LAMPIRAN

SCRIPTNODEMCU

```
#include
<ESP8266WiFi.h>#include<ESP8
266HTTPClient.h>#include
<Adafruit_Fingerprint.h>#include
<SoftwareSerial.h>#include<Ardui
noJson.h>#include
<LiquidCrystal_I2C.h>#include
<Wire.h>



//================================
==========UserKonfig
================================
==========

LiquidCrystal_I2Clcd(0x27,16,2);//0x27ad
alah alamat IIC, ganti sesuai address
IICyangdidapatbiasanya 0x27atau 0x3F
constchar*ssid="WiFiSaya";//NamaWificon
st char* password = "Password
WiFiSaya";//PasswordWifi
String url_server = "http://192.168.1.5"; //
IPaddress atau Domain server tanpa
https(SSL)intmaxCount=200;//nilaiuntukpeng
ecekanmode enroll. disarankan untuk
tidakmengganti.

//================================
==========ENDKONFIG
================================
============

SoftwareSerialmySerial(13,12);

intcount= 1;boolean
cek =
false;intfingerprintI
D=0;
Adafruit_Fingerprintfinger=Adafruit_Fi
ngerprint(&mySerial);uint8_tid;
HTTPClient
http;Stringmessa
ge;void setup()
{
 Serial.begin(9600);
 Wire.begin(D3,D4);//PIN(SDA,SCL)lc
 d.begin();
 lcd.setCursor(6,0);lcd.pri
 nt("FPM");lcd.setCursor(
 4,1);lcd.print("PRESENS
 I");while (!Serial);
```

```
  delay(100);Serial.println("\n\nAdafruit
Fingerprintsensorenrollment");



  finger.begin(57600);


  if(finger.verifyPassword()){


  } else
    {lcd.clear(
    );
    lcd.print("FPM
    ERROR");while (1){
      delay(1);
    }
  }
  connectWifi();
}


uint8_treadnumber(void){u
  int8_tnum=0;
  while(num==0){
    while(!Serial.available());n
    um= Serial.parseInt();
  }
  returnnum;
}

voidloop()
{
  if(WiFi.status()==WL_CONNECTED){lc
    d.setCursor(1,0);lcd.print("TEMPELKA
    NJARI");
    lcd.setCursor(2,1);lcd.print("
    PADASENSOR");count+=1;
    if(count<=maxCount&&cek==false){fing
      erprintID= getFingerprintIDez();
    } else
      {http.end(
      );delay(50
      );cek=true
      ;
    }


    if (cek)
      {http.begin(url_server
      +
"/fpm_absen/konfig/prosesdaftar/kontroler.php
");
      http.addHeader("Content-
Type","application/x-www-form-
urlencoded");
      inthttpCode=http.POST("key=x124sr3sQQ2
d");
```

```
delay(100);
if(httpCode>0){
  Stringpayload=http.getString();S
  erial.println(payload);
  charjson[500];payload.r
  eplace("","");
  payload.replace("\n","");payload
  .trim();payload.toCharArray(jso
  n,500);StaticJsonDocument<20
  0>
  doc;deserializeJson(doc,json);
  intresponse=doc["status"];i
  ntid_daftar =doc["id"];
  if (response == 1)
    {Serial.println("TidakadaID");
  }else if(response==0){id
    =id_daftar;
    if(id==0){re
      turn;
    } else
      {http.end(
      );
      daftar();
    }
  }
}
cek=false;
    count=0;
    }
  } else
    {connectWifi(
    );
  }
}
voidconnectWifi(){l
  cd.clear();lcd.setCu
  rsor(0,0);
  lcd.print("STATUSKONEKSI:");
  WiFi.begin(ssid,password);
  while(WiFi.status()!=WL_CONNECTED)
{
    lcd.setCursor(0,1);lcd.pri
    nt("Connecting...");delay(
    500);lcd.setCursor(0,1);lc
    d.print("                ");
  }
  lcd.clear();lcd.setC
  ursor(4,0);
  lcd.print("CONNECTED");lcd.setCu
  rsor(0,1);lcd.print(WiFi.localIP());del
  ay(4000);
  lcd.clear();
```

```
}

void
 daftar(){lcd.clear()
 ;lcd.setCursor(0,0);
 lcd.print("IDBARU:");lc
 d.print(id);
 while(!getFingerprintEnroll());

}

uint8_tgetFingerprintEnroll(){i
 ntp=-1;
 Serial.print("Waitingforvalidfingertoenrollas
#");Serial.println(id);
 while(p!=FINGERPRINT_OK){
  p=finger.getImage();s
  witch(p){
   caseFINGERPRINT_OK:
    Serial.println("Image
    taken");break;
   caseFINGERPRINT_NOFINGER:
    lcd.setCursor(0,1);lcd.print("SC
    ANSIDIKJARI");
    Serial.println(".");
    break;
   caseFINGERPRINT_PACKETRECIEVEER
R:
    Serial.println("Communicationerror");
    break;
   caseFINGERPRINT_IMAGEFAIL:
    Serial.println("Imagingerror");
    break;
   default:
    Serial.println("Unknownerror");
    break;
  }
 }

 p=finger.image2Tz(1);s
 witch(p){
  caseFINGERPRINT_OK:
   Serial.println("Imageconverted");
   break;
  caseFINGERPRINT_IMAGEMESS:
   Serial.println("Imagetoomessy");r
   eturnp;
  caseFINGERPRINT_PACKETRECIEVEER
R:
   Serial.println("Communicationerror");r
   eturnp;
  caseFINGERPRINT_FEATUREFAIL:
```

```
      Serial.println("Couldnotfindfingerprintf
eatures");
      returnp;
    caseFINGERPRINT_INVALIDIMAGE:
      Serial.println("Couldnotfindfingerprintf
eatures");
      return
    p;default:
      Serial.println("Unknownerror");
      returnp;
  }

