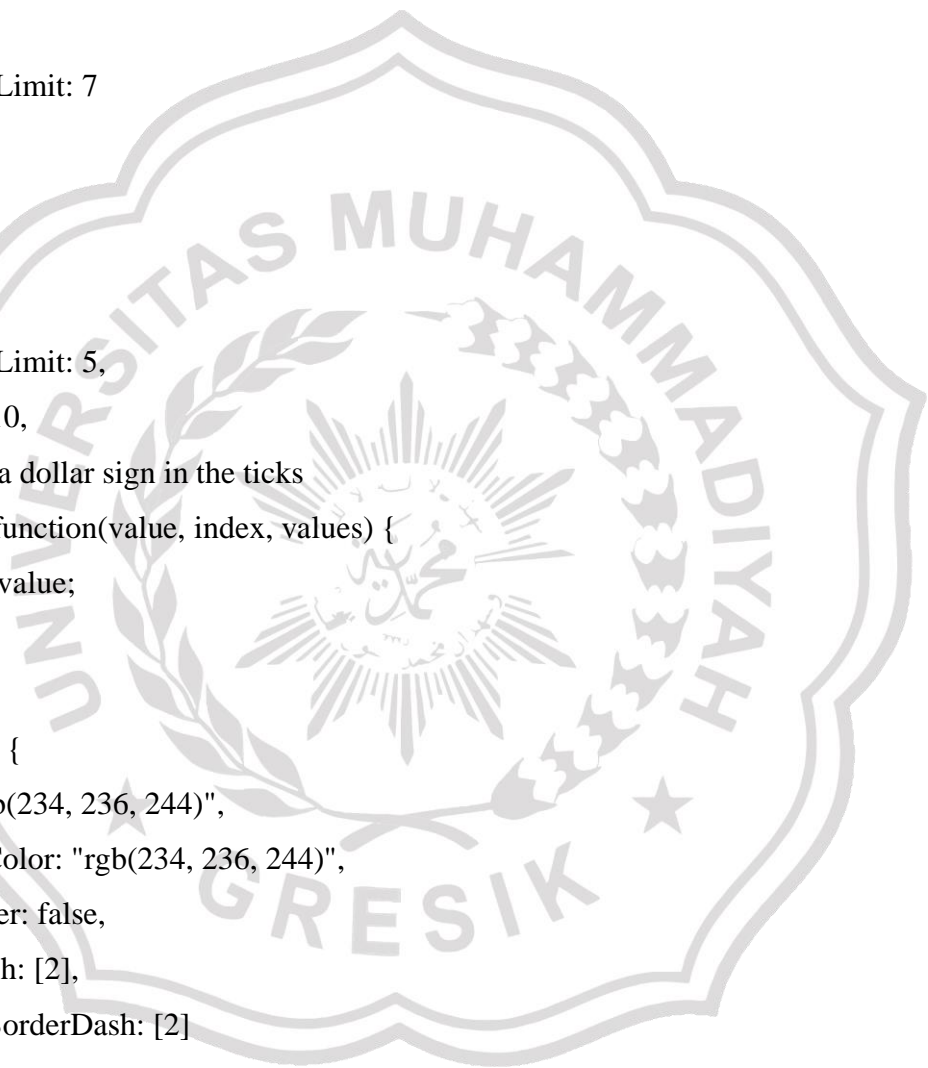




```

unit: 'date'
},
gridLines: {
display: false,
drawBorder: false
},
ticks: {
maxTicksLimit: 7
}
}],
yAxes: [{
ticks: {
maxTicksLimit: 5,
padding: 10,
// Include a dollar sign in the ticks
callback: function(value, index, values) {
return " + value;
}
},
gridLines: {
color: "rgb(234, 236, 244)",
zeroLineColor: "rgb(234, 236, 244)",
drawBorder: false,
borderDash: [2],
zeroLineBorderDash: [2]
}
}],
},
legend: {
display: false
},

```





```

tooltips: {
  backgroundColor: "rgb(255,255,255)",
  bodyFontColor: "#858796",
  titleMarginBottom: 10,
  titleFontColor: '#6e707e',
  titleFontSize: 14,
  borderColor: '#dddfeb',
  borderWidth: 1,
  xPadding: 15,
  yPadding: 15,
  displayColors: false,
  intersect: false,
  mode: 'index',
  caretPadding: 10,
  callbacks: {
    label: function(tooltipItem, chart) {
      var datasetLabel = chart.datasets[tooltipItem.datasetIndex].label || "";
      return datasetLabel + ': ' + tooltipItem.yLabel;
    }
  }
});

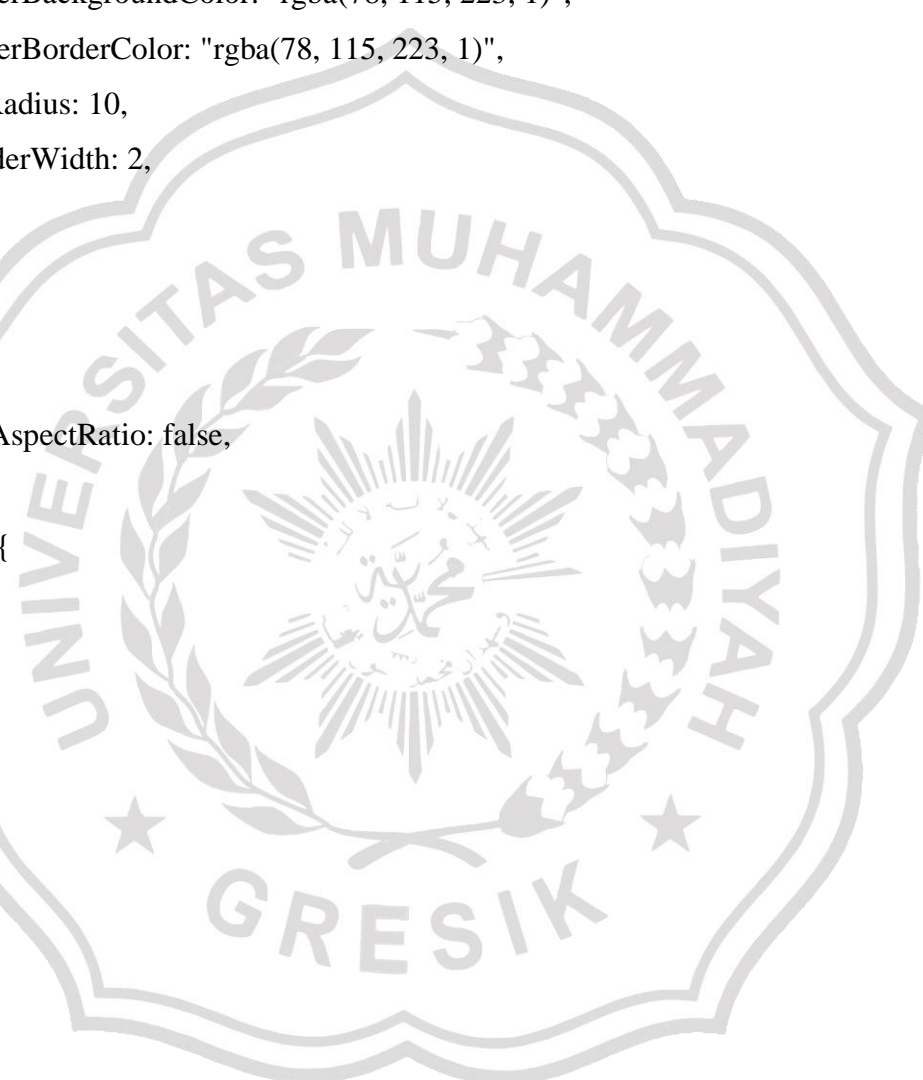
window.chartSuhu = new Chart(document.getElementById("chartSuhu"), {
  type: 'line',
  data: {
    labels: [],
    datasets: [{
      label: "Suhu (C)",
      lineTension: 0.3,
      backgroundColor: "rgba(78, 115, 223, 0.05)",

