LAMPIRAN

Lampiran - 1 Listing program *user*

interface situs web

```
void setup() {
  Wire.begin();
  Serial.begin(9600);
  pinMode(motor,OUTPUT);
  pinMode(solenoid,OUTPUT);

pinMode(tombol,INPUT_PULLUP);

Serial.println();
  // Mengkonesikan ke wifi
  Serial.print("Menghubungkan
ke jaringan...
");Serial.println(ssid);

  //Mulai koneksikan dengan
via wifi
  WiFi.begin(ssid, password);

  //syarat kondisi
pengkoneksian
  while (WiFi.status() !=
WL_CONNECTED)

{delay(300);Serial.print(".");
}Serial.println("");
  Serial.println("Jaringan
WiFi terkoneksi");

  // pemulaian
server.begin();Serial.println(
"Koneksi Server dimulai");

  Serial.print("alamat IP yang
untuk pengaksesan: ");
  //penulisan alamat ip
  Serial.print("http://");
  //IP address

Serial.print(WiFi.localIP());S
erial.println("/");
}

void loop() {
// mengecek jika client sudah
terkonek
  WiFiClient client =
server.available();
  //jika tidak client yang
terkoneksi
  if (!client) {return;}

  Serial.println("Koneksi
baru");
  //Jika sudah ada client baru
maka
  while(!client.available())
  {delay(5);}

 tombolx =
digitalRead(tombol);

 if(tombolx == LOW){
  mark = 0;
  delay(1000);
  digitalWrite(motor,HIGH);
  digitalWrite(solenoid,HIGH);
  mulai();
  }

   if (client) {

    boolean blank_line = true;
    while (client.connected())
{
      if (client.available())
{
        char c =
client.read();

           // Menuliskan
dalam format HTML

client.println("HTTP/1.1 200
OK");client.println("Content-
Type: text/html");

client.println("Connection:
close");client.println();

           // Halaman web

client.println("<!DOCTYPE
HTML>");

client.println("<html>");

client.println("<head>");

client.println("<meta
charset='utf-8' />");

client.println("<meta http-
```

```
equiv='refresh' content='2'
/>");

client.println("<title>Tensi
Meter </title>");

client.println("<meta
content='width=device-width,
initial-scale=1.0, maximum-
scale=1.0, user-scalable=0'
name='viewport' />");

client.println("<meta
name='viewport'
content='width=device-width'
/>");

client.println("<link
href='https://fonts.googleapis
.com/css?family=Roboto:400,700
,300|Material+Icons'
rel='stylesheet'>");

client.println("<link
rel='stylesheet'
href='https://maxcdn.bootstrap
cdn.com/bootstrap/3.3.7/css/bo
otstrap.min.css'
integrity='sha384-
BVYiiSIFeK1dGmJRAkycuHAHRg32Om
Ucww7on3RYdg4Va+PmSTsz/K68vbdE
jh4u'
crossorigin='anonymous'>");

client.println("<link
rel='stylesheet'
href='https://cdnjs.cloudflare
.com/ajax/libs/font-
awesome/4.7.0/css/fontawesome.
min.css'>");

client.println("<style
type='text/css'>th, td {text-
align: center;} ");

client.println(".card
{display: inline-block;
position: relative;width:
100%;margin: 25px 0;box-
shadow: 0 1px 4px 0 rgba(0, 0,
0, 0.14);border-radius:
3px;color: rgba(0, 0, 0,
0.87);background: #fff;}");

client.println(".card .card-
content {padding: 15px
20px;}.card .card-content
.category {margin-bottom:
0;}.card .card-header {box-
shadow: 0 10px 30px -12px
rgba(0, 0, 0, 0.42), 0 4px
25px 0px rgba(0, 0, 0, 0.12),
0 8px 10px -5px rgba(0, 0, 0,
0.2);margin: -20px 15px
0;border-radius: 3px;padding:
15px;background-color:
#999999;}");

client.println(".card .card-
header .title {color:
#FFFFFF;}");

client.println(".card .card-
header .category {margin-
bottom: 0; color: rgba(255,
255, 255, 0.62);}");

client.println(".card .card-
header.card-chart { padding:
0;min-height: 160px;}");

client.println(".card .card-
footer {margin: 0 20px
10px;padding-top: 10px;border-
top: 1px solid #eeeeee;}");

client.println(".card .card-
footer .content {display:
block;}");

client.println(".card .card-
footer div {    display:
inline-block;}");

client.println(".card .card-
footer .author { color:
#999999;}");

client.println(".card .card-
footer .stats {line-height:
22px;color: #999999;font-size:
12px;}");

client.println(".card .card-
footer .stats .material-icons
{position: relative;top:
4px;font-size: 16px;}");

client.println(".card .card-
footer h6 {color: #999999;}");

client.println(".card [data-
```

```
background-color='purple']
{background: linear-
gradient(60deg, #ab47bc,
#8e24aa);box-shadow: 0 12px
20px -10px rgba(156, 39, 176,
0.28), 0 4px 20px 0px rgba(0,
0, 0, 0.12), 0 7px 8px -5px
rgba(156, 39, 176, 0.2);}");

client.println(".card [data-
background-color='blue']
{background: linear-
gradient(60deg, #26c6da,
#00acc1); box-shadow: 0 12px
20px -10px rgba(0, 188, 212,
0.28), 0 4px 20px 0px rgba(0,
0, 0, 0.12), 0 7px 8px -5px
rgba(0, 188, 212, 0.2);}");

client.println(".card [data-
background-color='green']
{background: linear-
gradient(60deg, #66bb6a,
#43a047);box-shadow: 0 12px
20px -10px rgba(76, 175, 80,
0.28), 0 4px 20px 0px rgba(0,
0, 0, 0.12), 0 7px 8px -5px
rgba(76, 175, 80, 0.2);}");

client.println(".card [data-
background-color='orange']
{background: linear-
gradient(60deg, #ffa726,
#fb8c00);box-shadow: 0 12px
20px -10px rgba(255, 152, 0,
0.28), 0 4px 20px 0px rgba(0,
0, 0, 0.12), 0 7px 8px -5px
rgba(255, 152, 0, 0.2);}");

client.println(".card [data-
background-color='red']
{background: linear-
gradient(60deg, #ef5350,
#e53935);box-shadow: 0 12px
20px -10px rgba(244, 67, 54,
0.28), 0 4px 20px 0px rgba(0,
0, 0, 0.12), 0 7px 8px -5px
rgba(244, 67, 54, 0.2);}");

client.println(".card [data-
background-color] {color:
#FFFFFF;}");

client.println(".card [data-
background-color] a {color:
#FFFFFF;}");

client.println(".card-stats
.title { margin: 0;}");

client.println(".card-stats
.card-header {float:
left;text-align: center;}");

client.println(".card-stats
.card-header i {font-size:
36px;line-height: 56px;width:
56px;height: 56px;}");

client.println(".card-stats
.card-content {text-align:
right;padding-top: 10px;} ");

client.println("</style>");

client.println("</head>");

client.println("<body> ");

client.println("<br> ");

client.println("<div
class='wrapper'><div
class='content'><div
class='container-fluid'><div
class='row'><center><div><h1
class='title'>Hasil Pengukuran
Tekanan
Darah</h1></div></center><br><
/div>");

client.println("</span></h3></
div><div class='card-
footer'><div
class='stats'></div></div></di
v></div><div class='col-lg-3
col-md-3 col-sm-3'><div
class='card card-stats'><div
class='card-header' data-
background-color='orange'> <i
class='material-
icons'>local_drink</i></div><d
iv class='card-content'><p
class='category'>SISTOLE</p><h
3 class='title'><span>");

client.print(sistolex);
            client.println("
mmhg");

client.println("</span></h3></
div><div class='card-
```

```
footer'><div
class='stats'></div></div></di
v></div><div class='col-lg-3
col-md-3 col-sm-3'><div
class='card card-stats'><div
class='card-header' data-
background-color='orange'><i
class='material-
icons'>report</i></div><div
class='card-content'><p
class='category'>DIASTOLE</p><
h3 class='title'> <span>");

client.print(diastolex);
            client.println("
mmhg");

client.println("</span></h3></
div><div class='card-
footer'><div
class='stats'></div></div></di
v></div></div><div
class='row'><center><br></div>
</div></div><footer
class='footer'><div
class='container-
fluid'></div></footer></div>")
;

client.println("</body></html>
");
            break;
        }
        char c =
client.read();
        if (c == '\n') {
          // Saat mulai
membaca baris baru
          blank_line = true;
        }
        else if (c != '\r') {
          // Ketika menemukan
karakter pada baris saat ini
          blank_line = false;
        }
      }
    }
    // Menutup koneksi klien
    delay(5);

delay(10);
```