  lcd.setCursor(0,1);lcd.print("A
  NGKATJARI
                                        ");
  delay(2000);
  p=0;
  while(p!=FINGERPRINT_NOFINGER){
    p=finger.getImage();
  }
  Serial.print("ID");Serial.println(id);p
  =-1;
  while(p!=FINGERPRINT_OK){
    p=finger.getImage();s
    witch(p){
      caseFINGERPRINT_OK:
        lcd.setCursor(0,1);
        lcd.print("TEMPLATE DIBACA");
        Serial.println("Image
        taken");break;
      caseFINGERPRINT_NOFINGER:
        Serial.print(".");lcd
        .setCursor(0,1);
        lcd.print("ULANGISCANJARI");
        break;
      case
FINGERPRINT_PACKETRECIEVEERR:
        Serial.println("KomunikasiError");
        break;
      caseFINGERPRINT_IMAGEFAIL:
        Serial.println("TemplateError");
        break;
      default:
        Serial.println("Unknownerror");
        break;
    }
  }

  p=finger.image2Tz(2);s
  witch(p){
    caseFINGERPRINT_OK:
      Serial.println("Imageconverted");
      break;
```

```
    caseFINGERPRINT_IMAGEMESS:
      Serial.println("Imagetoomessy");r
      eturnp;
    caseFINGERPRINT_PACKETRECIEVE
ERR:
      Serial.println("Communicationerror");r
      eturnp;
    caseFINGERPRINT_FEATUREFAIL:
      Serial.println("Couldnotfindfingerprintf
eatures");
      returnp;
    caseFINGERPRINT_INVALIDIMAGE:
      Serial.println("Couldnotfindfingerprintf
eatures");
      return
    p;default:
      Serial.println("Unknownerror");
      returnp;
  }


  Serial.print("Creatingmodelfor#");S
erial.println(id);
  p=finger.createModel();
  if(p==FINGERPRINT_OK){
    lcd.setCursor(0,1);lcd.print("J
    ARISESUAI                    ");
    Serial.println("Printsmatched!");
  }elseif(p==FINGERPRINT_PACKETREC
IEVEERR){

    Serial.println("KomunikasiError");
    returnp;
  }elseif(p==FINGERPRINT_ENROLLMI
SMATCH){
    Serial.println("JariTidakCocok");l
    cd.setCursor(0,1);
    lcd.print("JARITIDAKCOCOK");
    message="NotFound";r
    eturnp;
  }else{
    Serial.println("Unknownerror");
    returnp;
  }


  Serial.print("ID");Serial.println(id);p
  =finger.storeModel(id);
  if(p==FINGERPRINT_OK) {
    lcd.setCursor(0,1);lcd.print("MENYI
    MPANDATA..");
    Serial.println("BerhasilMenyimpanID");d
    elay(1000);
    message="Sukses";
```

```
  }elseif(p==FINGERPRINT_PACKETREC
IEVEERR){
    message = "Komunikasi
    Error";Serial.println("KumunikasiE
    rror");returnp;
  }elseif(p
==FINGERPRINT_BADLOCATION
){
    message = "Gagal
    Menyimpan";Serial.println("Gagal
    Menyimpan");returnp;
  }else if(p==FINGERPRINT_FLASHERR)
{
    message="FlashGagal";S
    erial.println("");
    returnp;
  }else{
    Serial.println("Unknown
    error");returnp;
  }


  Serial.println("AKSESURL");http.begin(url
_server+"/fpm_absen/konfig/prosesdaftar/daft
ar.php");http.addHeader("Content-
Type","application/x-www-form-
urlencoded");
  inthttpCode=http.POST("id=kontroler&
parameter="+message);
  delay(100);
  if(httpCode>0){
    String payload =
    http.getString();lcd.setCursor(0,1);lcd
    .print("SUKSES MENYIMPAN");
    Serial.println(payload);
  } else
    {lcd.clear(
    );
    lcd.print("ERROR:");l
    cd.print(httpCode);
  }
  http.end();de
  lay(1000);lc
  d.clear();
}

intgetFingerprintIDez(){uint8_
  tp=finger.getImage();
  if(p !=FINGERPRINT_OK)return-1;

  p=finger.image2Tz();
  if(p !=FINGERPRINT_OK)return-1;
```

```
  p=finger.fingerFastSearch();
  if(p!= FINGERPRINT_OK)return -1;

  Serial.print("FoundID
  #");Serial.print(finger.fingerID);Se
  rial.print("withconfidenceof");Seri
  al.println(finger.confidence);absen(
  );
  returnfinger.fingerID;
}

voidabsen(){h
  ttp.end();
  lcd.clear();lcd.setC
  ursor(0,
  0);lcd.print("ID: ");
  lcd.print(String(finger.fingerID));
  lcd.setCursor(0,1);lcd.print("PRO
  SESPRESENSI");
  delay(300);lcd.set
  Cursor(0,1);
  lcd.print("ANGKATJARI
                                  ");http.b
egin(url_server+"/fpm_absen/konfig/ab
sen.php");http.addHeader("Content-
Type","application/x-www-form-
urlencoded");
  delay(100);
  inthttpCode=http.POST("id="+St
ring(finger.fingerID));delay(300);
  if(httpCode>0){
    Stringpayload=http.getString();lc
    d.setCursor(0,1);Serial.print("Re
    sponse = ");lcd.print(payload);
    lcd.print("");Serial.print
    ln(payload);
  } else
    {lcd.clear(
    );
    lcd.setCursor(0,0);lcd.print("
    COBALAGI.....!");
    lcd.setCursor(0,
    1);lcd.print("Error:
    ");lcd.print(httpCod
    e);
  }
  http.end();co
  unt=0;delay(
  1000);lcd.cl
  ear();
}
```