```

```

borderColor: "rgba(78, 115, 223, 1)",
pointRadius: 3,
pointBackgroundColor: "rgba(78, 115, 223, 1)",
pointBorderColor: "rgba(78, 115, 223, 1)",
pointHoverRadius: 3,
pointHoverBackgroundColor: "rgba(78, 115, 223, 1)",
pointHoverBorderColor: "rgba(78, 115, 223, 1)",
pointHitRadius: 10,
pointBorderWidth: 2,
data: [],
}],
},
options: {
maintainAspectRatio: false,
layout: {
padding: {
left: 10,
right: 25,
top: 25,
bottom: 0
}
},
scales: {
xAxes: [{
time: {
unit: 'date'
},
},
gridLines: {
display: false,
drawBorder: false
},
}],
}

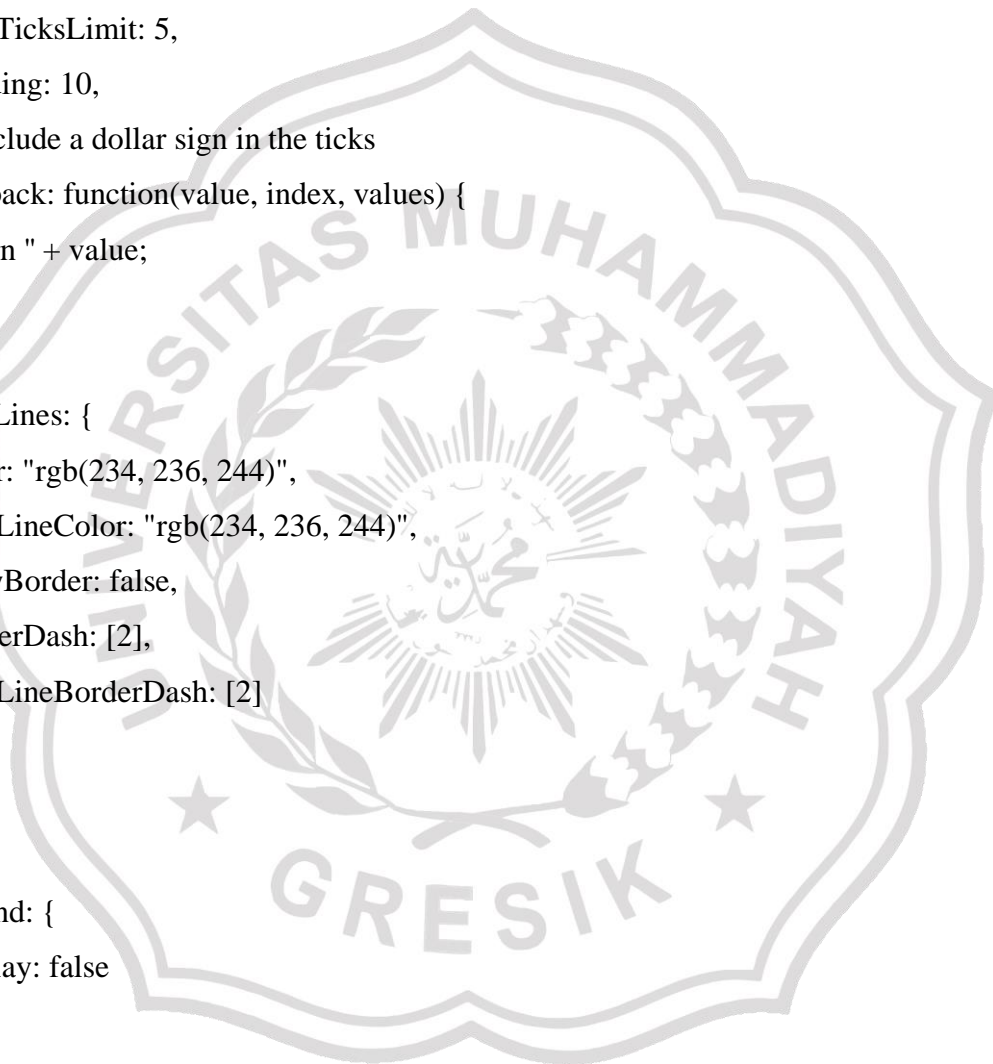
```



```

ticks: {
  maxTicksLimit: 7
}
}],
yAxes: [{
  ticks: {
    maxTicksLimit: 5,
    padding: 10,
    // Include a dollar sign in the ticks
    callback: function(value, index, values) {
      return "$" + value;
    }
  },
  gridLines: {
    color: "rgb(234, 236, 244)",
    zeroLineColor: "rgb(234, 236, 244)",
    drawBorder: false,
    borderDash: [2],
    zeroLineBorderDash: [2]
  }
}],
},
legend: {
  display: false
},
tooltips: {
  backgroundColor: "rgb(255,255,255)",
  bodyFontColor: "#858796",
  titleMarginBottom: 10,
  titleFontColor: '#6e707e',
  titleFontSize: 14,

```



```

borderColor: '#dddfeb',
borderWidth: 1,
xPadding: 15,
yPadding: 15,
displayColors: false,
intersect: false,
mode: 'index',
caretPadding: 10,
callbacks: {
label: function(tooltipItem, chart) {
var datasetLabel = chart.datasets[tooltipItem.datasetIndex].label || "";
return datasetLabel + ': ' + tooltipItem.yLabel;
}
}
});
</script>
</body>
</html>

```

### **InterFace**

```

<?php
function getTanggal($time) {
$array_bulan = array(
"1" => "Januari",
"2" => 'Februari',
"3" => 'Maret',
"4" => 'April',
"5" => 'Mei',
"6" => 'Juni',
"7" => 'Juli',

```

```

"8" => 'Agustus',
"9" => 'September',
"10" => 'Oktober',
"11" => 'November',
"12" => 'Desember'
);
$date = strtotime($time);
$bulan = $array_bulan[date("n", $date)];
$tanggal = date("j", $date);
$tahun = date("Y", $date);
return "$tanggal $bulan $tahun";
}
function getJam($time) {
$date = strtotime($time);
return date("H:i:s", $date);
}
include 'php/db.php';
$tipe = $_GET['id'];
$data_tabel = $conn->query("SELECT * FROM `data` WHERE `tipe`='$tipe'")-
>fetch_all(MYSQLI_ASSOC);
?>
<!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>Monitoring Arus</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,400,400
i,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 href="/vendor/datatables/dataTables.bootstrap4.min.css" rel="stylesheet">
</head>
<body id="page-top">
<!-- Page Wrapper -->
<div id="wrapper">
<!-- Sidebar -->
<?php include 'leftside.php'?>
<!-- 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">
<!-- Sidebar Toggle (Topbar) -->
<button id="sidebarToggleTop" class="btn btn-link d-md-none rounded-circle
mr-3">
<i class="fa fa-bars"></i>
</button>
<!-- Topbar Search -->
<form class="d-none d-sm-inline-block form-inline mr-auto ml-md-3 my-2 my-
md-0 mw-100 navbar-search">

```

```

<div class="input-group">
<input type="text" class="form-control bg-light border-0 small"
placeholder="Search for..." aria-label="Search" aria-describedby="basic-
addon2">
<div class="input-group-append">
<button class="btn btn-primary" type="button">
<i class="fas fa-search fa-sm"></i>
</button>
</div>
</div>
</form>
</nav>
<!-- End of Topbar -->
<!-- Begin Page Content -->
<div class="container-fluid">
<!-- Page Heading -->
<div class="d-sm-flex align-items-center justify-content-between mb-4">
<h1 class="h3 mb-0 text-gray-800">Detail <?=$stipe?></h1>
<a href="/laporan" class="d-none d-sm-inline-block btn btn-sm btn-primary
shadow-sm"><i class="fas fa-download fa-sm text-white-50"></i> Buat
Laporan</a>
</div>
<!-- Content Row -->
<div class="row">
<!-- Area Chart -->
<div class="col-xl-12 col-lg-12">
<div class="card shadow mb-4">
<!-- Card Header - Dropdown -->
<div class="card-header py-3 d-flex flex-row align-items-center justify-content-
between">
<h6 class="m-0 font-weight-bold text-primary">Grafik</h6>

```



```

<div class="dropdown no-arrow">
  <a class="dropdown-toggle" href="#" role="button" id="dropdownMenuLink"
  data-toggle="dropdown" aria-haspopup="true" aria-expanded="false">
    <i class="fas fa-ellipsis-v fa-sm fa-fw text-gray-400"></i>
  </a>
  <div class="dropdown-menu dropdown-menu-right shadow animated--fade-in"
  aria-labelledby="dropdownMenuLink">
    <div class="dropdown-header">Dropdown Header:</div>
    <a class="dropdown-item" href="#">Action</a>
    <a class="dropdown-item" href="#">Another action</a>
    <div class="dropdown-divider"></div>
    <a class="dropdown-item" href="#">Something else here</a>
  </div>
</div>
</div>
<!-- Card Body -->
<div class="card-body">
  <div class="chart-area">
    <canvas id="myAreaChart"></canvas>
  </div>
</div>
</div>
</div>
<!-- Content Row -->
<div class="row">
  <!-- Content Column -->
  <div class="col-lg-12 mb-4">
    <!-- Project Card Example -->
    <div class="card shadow mb-4">
      <div class="card-header py-3">

```

```

<h6 class="m-0 font-weight-bold text-primary">Tabel</h6>
</div>
<div class="card-body">
<div class="table-responsive">
<table class="table table-bordered" id="dataTable" width="100%"
cellspacing="0">
<thead>
<tr>
<th>Nomor</th>
<th>Tanggal</th>
<th>Jam</th>
<th id="HeaderData">Data</th>
</tr>
</thead>
<tbody>
<?php
$counter = 0;
foreach ($data_tabel as $key) {
$key = (object)$key;
$counter++;
echo "<tr>
<td>$counter</td>
<td>".getTanggal($key->waktu)."</td>
<td>".getJam($key->waktu)."</td>
<td>$key->data</td>
</tr>";
}
?>
</tbody>
</table>
</div>

```

```

</div>
</div>
</div>
</div>
</div>
<!-- /.container-fluid -->
</div>
<!-- End of Main Content -->
<!-- Footer -->
<?php include 'footer.php'; ?>
<!-- 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>
<script src="/vendor/datatables/jquery.dataTables.min.js"></script>
<script src="/vendor/datatables/dataTables.bootstrap4.min.js"></script>
<script src="/vendor/datatables/dataTables.select.min.js"></script>
<script type="text/javascript">
function updateChart() {
$.get("/php/last_20?tiipe=<?=$_GET['id'];?>", function(data){
window.data_last = JSON.parse(data);
window.myLineChart.data.labels = window.data_last.tanggal;
window.myLineChart.data.datasets[0].data = window.data_last.data;
window.myLineChart.update();
setTimeout(updateChart, 5000);
});
}