Lampiran - 2 Listing Program Arduino

```
void mulai(){

 dataadc = analogRead(A0);
 mmhg=(dataadc-288)/0.3;

 batas=batas+1;

 Serial.println(batas);
 Serial.print("mmhgx = ");
 Serial.println(mmhgx);

 if(batas >= 500)
{
 digitalWrite(motor,LOW);

 Serial.print("mmhg = ");
 Serial.println(mmhg);
 Serial.println("     ");
 if (mmhg <= 130){
 if((mmhg >= mmhgx + 5)&&(mark
== 0)){
sistole = mmhg;
mark = 2;
}
if(mark == 2){
diastole = sistole-40;
mark = 3;
}}
}else{


 Serial.print("mmhg = ");
 Serial.println(mmhg);
 Serial.println("     ");
}

mmhgx = mmhg;

if((mark == 3)){
delay(1000);
mark = 0;
sistolex = sistole;
diastolex = diastole;
digitalWrite(solenoid,LOW);
 Serial.println("Hasil
Pengukuran Tekanan Darah");
 Serial.print("Sistole = ");
 Serial.print(sistolex);
 Serial.print(" || ");
 Serial.print("Diastole = ");
 Serial.println(diastolex);
batas=0;
return;
}
delay(1);
mulai();

}
```