SCRIPTWEBSITE

```
<?php

session_start();

if ($_SESSION['status'] != '0' && $_SESSION['username']=='') {

header("location:konfig/logout.php");

}

include'konfig/function.php';

$_SESSION['page']='index';

?>


<!DOCTYPEhtml>

<!--

This is a starter template page. Use this page tostartyournew projectfrom

scratch.Thispagegetsridofalllinksandprovidesthe neededmarkup only.

-->

<htmllang="en">


<head>

<metacharset="utf-8">

  <meta name="viewport" content="width=device-width, initial-scale=1">

  <meta http-equiv="x-ua-compatible"content="ie=edge">


<title>FPMPRESENSI</title>

  <meta name="viewport" content="width=device-width, initial-scale=1">

<!--Ionicons-->

  <link rel="stylesheet" href="https://code.ionicframework.com/ionicons/2.0.1/css/ionicons.min.css">

<!--FontAwesomeIcons-->

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

<!--Themestyle-->

  <link rel="stylesheet" href="vendor/css/admin-lte/adminlte.min.css">

<!-- GoogleFont:SourceSansPro-->

<linkhref="https://fonts.googleapis.com/css?family
=Source+Sans+Pro:300,400,400i,700"rel="stylesheet">

<!--customdatabales -->

  <link rel="stylesheet" href="https://cdn.datatables.net/1.10.19/css/dataTables.bootstrap4.min.css">

  <link rel="stylesheet" href="https://cdn.datatables.net/buttons/1.5.2/css/buttons.bootstrap4.min.css">

  <link rel="stylesheet" href="https://cdn.datatables.net/responsive/2.2.3/css/responsive.bootstrap4.min.css">

<!--loading-->

<linkrel="stylesheet"href="vendor/css/css-manual/print.css"
  type="text/css" media="print"/>

<!--datepicker-->

  <link rel="stylesheet" href="vendor/bootstrap-
```