```

```

function updateTable() {
$.post("/php/last_row?tipe=<?=$tipe?>", { tipe: '<?=$tipe?>' }, function(result){
try {
var obj = JSON.parse(result);
if (obj.length == undefined) {
if (window.tabelnya.data().count() == 0) {
window.tabelnya.row.add([1, obj.tanggal, obj.jam, obj.data]).draw(false);
window.tabelnya.row(':last').select();
} else if (window.tabelnya.row(':last').data()[2] != obj.jam) {
window.tabelnya.row(':last').deselect();
window.tabelnya.row.add([(Number(window.tabelnya.row(':last').data()[0])+1),
obj.tanggal, obj.jam, obj.data]).draw(false);
window.tabelnya.row(':last').select();
window.tabelnya.page.jumpToData( window.tabelnya.row(':last').data()[0], 0 );
}
}
setTimeout(updateTable, 5000);
} catch(err) {
console.log(err);
setTimeout(updateTable, 5000);
}
});
}
$(document).ready(function(){
jQuery.fn.dataTable.Api.register( 'page.jumpToData()', function ( data, column ) {
var pos = this.column(column, {order:'current'}).data().indexOf( data );
if ( pos >= 0 ) {
var page = Math.floor( pos / this.page.info().length );
this.page( page ).draw( false );
}
}
return this;
}

```

```

});
window.tabelnya = $('#dataTable').DataTable({
select: true
});
updateTable();
updateChart();
});
var tipe = "<?php echo $tipe?>"
if (tipe=="kecepatan"){
document.getElementById("HeaderData").innerHTML = "Data M/S";
}else if (tipe=="suhu"){
document.getElementById("HeaderData").innerHTML = "Data C";
}
Chart.defaults.global.defaultFontFamily = 'Nunito', '-apple-system,system-
ui,BlinkMacSystemFont,"Segoe UI",Roboto,"Helvetica Neue",Arial,sans-serif';
Chart.defaults.global.defaultFontColor = '#858796';
var ctx = document.getElementById("myAreaChart");
window.myLineChart = new Chart(ctx, {
type: 'line',
data: {
labels: [],
datasets: [{
label: "<?=$_GET['id'];?>",
lineTension: 0.3,
backgroundColor: "rgba(78, 115, 223, 0.05)",
borderColor: "rgba(78, 115, 223, 1)",
pointRadius: 3,
pointBackgroundColor: "rgba(78, 115, 223, 1)",
pointBorderColor: "rgba(78, 115, 223, 1)",
pointHoverRadius: 3,
pointHoverBackgroundColor: "rgba(78, 115, 223, 1)",

```



```

pointHoverBorderColor: "rgba(78, 115, 223, 1)",
pointHitRadius: 10,
pointBorderWidth: 2,
data: [],
}],
},
options: {
maintainAspectRatio: false,
layout: {
padding: {
left: 10,
right: 25,
top: 25,
bottom: 0
}
},
scales: {
xAxes: [{
time: {
unit: 'date'
},
gridLines: {
display: false,
drawBorder: false
},
ticks: {
maxTicksLimit: 7
}
}],
yAxes: [{
ticks: {

```





```
maxTicksLimit: 5,  
padding: 10,  
// Include a dollar sign in the ticks  
callback: function(value, index, values) {  
return " + value;  
}  
},  
gridLines: {  
color: "rgb(234, 236, 244)",  
zeroLineColor: "rgb(234, 236, 244)",  
drawBorder: false,  
borderDash: [2],  
zeroLineBorderDash: [2]  
}  
}],  
},  
legend: {  
display: false  
},  
tooltips: {  
backgroundColor: "rgb(255,255,255)",  
bodyFontColor: "#858796",  
titleMarginBottom: 10,  
titleFontColor: '#6e707e',  
titleFontSize: 14,  
borderColor: '#dddfeb',  
borderWidth: 1,  
xPadding: 15,  
yPadding: 15,  
displayColors: false,  
intersect: false,
```

```

mode: 'index',
caretPadding: 10,
callbacks: {
label: function(tooltipItem, chart) {
var datasetLabel = chart.datasets[tooltipItem.datasetIndex].label || "";
return datasetLabel + ': ' + tooltipItem.yLabel;
}
}
});
</script>
</body>
</html>

```

## Laporan

```

<?php
include 'php/db.php';
include_once 'php/make_report.php';
if (isset($_POST['kecepatan'])) {
$stglawal = mysqli_real_escape_string($conn, $_POST['tglawal']);
$stglakhir = mysqli_real_escape_string($conn, $_POST['tglakhir']);
$jamawal = mysqli_real_escape_string($conn, $_POST['jamawal']).":00";
$jamakhir = mysqli_real_escape_string($conn, $_POST['jamakhir']).":00";
$arusa_data = $conn->query("SELECT * FROM `data` WHERE `tipe`='kecepatan'
AND `waktu` BETWEEN '$stglawal $jamawal' AND '$stglakhir $jamakhir'")-
>fetch_all(MYSQLI_ASSOC);
$pdf = new ReportDevice();
$pdf->SetFont('Times','B',17);
$pdf->AddPage();
$pdf->BuatHeader("Laporan Kecepatan (M/S)", "");
$pdf->InfoDevice($stglawal, $stglakhir, $jamawal, $jamakhir);

```

```

$pdf->Tabel("Kecepatan",$arus_data); $pdf->Ln();
$pdf->Output('D', 'Laporan Kecepatan.pdf', true);
} else if (isset($_POST['suhu'])) {
$stglawal = mysqli_real_escape_string($conn, $_POST['tglawal']);
$stglakhir = mysqli_real_escape_string($conn, $_POST['tglakhir']);
$jamawal = mysqli_real_escape_string($conn, $_POST['jamawal']).":00";
$jamakhir = mysqli_real_escape_string($conn, $_POST['jamakhir']).":00";
$arus_data = $conn->query("SELECT * FROM `data` WHERE `tipe`='suhu'
AND `waktu` BETWEEN '$stglawal $jamawal' AND '$stglakhir $jamakhir'")-
>fetch_all(MYSQLI_ASSOC);
$pdf = new ReportDevice();
$pdf->SetFont('Times','B',17);
$pdf->AddPage();
$pdf->BuatHeader("Laporan Suhu (C)", "");
$pdf->InfoDevice($stglawal, $stglakhir, $jamawal, $jamakhir);
$pdf->Tabel("Suhu", $arus_data); $pdf->Ln();
$pdf->Output('D', 'Laporan Suhu.pdf', true);
}
?>
<!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>Monitoring Kondisi Cuaca</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,400,400
i,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">
<script src="vendor/jquery/jquery.min.js"></script>
<link href="vendor/clockpicker/clockpicker.css" rel="stylesheet">
<script src="vendor/clockpicker/clockpicker.js"></script>
</head>
<body id="page-top">
<!-- Page Wrapper -->
<div id="wrapper">
<!-- Sidebar -->
<?php include 'leftside.php'?>
<!-- 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">
<!-- Sidebar Toggle (Topbar) -->
<button id="sidebarToggleTop" class="btn btn-link d-md-none rounded-circle
mr-3">
<i class="fa fa-bars"></i>
</button>
<!-- Topbar Search -->
<form class="d-none d-sm-inline-block form-inline mr-auto ml-md-3 my-2 my-
md-0 mw-100 navbar-search">

```

```

<div class="input-group">
<input type="text" class="form-control bg-light border-0 small"
placeholder="Search for..." aria-label="Search" aria-describedby="basic-
addon2">
<div class="input-group-append">
<button class="btn btn-primary" type="button">
<i class="fas fa-search fa-sm"></i>
</button>
</div>
</div>
</form>
</nav>
<!-- End of Topbar -->
<!-- Begin Page Content -->
<div class="container-fluid">
<!-- Page Heading -->
<div class="d-sm-flex align-items-center justify-content-between mb-4">
<h1 class="h3 mb-0 text-gray-800">Buat Laporan</h1>
</div>
<!-- Content Row -->
<div class="row">
<!-- Content Column -->
<div class="col-lg-6 mb-4">
<!-- Project Card Example -->
<div class="card shadow mb-4">
<div class="card-header py-3">
<h6 class="m-0 font-weight-bold text-primary">Laporan Kecepatan</h6>
</div>
<div class="card-body">
<form action="" method="post">
<div class="row pt-3">

```

```

<div class="col-md-6">
<div class="form-group">
<label class="control-label">Tanggal Awal</label>
<input type="date" name="tglawal" class="form-control"
onchange="if($(this).val()!=")
{ $('[name=tglakhir]').removeAttr('disabled'); $('[name=tglakhir]').val(""); }"
required>
<small class="form-control-feedback"> Pilih tanggal mulai pencatatan</small>
</div>
</div>
<!--/span-->
<div class="col-md-6">
<div class="form-group">
<label class="control-label">Tanggal Akhir</label>
<input type="date" name="tglakhir" class="form-control" onchange="if
($(this).val()< $('[name=tglawal]').val()) { alert('Pilih tanggal akhir dengan
benar'); $(this).val(""); }" required disabled>
<small class="form-control-feedback"> Pilih tanggal akhir pencatatan</small>
</div>
</div>
<!--/span-->
</div>
<div class="row pt-3">
<div class="col-md-6">
<div class="form-group">
<label class="control-label">Jam Awal</label>
<div class="input-group clockpicker">
<input type="text" name="jamawal" class="form-control" value="00:00">
<span class="input-group-addon">
<span class="glyphicon glyphicon-time"></span>
</span>