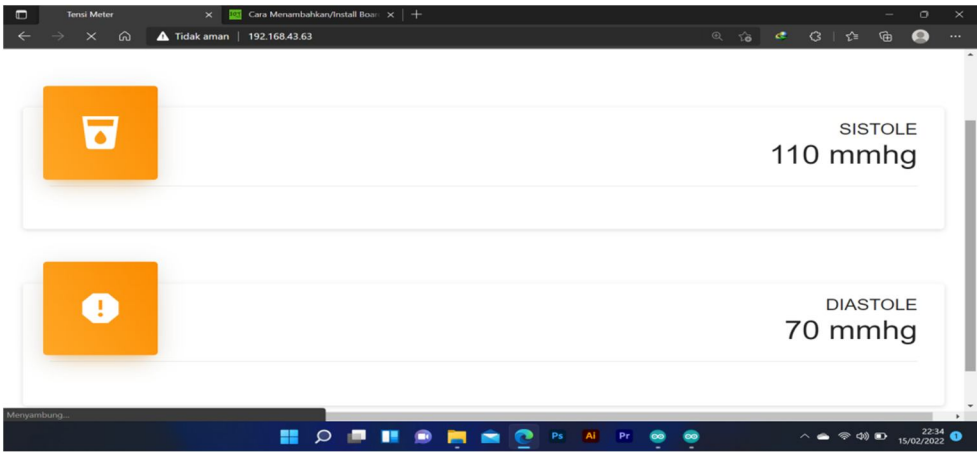
Lampiran – 3 Dokumentasi

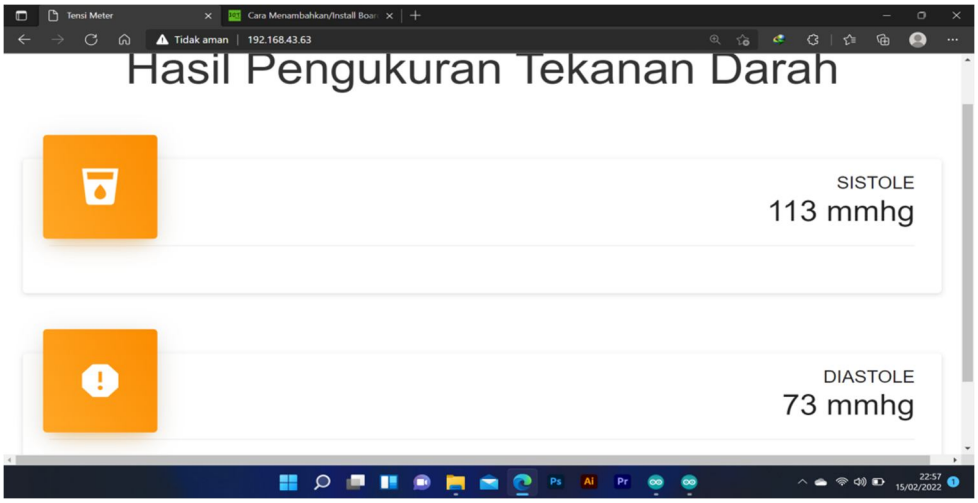


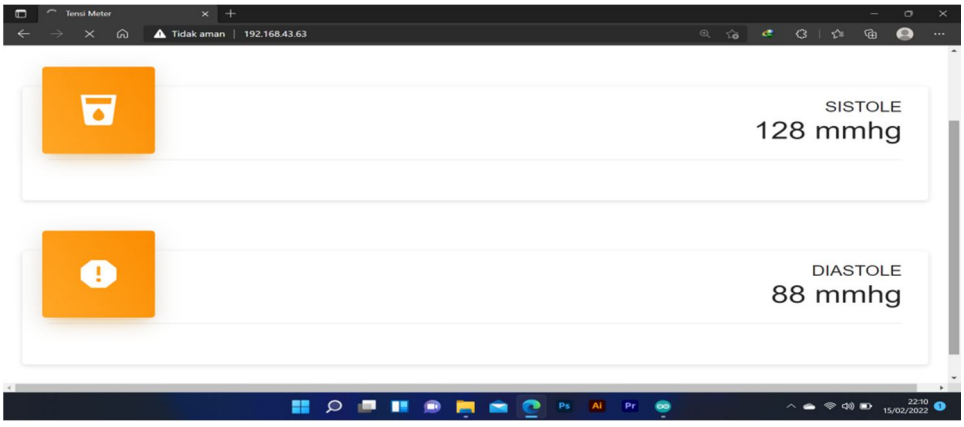







Tensi Meter
Cara Menambahkan/Install Boar
Tidak aman | 192.168.43.63
SISTOLE
110 mmhg
DIASTOLE
70 mmhg
Menyambung...
22:34
15/02/2022


Tensi Meter
Cara Menambahkan/Install Boar
Tidak aman | 192.168.43.63
Hasil Pengukuran Tekanan Darah
SISTOLE
113 mmhg
DIASTOLE
73 mmhg
22:57
15/02/2022


Tensi Meter
Tidak aman | 192.168.43.63
SISTOLE
128 mmhg
DIASTOLE
88 mmhg
22:10
15/02/2022