datepicker/dist/css/bootstrap-datepicker3.css"
/>

</head>

<bodyclass="hold-transitionsidebar-mini">

<divclass="wrapper">

<!--Navbar-->

<navclass="main-headernavbarnavbar-
expandnavbar-lightnavbar-light">

<!--Leftnavbarlinks-->

<ulclass="navbar-nav">

<liclass="nav-item">

<a class="nav-link" data-
widget="pushmenu"href="#"><iclass="fasfa-
bars"></i>

<liclass="nav-itemd-noned-sm-inline-
block">

<a
href="index.php?page=dashboard"class=
"nav-link">Home

<liclass="nav-itemd-noned-sm-inline-
block">

<a href="#" class="nav-
link">Contact

<!--Rightnavbarlinks-->

<ulclass="navbar-nav ml-auto">

<!-- MessagesDropdownMenu-->

<liclass="nav-itemd-noned-sm-inline-
block">

<a class="nav-link"
href="konfig/logout.php"onclick="returnconfir
m('Inginkeluar??')">

<iclass="fasfa-sign-out-alt"></i>

</nav>

<!--/.navbar-->

<!--MainSidebarContainer-->

<asideclass="main-sidebarsidebar-dark-
warning elevation-4">

<!-- BrandLogo-->

<ahref="#"class="brand-link">

<imgsrc="vendor/img/logo_index.png"alt="A
dminLTELogo"class="brand-imageimg-circle
elevation-3">