```



```

</div>
<small class="form-control-feedback"> Pilih jam awal pencatatan</small>
</div>
</div>
<!--/span-->
<div class="col-md-6">
<div class="form-group">
<label class="control-label">Jam Akhir</label>
<div class="input-group clockpicker">
<input type="text" name="jamakhir" class="form-control" value="23:59">
<span class="input-group-addon">
<span class="glyphicon glyphicon-time"></span>
</span>
</div>
<small class="form-control-feedback"> Pilih jam akhir pencatatan</small>
</div>
</div>
<script type="text/javascript">
$('.clockpicker').clockpicker({
donetext: 'Done',
});
</script>
<!--/span-->
</div>
<!--/row-->
<div class="form-actions">
<input type="hidden" name="kecepatan" value="1">
<button type="submit" class="btn btn-success"> <i class="fas fa-download"></i>
Unduh Laporan</button>
</div>
</form>

```



```

</div>
</div>
</div>
<!-- Card ke dua -->
<!-- Content Column -->
<div class="col-lg-6 mb-4">
<!-- Project Card Example -->
<div class="card shadow mb-4">
<div class="card-header py-3">
<h6 class="m-0 font-weight-bold text-primary">Laporan Suhu</h6>
</div>
<div class="card-body">
<form action="" method="post">
<div class="row pt-3">
<div class="col-md-6">
<div class="form-group">
<label class="control-label">Tanggal Awal</label>
<input type="date" name="tglawal" class="form-control"
onchange="if($(this).val()!=")
{ $('[name=tglakhir]').removeAttr('disabled'); $('[name=tglakhir]').val(""); }"
required>
<small class="form-control-feedback"> Pilih tanggal mulai pencatatan</small>
</div>
</div>
<!--/span-->
<div class="col-md-6">
<div class="form-group">
<label class="control-label">Tanggal Akhir</label>
<input type="date" name="tglakhir" class="form-control" onchange="if
($(this).val()< $('[name=tglawal]').val()) { alert('Pilih tanggal akhir dengan
benar'); $(this).val(""); }" required disabled>

```

```

<small class="form-control-feedback"> Pilih tanggal akhir pencatatan</small>
</div>
</div>
<!--/span-->
</div>
<div class="row pt-3">
<div class="col-md-6">
<div class="form-group">
<label class="control-label">Jam Awal</label>
<div class="input-group clockpicker">
<input type="text" name="jamawal" class="form-control" value="00:00">
<span class="input-group-addon">
<span class="glyphicon glyphicon-time"></span>
</span>
</div>
<small class="form-control-feedback"> Pilih jam awal pencatatan</small>
</div>
</div>
<!--/span-->
<div class="col-md-6">
<div class="form-group">
<label class="control-label">Jam Akhir</label>
<div class="input-group clockpicker">
<input type="text" name="jamakhir" class="form-control" value="23:59">
<span class="input-group-addon">
<span class="glyphicon glyphicon-time"></span>
</span>
</div>
<small class="form-control-feedback"> Pilih jam akhir pencatatan</small>
</div>
</div>

```

```

<script type="text/javascript">
$( '.clockpicker' ).clockpicker({
donetext: 'Done',
});
</script>
<!--/span-->
</div>
<!--/row-->
<div class="form-actions">
<input type="hidden" name="suhu" value="1">
<button type="submit" class="btn btn-success"> <i class="fas fa-download"></i>
Unduh Laporan</button>
</div>
</form>
</div>
</div>
</div>
</div>
<!-- end card dua -->
</div>
</div>
<!-- /.container-fluid -->
</div>
<!-- End of Main Content -->
<!-- Footer -->
<?php include 'footer.php'; ?>
<!-- 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/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 -->
</body>
</html>
Leftside
<ul class="navbar-nav bg-gradient-primary sidebar sidebar-dark accordion"
id="accordionSidebar">
<!-- Sidebar - Brand -->
<a class="sidebar-brand d-flex align-items-center justify-content-center"
href="index.html">
<div class="sidebar-brand-icon rotate-n-15">
<i class="fas fa-wind"></i>
</div>
<div class="sidebar-brand-text mx-3">Wind Monitoring</div>
</a>
<!-- Divider -->
<li class="nav-item">
<a class="nav-link" href="/">
<i class="fas fa-fw fa-tachometer-alt"></i>
<span>Dashboard</span></a>
</li>
<hr class="sidebar-divider">
<!-- Heading -->
<div class="sidebar-heading">
Interface
</div>
</div>
<li class="nav-item">
<a class="nav-link collapsed" href="#" data-toggle="collapse" data-
target="#collapseTwo" aria-expanded="true" aria-controls="collapseTwo">
<i class="fas fa-fw fa-eye"></i>
<span>Detail</span>

```

```

</a>
<div id="collapseTwo" class="collapse" aria-labelledby="headingTwo" data-
parent="#accordionSidebar">
<div class="bg-white py-2 collapse-inner rounded">
<h6 class="collapse-header">Grafik dan Tabel:</h6>
<a class="collapse-item" href="/interface/kecepatan">Kecepatan</a>
<a class="collapse-item" href="/interface/suhu">Suhu</a>
<a class="collapse-item" href="/interface/arah">Arah Angin</a>
</div>
</div>
</li>
<hr class="sidebar-divider">
<!-- Heading -->
<div class="sidebar-heading">
Report
</div>
<li class="nav-item">
<a class="nav-link" href="/laporan">
<i class="fas fa-fw fa-table"></i>
<span>Buat Laporan</span></a>
</li>
<hr class="sidebar-divider">
<li class="nav-item">
<a class="nav-link" href="/logout.php">
<i class="fas fa-fw fa-table"></i>
<span>Log Out</span></a>
</li>
</ul>

```



## Login

```
<?php
include 'php/db.php';
session_start();
if (isset($_SESSION['user'])) exit(header("Location: index.php"));
if (isset($_POST['username'])) {
$user = $_POST['username'];
$pass = $_POST['password'];
$sqlout = $conn->query("SELECT * FROM `user` WHERE `username`='$_user'
AND `password`='$_pass' LIMIT 1");
if ($sqlout->num_rows > 0) {
$_SESSION['user'] = $user;
exit(header("Location: index.php"));
}
}
?>
<!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>Login</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,400,400
```



```

i,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 class="bg-gradient-primary">
<div class="container">
<!-- Outer Row -->
<div class="row justify-content-center">
<div class="col-xl-4 col-lg-4 col-md-9">
<div class="card o-hidden border-0 shadow-lg my-5">
<div class="card-body p-0">
<!-- Nested Row within Card Body -->
<div class="row">
<div class="col-lg-12">
<center>
<!--
<i class="fas fa-wind fa-10x"></i>
</center>
<div class="p-5">
<div class="text-center">
<h1 class="h4 text-gray-900 mb-4">Login Windssock</h1>
</div>
<form class="user" action="login.php" method="POST">
<div class="form-group">
<input type="text" class="form-control form-control-user" id="username"
name="username" aria-describedby="emailHelp" placeholder="Username">
</div>
<div class="form-group">
<input type="password" class="form-control form-control-user" id="password"
name="password" placeholder="Password">
</div>

```

```

<div class="form-group">
<div class="custom-control custom-checkbox small">
<input type="checkbox" class="custom-control-input" id="customCheck">
<label class="custom-control-label" for="customCheck">Remember Me</label>
</div>
</div>

<button type="submit" class="btn btn-primary btn-user btn-
block">Login</button>
</div>
</div>
</div>
</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>

```

### **Logout**

```

<?php
session_start();
session_destroy();
exit(header("Location: login.php"));
?>

```

## Relay

```
<?php
include 'php/db.php';
include_once 'php/make_report.php';
if (isset($_POST['kondisi1'])) {
    $kondisi = mysqli_real_escape_string($conn, $_POST['kondisi1']);
    $conn->query("UPDATE `relay` SET `relay`='<math>\$kondisi</math>' WHERE `id`='1'");
} else if (isset($_POST['kondisi2'])) {
    $kondisi = mysqli_real_escape_string($conn, $_POST['kondisi2']);
    $conn->query("UPDATE `relay` SET `relay`='<math>\$kondisi</math>' WHERE `id`='2'");
} else if (isset($_POST['kondisi3'])) {
    $kondisi = mysqli_real_escape_string($conn, $_POST['kondisi3']);
    $conn->query("UPDATE `relay` SET `relay`='<math>\$kondisi</math>' WHERE `id`='3'");
} else if (isset($_POST['kondisi4'])) {
    $kondisi = mysqli_real_escape_string($conn, $_POST['kondisi4']);
    $conn->query("UPDATE `relay` SET `relay`='<math>\$kondisi</math>' WHERE `id`='4'");
} else if (isset($_POST['kondisi5'])) {
    $kondisi = mysqli_real_escape_string($conn, $_POST['kondisi5']);
    $conn->query("UPDATE `relay` SET `relay`='<math>\$kondisi</math>' WHERE `id`='5'");
} else if (isset($_POST['kondisi6'])) {
    $kondisi = mysqli_real_escape_string($conn, $_POST['kondisi6']);
    $conn->query("UPDATE `relay` SET `relay`='<math>\$kondisi</math>' WHERE `id`='6'");
} else if (isset($_POST['kondisi7'])) {
    $kondisi = mysqli_real_escape_string($conn, $_POST['kondisi7']);
    $conn->query("UPDATE `relay` SET `relay`='<math>\$kondisi</math>' WHERE `id`='7'");
}
?>
<!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>Monitoring Arus</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,400,400
i,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">
<script src="vendor/jquery/jquery.min.js"></script>
<link href="vendor/clockpicker/clockpicker.css" rel="stylesheet">
<script src="vendor/clockpicker/clockpicker.js"></script>
</head>
<body id="page-top">
<!-- Page Wrapper -->
<div id="wrapper">
<!-- Sidebar -->
<?php include 'leftside.php'?>
<!-- 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">

```

```

<!-- Sidebar Toggle (Topbar) -->
<button id="sidebarToggleTop" class="btn btn-link d-md-none rounded-circle
mr-3">
<i class="fa fa-bars"></i>
</button>
<!-- Topbar Search -->
<form class="d-none d-sm-inline-block form-inline mr-auto ml-md-3 my-2 my-
md-0 mw-100 navbar-search">
<div class="input-group">
<input type="text" class="form-control bg-light border-0 small"
placeholder="Search for..." aria-label="Search" aria-describedby="basic-
addon2">
<div class="input-group-append">
<button class="btn btn-primary" type="button">
<i class="fas fa-search fa-sm"></i>
</button>
</div>
</div>
</form>
</nav>
<!-- End of Topbar -->
<!-- Begin Page Content -->
<div class="container-fluid">
<!-- Page Heading -->
<div class="d-sm-flex align-items-center justify-content-between mb-4">
<h1 class="h3 mb-0 text-gray-800">Ubah Kondisi Relay</h1>
</div>
<!-- Content Row -->
<!-- Content Row -->
<!-- Content Row -->
<div class="row">

```

```

<div class="col-sm-4">
<div class="card">
<div class="card-body">
<h5 class="card-title">Lampu 1</h5>
<form action="" method="post">
<?php
statrelay = $conn->query("SELECT * FROM `relay` WHERE `id`='1' LIMIT 1")-
>fetch_array(MYSQLI_ASSOC);
if ($statrelay['relay'] == 'nyala') {
echo "Relay : On";
} else {
echo "Relay : Off";
}
?>
<hr>
<div class="row">
<div class="col-md-6">
<div class="form-group">
<label>Ubah Kondisi</label>
<select name="kondisi1" class="form-control" required >
<option value="nyala">Aktif</option>
<option value="mati">NonAktif</option>
</select>
<small class="form-control-feedback">Masukkan kondisi baru</small>
</div>
</div>
</div>
<!--/row-->
<div class="form-actions">
<button type="submit" class="btn btn-success"> <i class="fa fa-save"></i>
Simpan perubahan</button>

```



```

</div>
</form>
</div>
</div>
</div>
<div class="col-sm-4">
<div class="card">
<div class="card-body">
<h5 class="card-title">Lampu 2</h5>
<form action="" method="post">
<?php
$statrelay = $conn->query("SELECT * FROM `relay` WHERE `id`='2' LIMIT
1")->fetch_array(MYSQLI_ASSOC);
if ($statrelay['relay'] == 'nyala') {
echo "Relay : On";
} else {
echo "Relay : Off";
}
?>
<hr>
<div class="row">
<div class="col-md-6">
<div class="form-group">
<label>Ubah Kondisi</label>
<select name="kondisi2" class="form-control" required >
<option value="nyala">Aktif</option>
<option value="mati">NonAktif</option>
</select>
<small class="form-control-feedback">Masukkan kondisi baru</small>
</div>
</div>

```



```

</div>
<!--/row-->
<div class="form-actions">
<button type="submit" class="btn btn-success"> <i class="fa fa-save"></i>
Simpan perubahan</button>
</div>
</form>
</div>
</div>
</div>
</div>
<div class="col-sm-4">
<div class="card">
<div class="card-body">
<h5 class="card-title">Lampu 3</h5>
<form action="" method="post">
<?php
$starelay = $conn->query("SELECT * FROM `relay` WHERE `id`='3' LIMIT
1")->fetch_array(MYSQLI_ASSOC);
if ($starelay['relay'] == 'nyala') {
echo "Relay : On";
} else {
echo "Relay : Off";
}
?>
<hr>
<div class="row">
<div class="col-md-6">
<div class="form-group">
<label>Ubah Kondisi</label>
<select name="kondisi3" class="form-control" required >
<option value="nyala">Aktif</option>

```

```

<option value="mati">NonAktif</option>
</select>
<small class="form-control-feedback">Masukkan kondisi baru</small>
</div>
</div>
</div>
<!--/row-->
<div class="form-actions">
<button type="submit" class="btn btn-success"> <i class="fa fa-save"></i>
Simpan perubahan</button>
</div>
</form>
</div>
</div>
</div>
</div>
<br>
<br>
<div class="row">
<div class="col-sm-4">
<div class="card">
<div class="card-body">
<h5 class="card-title">Lampu 4</h5>
<form action="" method="post">
<?php
$statrelay = $conn->query("SELECT * FROM `relay` WHERE `id`='4' LIMIT
1")->fetch_array(MYSQLI_ASSOC);
if ($statrelay['relay'] == 'nyala') {
echo "Relay : On";
} else {
echo "Relay : Off";

```

```

}
?>
<hr>
<div class="row">
<div class="col-md-6">
<div class="form-group">
<label>Ubah Kondisi</label>
<select name="kondisi4" class="form-control" required >
<option value="nyala">Aktif</option>
<option value="mati">NonAktif</option>
</select>
<small class="form-control-feedback">Masukkan kondisi baru</small>
</div>
</div>
</div>
<!--/row-->
<div class="form-actions">
<button type="submit" class="btn btn-success"> <i class="fa fa-save"></i>
Simpan perubahan</button>
</div>
</form>
</div>
</div>
</div>
<div class="col-sm-4">
<div class="card">
<div class="card-body">
<h5 class="card-title">Lampu 5</h5>
<form action="" method="post">
<?php
$statrelay = $conn->query("SELECT * FROM `relay` WHERE `id`='5' LIMIT

```

```

1")->fetch_array(MYSQLI_ASSOC);
if ($statrelay['relay'] == 'nyala') {
echo "Relay : On";
} else {
echo "Relay : Off";
}
?>
<hr>
<div class="row">
<div class="col-md-6">
<div class="form-group">
<label>Ubah Kondisi</label>
<select name="kondisi5" class="form-control" required >
<option value="nyala">Aktif</option>
<option value="mati">NonAktif</option>
</select>
<small class="form-control-feedback">Masukkan kondisi baru</small>
</div>
</div>
</div>
<!--/row-->
<div class="form-actions">
<button type="submit" class="btn btn-success"> <i class="fa fa-save"></i>
Simpan perubahan</button>
</div>
</form>
</div>
</div>
</div>
<div class="col-sm-4">
<div class="card">

```

```

<div class="card-body">
<h5 class="card-title">Lampu 6</h5>
<form action="" method="post">
<?php
$statrelay = $conn->query("SELECT * FROM `relay` WHERE `id`='6' LIMIT
1")->fetch_array(MYSQLI_ASSOC);
if ($statrelay['relay'] == 'nyala') {
echo "Relay : On";
} else {
echo "Relay : Off";
}
?>
<hr>
<div class="row">
<div class="col-md-6">
<div class="form-group">
<label>Ubah Kondisi</label>
<select name="kondisi6" class="form-control" required >
<option value="nyala">Aktif</option>
<option value="mati">NonAktif</option>
</select>
<small class="form-control-feedback">Masukkan kondisi baru</small>
</div>
</div>
</div>
<!--/row-->
<div class="form-actions">
<button type="submit" class="btn btn-success"> <i class="fa fa-save"></i>
Simpan perubahan</button>
</div>
</form>

```

```

</div>
</div>
</div>
</div>
<br>
<br>
<div class="row">
<div class="col-sm-4">
<div class="card">
<div class="card-body">
<h5 class="card-title">Air Conditioner</h5>
<form action="" method="post">
<?php
$statrelay = $conn->query("SELECT * FROM `relay` WHERE `id`='7' LIMIT
1")->fetch_array(MYSQLI_ASSOC);
if ($statrelay['relay'] == 'nyala') {
echo "Relay : On";
} else {
echo "Relay : Off";
}
?>
<hr>
<div class="row">
<div class="col-md-6">
<div class="form-group">
<label>Ubah Kondisi</label>
<select name="kondisi7" class="form-control" required >
<option value="nyala">Aktif</option>
<option value="mati">NonAktif</option>
</select>
<small class="form-control-feedback">Masukkan kondisi baru</small>

```

```

</div>
</div>
</div>
<!--/row-->
<div class="form-actions">
<button type="submit" class="btn btn-success"> <i class="fa fa-save"></i>
Simpan perubahan</button>
</div>
</form>
</div>
</div>
</div>
</div>
</div>
<!-- /.container-fluid -->
</div>
<!-- End of Main Content -->
<!-- Footer -->
<?php include 'footer.php'; ?>
<!-- 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">