<spanclass="brand-textfont-weight-
light">FPMPresensi

<!--Sidebar-->

<divclass="sidebar">

<!--Sidebaruser panel(optional)-->

<div class="user-panel mt-3 pb-3 mb-3 d-
flex">

<divclass="image">

<imgsrc="vendor/img/admin.png"class
="img-circleelevation-2"alt="UserImage">

<divclass="info">

```
        <ahref="#"class="d-
block"><?phpecho"Hello,".$_SESSION['usern
ame'];
?></a>

      </div>

    </div>


    <!--Sidebar Menu-->

    <navclass="mt-2">

<ulclass="navnav-pillsnav-sidebarflex-
column" data-
widget="treeview"role="menu"data-
accordion="false">


      <!--Addiconstothelinksusingthe
.nav-iconclass

        with font-awesome or any other
iconfontlibrary-->

      <liclass="nav-item">

        <a
href="index.php?page=dashboard"class="nav-
link">

          <iclass="nav-iconfasfa-tachometer-
alt"></i>

          <p>

            Dashboard

          </p>

        </a>

      </li>


      <liclass="nav-item">

        <ahref=""class="nav-link">

          <iclass="nav-iconfarfa-calendar-
alt"></i>

          <p>

            DataPresensi

            <i class="right fas fa-angle-
left"></i>

          </p>

        </a>

        <ulclass="navnav-treeview">

          <liclass="nav-item">

            <ahref="index.php?page=absensi"c
lass="nav-link">

              <i class="far fa-circle nav-
icon"></i>

              <p>Pertanggal</p>

            </a>

          </li>

          <liclass="nav-item">

            <a href="index.php?page=absen-
bulanan"class="nav-link">

              <i class="far fa-circle nav-
icon"></i>

              <p>Bulanan</p>

            </a>

          </li>

        </ul>

      </li>


      <liclass="nav-item">

        <ahref=""class="nav-link">

          <iclass="nav-iconfasfa-users"></i>

          <p>

            Pegawai


            <i class="right fas fa-angle-
left"></i>
```

```
            </p>
            </a>
            <ulclass="navnav-treeview">
            <liclass="nav-item">
            <ahref="index.php?page=pegawai" class="nav-link">
            <i class="far fa-circle nav-icon"></i>
            <p>DaftarPegawai</p>
            </a>
            </li>
            <liclass="nav-item">
            <ahref="index.php?page=tambah-pegawai"class="nav-link">
            <i class="far fa-circle nav-icon"></i>
            <p>TambahPegawai</p>
            </a>
            </li>
            </ul>
        </li>

        <liclass="nav-item">
        <ahref="index.php?page=pengguna"class="nav-link">
            <i class="nav-icon fas fa-user-lock"></i>
            <p>
            DaftarPengguna
            </p>
        </a>
        </li>

        <liclass="nav-item">
        <ahref="index.php?page=konfigurasi"class="nav-link">
            <iclass="nav-iconfasfa-cogs"></i>
            <p>
            Konfigurasi
            </p>
        </a>
        </li>

        </ul>
    </nav>
    <!--/.sidebar-menu-->
    </div>
    <!--/.sidebar-->
</aside>

<!--ContentWrapper.Containspagecontent-->
<divclass="content-wrapper pt-4pb-4">
    <?php
    if(isset($_GET['page'])){
    $page=$_GET['page'];

    switch($page){

    case'dashboard':
```

```
        include"pages/dashboard.php";
        break;

    case'absensi':
        include"pages/absensi.php";
        break;

    case'pegawai':
        include"pages/pegawai.php";
        break;

    case'tambah-pegawai':
        include"pages/tambah_pegawai2.php";
        break;

    case'pengguna':
        include"pages/pengguna.php";
        break;

    case'konfigurasi':
        include"pages/konfigurasi.php";
        break;