```



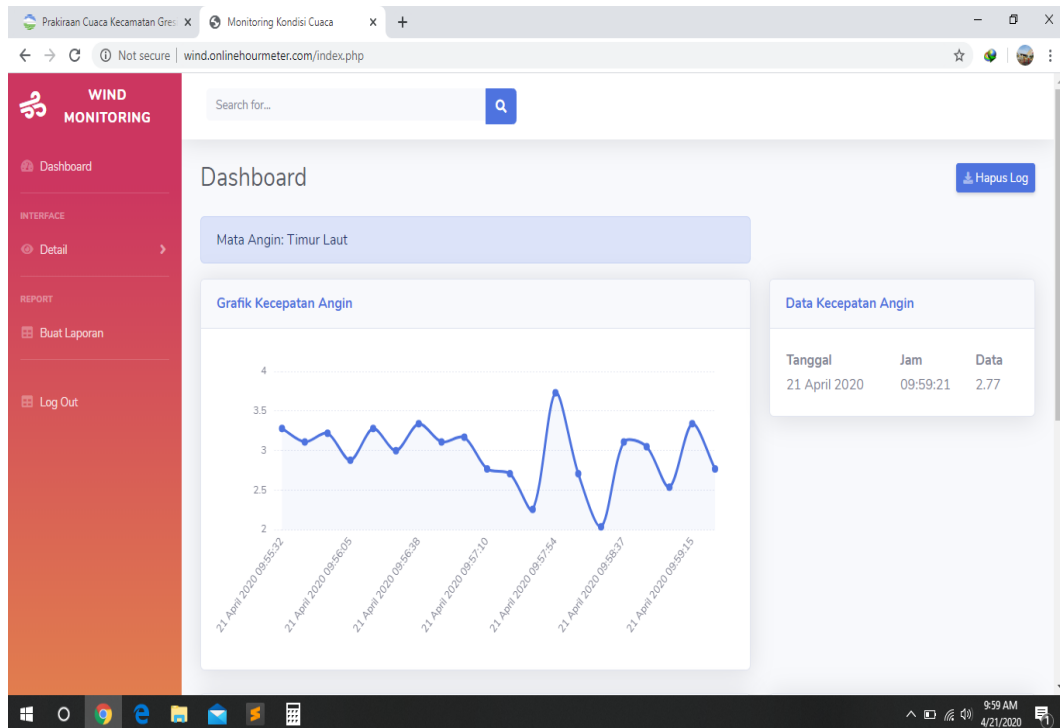
```

<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>
</div>
<!-- Bootstrap core JavaScript-->
<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 -->
</body>
</html>

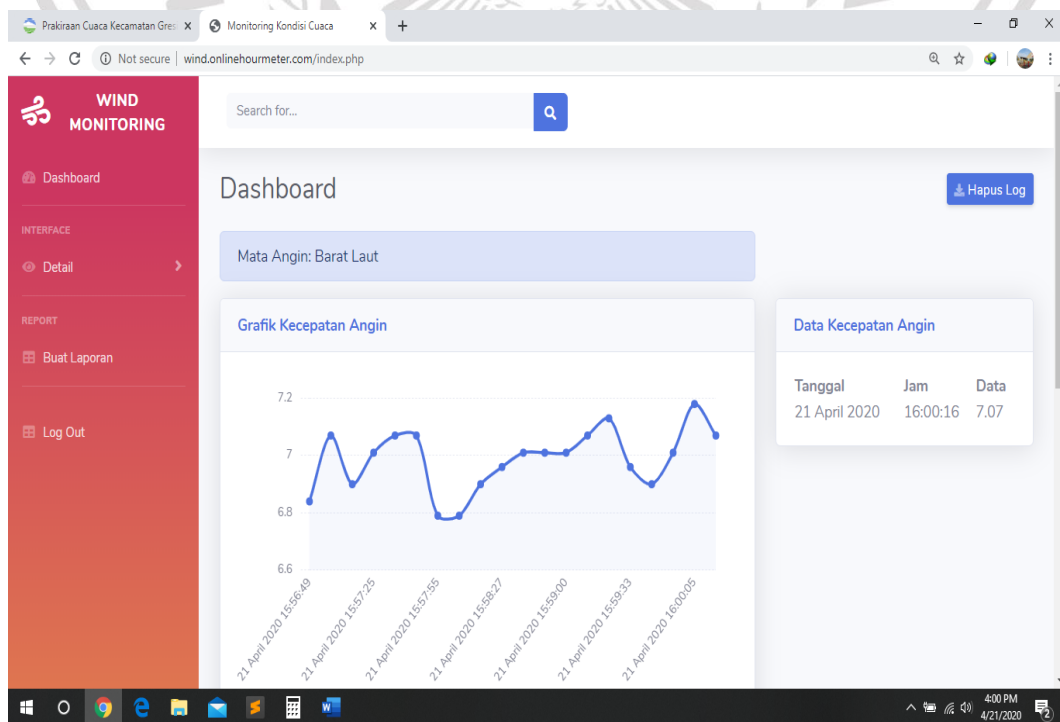
```

## LAMPIRAN 4: Arah mata angin alat

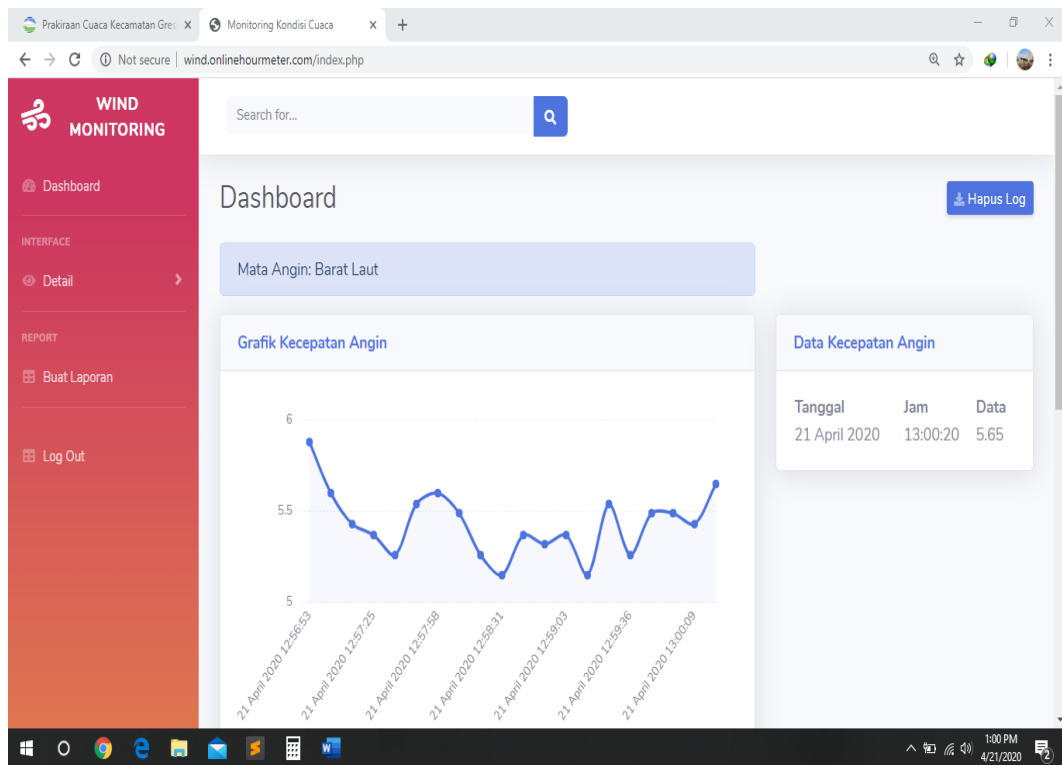
Pukul 10:00 WIB



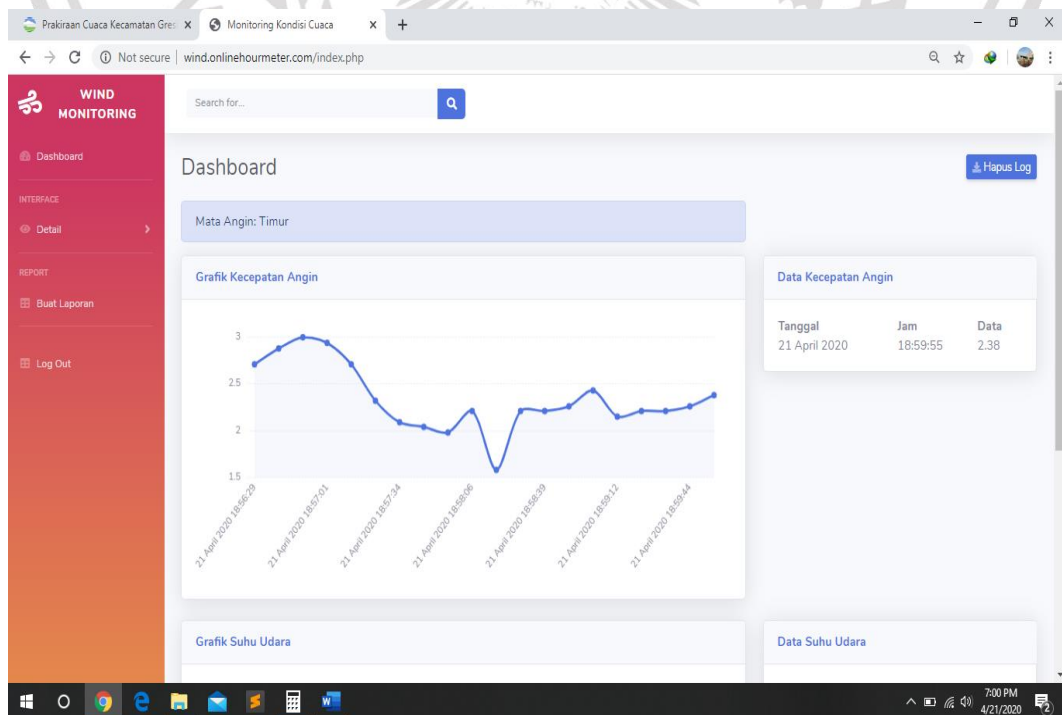
Pukul 13:00 WIB



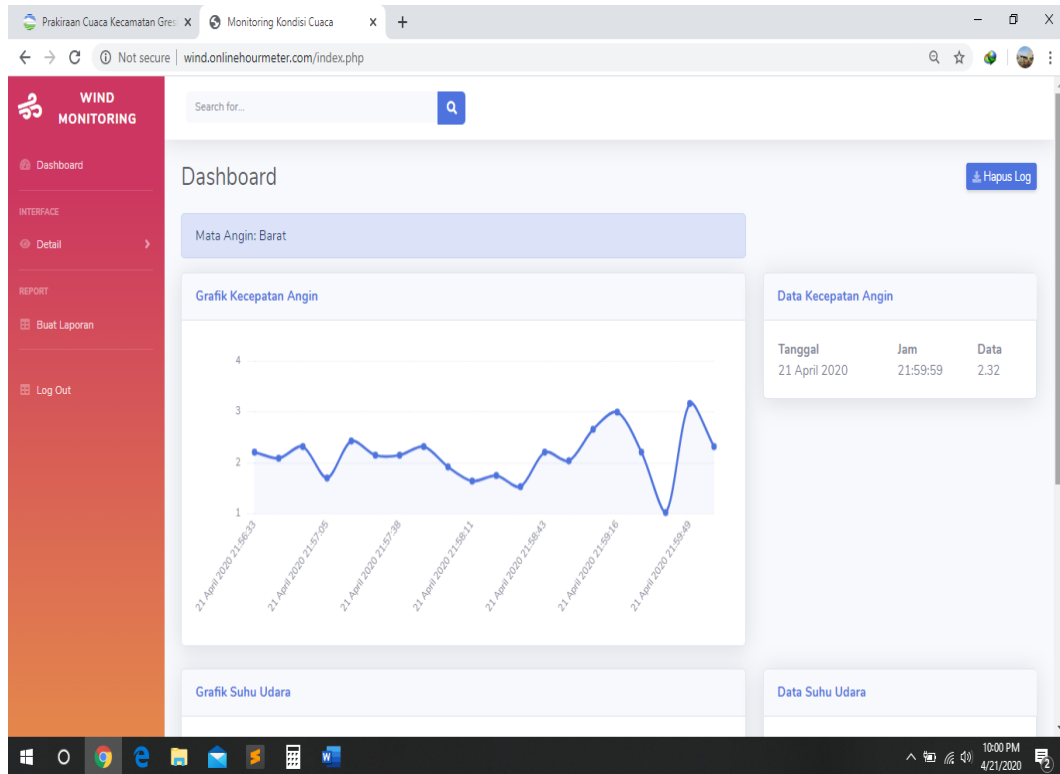
Pukul 16:00 WIB



Pukul 19:00 WIB



Pukul 22:00 WIB



## LAMPIRAN 5: Kecepatan Angin

Pukul 10:00 WIB

87	21 April 2020	09:54:05	3.05
88	21 April 2020	09:54:16	2.49
89	21 April 2020	09:54:27	0.96
90	21 April 2020	09:54:38	1.98
91	21 April 2020	09:54:49	3.28
92	21 April 2020	09:55:00	2.38
93	21 April 2020	09:55:11	2.60
94	21 April 2020	09:55:22	2.94
95	21 April 2020	09:55:32	3.28
96	21 April 2020	09:55:43	3.11
97	21 April 2020	09:55:54	3.22
98	21 April 2020	09:56:05	2.88
99	21 April 2020	09:56:16	3.28
100	21 April 2020	09:56:27	3.00
101	21 April 2020	09:56:38	3.34
102	21 April 2020	09:56:49	3.11
103	21 April 2020	09:57:00	3.17
104	21 April 2020	09:57:10	2.77
105	21 April 2020	09:57:21	2.71
106	21 April 2020	09:57:32	2.26
107	21 April 2020	09:57:54	3.73
108	21 April 2020	09:58:05	2.71
109	21 April 2020	09:58:27	2.04
110	21 April 2020	09:58:37	3.11
111	21 April 2020	09:58:48	3.05
112	21 April 2020	09:58:59	2.54
113	21 April 2020	09:59:15	3.34
114	21 April 2020	09:59:21	2.77
115	21 April 2020	09:59:32	3.34
116	21 April 2020	09:59:43	2.60
117	21 April 2020	09:59:55	2.60
118	21 April 2020	10:00:05	2.49
119	21 April 2020	10:00:15	2.49
120	21 April 2020	10:00:37	3.22
121	21 April 2020	10:00:48	3.28
122	21 April 2020	10:00:59	2.54

Pukul 13:00 WIB

1014	21 April 2020	12:56:09	5.99
1015	21 April 2020	12:56:20	5.99
1016	21 April 2020	12:56:31	5.71
1017	21 April 2020	12:56:42	6.16
1018	21 April 2020	12:56:53	5.88
1019	21 April 2020	12:57:04	5.60
1020	21 April 2020	12:57:15	5.43
1021	21 April 2020	12:57:25	5.37
1022	21 April 2020	12:57:36	5.26
1023	21 April 2020	12:57:47	5.54
1024	21 April 2020	12:57:58	5.60
1025	21 April 2020	12:58:09	5.49
1026	21 April 2020	12:58:20	5.26
1027	21 April 2020	12:58:31	5.15
1028	21 April 2020	12:58:42	5.37
1029	21 April 2020	12:58:53	5.32
1030	21 April 2020	12:59:03	5.37
1031	21 April 2020	12:59:14	5.15
1032	21 April 2020	12:59:25	5.54
1033	21 April 2020	12:59:36	5.26
1034	21 April 2020	12:59:47	5.49
1035	21 April 2020	12:59:58	5.49
1036	21 April 2020	13:00:09	5.43
1037	21 April 2020	13:00:20	5.65
1038	21 April 2020	13:00:31	5.49
1039	21 April 2020	13:00:41	5.32
1040	21 April 2020	13:00:52	5.49
1041	21 April 2020	13:01:14	5.20
1042	21 April 2020	13:01:15	5.32
1043	21 April 2020	13:01:25	5.15
1044	21 April 2020	13:01:47	4.75
1045	21 April 2020	13:01:58	4.98
1046	21 April 2020	13:02:08	4.75
1047	21 April 2020	13:02:19	4.75

Pukul 16:00 WIB

1628	21 April 2020	15:57:25	7.01
1629	21 April 2020	15:57:33	7.07
1630	21 April 2020	15:57:44	7.07
1631	21 April 2020	15:57:55	6.79
1632	21 April 2020	15:58:06	6.79
1633	21 April 2020	15:58:16	6.90
1634	21 April 2020	15:58:27	6.96
1635	21 April 2020	15:58:38	7.01
1636	21 April 2020	15:58:49	7.01
1637	21 April 2020	15:59:00	7.01
1638	21 April 2020	15:59:11	7.07
1639	21 April 2020	15:59:22	7.13
1640	21 April 2020	15:59:33	6.96
1641	21 April 2020	15:59:44	6.90
1642	21 April 2020	15:59:54	7.01
1643	21 April 2020	16:00:05	7.18
1644	21 April 2020	16:00:16	7.07
1645	21 April 2020	16:00:27	7.13
1646	21 April 2020	16:00:38	6.84
1647	21 April 2020	16:00:49	6.79
1648	21 April 2020	16:01:00	6.67
1649	21 April 2020	16:01:11	6.84
1650	21 April 2020	16:01:22	6.90
1651	21 April 2020	16:01:32	6.62
1652	21 April 2020	16:01:43	6.73
1653	21 April 2020	16:01:54	6.67
1654	21 April 2020	16:02:05	6.62
1655	21 April 2020	16:02:16	6.79
1656	21 April 2020	16:02:27	6.84
1657	21 April 2020	16:02:38	6.84
1658	21 April 2020	16:02:49	6.73
1659	21 April 2020	16:02:59	6.79
1660	21 April 2020	16:03:10	6.56
1661	21 April 2020	16:03:21	6.22
1662	21 April 2020	16:03:32	6.11

Pukul 19:00 WIB

2418	21 April 2020	18:57:12	2.71
2419	21 April 2020	18:57:23	2.32
2420	21 April 2020	18:57:34	2.09
2421	21 April 2020	18:57:45	2.04
2422	21 April 2020	18:57:56	1.98
2423	21 April 2020	18:58:06	2.21
2424	21 April 2020	18:58:17	1.58
2425	21 April 2020	18:58:28	2.21
2426	21 April 2020	18:58:39	2.21
2427	21 April 2020	18:58:50	2.26
2428	21 April 2020	18:59:01	2.43
2429	21 April 2020	18:59:12	2.15
2430	21 April 2020	18:59:23	2.21
2431	21 April 2020	18:59:33	2.21
2432	21 April 2020	18:59:44	2.26
2433	21 April 2020	18:59:55	2.38
2434	21 April 2020	19:00:06	2.09
2435	21 April 2020	19:00:17	2.09
2436	21 April 2020	19:00:28	2.15
2437	21 April 2020	19:00:39	2.32
2438	21 April 2020	19:00:50	1.92
2439	21 April 2020	19:01:00	2.04
2440	21 April 2020	19:01:11	2.09
2441	21 April 2020	19:01:25	2.49
2442	21 April 2020	19:01:33	2.43
2443	21 April 2020	19:01:44	2.32
2444	21 April 2020	19:01:55	2.54
2445	21 April 2020	19:02:06	2.26
2446	21 April 2020	19:02:17	2.09
2447	21 April 2020	19:02:27	1.70
2448	21 April 2020	19:02:38	1.70
2449	21 April 2020	19:02:49	2.32
2450	21 April 2020	19:03:00	2.60
2451	21 April 2020	19:03:11	2.38
2452	21 April 2020	19:03:22	2.15
2453	21 April 2020	19:03:33	2.32

Pukul 22:00 WIB

2720	21 April 2020	21:59:27	2.21
2721	21 April 2020	21:59:38	1.02
2722	21 April 2020	21:59:49	3.17
2723	21 April 2020	21:59:59	2.32
2724	21 April 2020	22:00:10	2.71
2725	21 April 2020	22:00:21	1.87
2726	21 April 2020	22:00:32	1.75
2727	21 April 2020	22:00:43	1.98
2728	21 April 2020	22:00:54	1.47
2729	21 April 2020	22:01:05	1.92
2730	21 April 2020	22:01:16	1.98
2731	21 April 2020	22:01:26	2.38
2732	21 April 2020	22:01:37	2.21
2733	21 April 2020	22:01:48	2.54
2734	21 April 2020	22:01:59	1.98
2735	21 April 2020	22:02:10	2.77
2736	21 April 2020	22:02:21	2.43
2737	21 April 2020	22:02:32	2.26
2738	21 April 2020	22:02:43	2.09
2739	21 April 2020	22:02:53	2.54



## LAMPIRAN 6: Suhu Udara

Pukul 10:00 WIB

101	21 April 2020	09:56:38	30.19
102	21 April 2020	09:56:49	30.19
103	21 April 2020	09:57:00	30.19
104	21 April 2020	09:57:10	30.25
105	21 April 2020	09:57:21	30.25
106	21 April 2020	09:57:32	30.19
107	21 April 2020	09:57:54	30.25
108	21 April 2020	09:58:05	30.25
109	21 April 2020	09:58:27	30.25
110	21 April 2020	09:58:37	30.19
111	21 April 2020	09:58:48	30.19
112	21 April 2020	09:58:59	30.19
113	21 April 2020	09:59:15	30.19
114	21 April 2020	09:59:21	30.19
115	21 April 2020	09:59:32	30.25
116	21 April 2020	09:59:43	30.25
117	21 April 2020	09:59:55	30.19
118	21 April 2020	10:00:05	30.19
119	21 April 2020	10:00:15	30.13
120	21 April 2020	10:00:37	30.19
121	21 April 2020	10:00:48	30.19
122	21 April 2020	10:00:59	30.19
123	21 April 2020	10:01:10	30.19

Pukul 13:00 WIB

1112	21 April 2020	13:14:07	30.94
1113	21 April 2020	13:14:20	30.94
1114	21 April 2020	13:14:28	30.94
1115	21 April 2020	13:14:40	30.94
1116	21 April 2020	13:14:53	30.94
1117	21 April 2020	13:15:01	30.94
1118	21 April 2020	13:15:12	30.94
1119	21 April 2020	13:15:23	30.94
1120	21 April 2020	13:15:34	30.94
1121	21 April 2020	13:15:44	30.94
1122	21 April 2020	13:15:55	30.94
1123	21 April 2020	13:16:06	30.94
1124	21 April 2020	13:16:17	30.94
1125	21 April 2020	13:16:28	30.94
1126	21 April 2020	13:16:39	30.94
1127	21 April 2020	13:16:50	30.94
1128	21 April 2020	13:17:01	30.94
1129	21 April 2020	13:17:12	30.94
1130	21 April 2020	13:17:22	31.00
1131	21 April 2020	13:17:33	31.00
1132	21 April 2020	13:17:44	30.94
1133	21 April 2020	13:17:55	31.00
1134	21 April 2020	13:18:06	31.00
1135	21 April 2020	13:18:17	31.00

Pukul 16:00 WIB

1638	21 April 2020	15:59:11	30.56
1639	21 April 2020	15:59:22	30.63
1640	21 April 2020	15:59:33	30.63
1641	21 April 2020	15:59:44	30.63
1642	21 April 2020	15:59:54	30.56
1643	21 April 2020	16:00:05	30.63
1644	21 April 2020	16:00:16	30.56
1645	21 April 2020	16:00:27	30.56
1646	21 April 2020	16:00:38	30.63
1647	21 April 2020	16:00:49	30.56
1648	21 April 2020	16:01:00	30.56
1649	21 April 2020	16:01:11	30.50
1650	21 April 2020	16:01:22	30.56
1651	21 April 2020	16:01:32	30.50
1652	21 April 2020	16:01:43	30.50
1653	21 April 2020	16:01:54	30.50
1654	21 April 2020	16:02:05	30.50
1655	21 April 2020	16:02:16	30.50
1656	21 April 2020	16:02:27	30.50
1657	21 April 2020	16:02:38	30.50
1658	21 April 2020	16:02:49	30.50
1659	21 April 2020	16:02:59	30.50
1660	21 April 2020	16:03:10	30.50
1661	21 April 2020	16:03:21	30.56

Pukul 19:00 WIB

2422	21 April 2020	18:57:56	30.19
2423	21 April 2020	18:58:06	30.19
2424	21 April 2020	18:58:17	30.25
2425	21 April 2020	18:58:28	30.19
2426	21 April 2020	18:58:39	30.19
2427	21 April 2020	18:58:50	30.25
2428	21 April 2020	18:59:01	30.19
2429	21 April 2020	18:59:12	30.19
2430	21 April 2020	18:59:23	30.19
2431	21 April 2020	18:59:33	30.19
2432	21 April 2020	18:59:44	30.25
2433	21 April 2020	18:59:55	30.19
2434	21 April 2020	19:00:06	30.19
2435	21 April 2020	19:00:17	30.19
2436	21 April 2020	19:00:28	30.25
2437	21 April 2020	19:00:39	30.25
2438	21 April 2020	19:00:50	30.25
2439	21 April 2020	19:01:00	30.25
2440	21 April 2020	19:01:11	30.25
2441	21 April 2020	19:01:25	30.25
2442	21 April 2020	19:01:33	30.31
2443	21 April 2020	19:01:44	30.25
2444	21 April 2020	19:01:55	30.31
2445	21 April 2020	19:02:06	30.31

Pukul 22:00 WIB

2720	21 April 2020	21:59:27	30.13
2721	21 April 2020	21:59:38	30.19
2722	21 April 2020	21:59:49	30.13
2723	21 April 2020	21:59:59	30.13
2724	21 April 2020	22:00:10	30.19
2725	21 April 2020	22:00:21	30.19
2726	21 April 2020	22:00:32	30.13
2727	21 April 2020	22:00:43	30.13
2728	21 April 2020	22:00:54	30.13
2729	21 April 2020	22:01:05	30.13
2730	21 April 2020	22:01:16	30.06
2731	21 April 2020	22:01:26	30.06
2732	21 April 2020	22:01:37	30.06
2733	21 April 2020	22:01:48	30.13
2734	21 April 2020	22:01:59	30.13
2735	21 April 2020	22:02:10	30.13
2736	21 April 2020	22:02:21	30.13
2737	21 April 2020	22:02:32	30.13
2738	21 April 2020	22:02:43	30.19
2739	21 April 2020	22:02:53	30.13

### LAMPIRAN 7: Data dari BMKG

Kecepatan dan Arah angin



Suhu udara



## LAMPIRAN 8: Daftar Riwayat Hidup

### DAFTAR RIWAYAT HIDUP



#### A. Biodata Pribadi

Nama Lengkap : Ali Akbar  
Tempat/Tanggal lahir : Muara Bungo, 23 September 1995  
Jenis Kelamin : Laki-laki  
Kewarganegaraan : WNI  
Agama : Islam  
Alamat : Jln. Sari Bakti Lrg. Atlanta 009/000 Kec. Kota Baru. Kota Jambi  
No Telp : +62 852 1213 8855  
Email : aliakbar.tip@gmail.com

#### B. Riwayat Pendidikan

SD : SDN 81 Muara Bungo (2002-2008)  
SMP : SMPN 1 Muara Bungo (2008-2011)  
SMA : SMAN 5 Kota Jambi (2011-2014)  
Perguruan Tinggi : Universitas Muhammadiyah Gresik (2016-2020)