    case'edit_pegawai':
        include"pages/edit_pegawai.php";
        break;

    case'edit_konfigurasi':
        include"pages/edit_konfigurasi.php";
        break;

    case'edit_absen':
        include"pages/edit_absen.php";
        break;

    case'absen-bulanan':
        include"pages/absensi-bulanan.php";
        break;

    case'edit_pengguna':
        include"pages/edit_pengguna.php";
        break;

    case'tambah_pengguna':
        include"pages/tambah_pengguna.php";
        break;

    case'login':
        include"pages/login.php";
        break;

    default:
        echo"<center><h3>Maaf.Halamantidak ditemukan!</h3></center>";
        break;
    }
}else{
    echo'<h3><center>Permintaanditolak:(</center></h3>';
```

```
    }
    ?>


</div>
<!--/.content-wrapper-->

<!-- ControlSidebar-->
<aside class="control-sidebar control-sidebar-dark">
    <!-- Controlsidebarcontentgoeshere-->
    <divclass="p-3">
      <h5>Title</h5>
      <p>Sidebarcontent</p>
    </div>
</aside>
<!--/.control-sidebar-->

<!--MainFooter-->
<footerclass="main-footer">
    <!--Defaulttotheleft-->
    <strong>Copyright &copy; 2020
    <ahref="https://dt-production.com">DTProduction</a>.</strong>
</footer>
</div>
<!--./wrapper-->

<!--REQUIREDSCRIPTS-->

<!--jQuery-->
<scriptsrc="vendor/js/jquery/jquery.min.js"></script>
<!-- Bootstrap4-->
<scriptsrc="vendor/js/bootstrap/js/bootstrap.bundle.min.js"></script>
<!--AdminLTEApp-->
 <script src="vendor/js/admin-lte/adminlte.min.js"></script>

<!-- DatePicker-->
<scriptsrc="vendor/js/bootstrap/js/bootstrap.js"></script>
 <script src="vendor/bootstrap-datepicker/dist/js/bootstrap-datepicker.js"></script>

<!-- Jsdatatables-->
<scriptsrc="https://cdn.datatables.net/1.10.19/js/jquery.dataTables.min.js"></script>
<scriptsrc="https://cdn.datatables.net/1.10.19/js/dataTables.bootstrap4.min.js"></script>
<scriptsrc="https://cdn.datatables.net/buttons/1.5.2/js/dataTables.buttons.min.js"></script>
<scriptsrc="https://cdn.datatables.net/buttons/1.5.2/js/buttons.bootstrap4.min.js"></script>
<scriptsrc="https://cdnjs.cloudflare.com/ajax/libs/jszip/3.1.3/jszip.min.js"></script>
<scriptsrc="https://cdnjs.cloudflare.com/ajax/libs/pdfmake/0.1.36/pdfmake.min.js"></script>
```

```
<scriptsrc="https://cdnjs.cloudflare.com/ajax/libs/pdfmake/0.1.36/vfs_fonts.js"></script>

<scriptsrc="https://cdn.datatables.net/buttons/1.5.2/js/buttons.html5.min.js"></script>

<scriptsrc="https://cdn.datatables.net/buttons/1.5.2/js/buttons.print.min.js"></script>

<scriptsrc="https://cdn.datatables.net/buttons/1.5.2/js/buttons.colVis.min.js"></script>

<scriptsrc="https://cdn.datatables.net/responsive/2.2.3/js/dataTables.responsive.min.js"></script>

<scriptsrc="https://cdn.datatables.net/responsive/2.2.3/js/responsive.bootstrap4.min.js"></script>


<!---exportexcel-->

  <script                                                    lang="javascript" src="vendor/js/sheetJS/xlsx.full.min.js"></script>

  <script                                                    lang="javascript" src="vendor/js/sheetJS/FileSaver.min.js"></script>



<!--JSDaftar Pegawai

<scriptsrc="vendor/js/daftarpegawai/daftarpegawai.js"></script>

-->


<script>

   var                    wb                                =XLSX.utils.table_to_book(document.getElementById('table-bulanan'),{

      sheet:"SheetJS"

});

varwbout =XLSX.write(wb,{

      bookType:'xlsx',

      bookSST:true,

      type:'binary'

});


functions2ab(s){

      varbuf=newArrayBuffer(s.length);

      varview=newUint8Array(buf);

      for(vari=0;i<s.length;i++)view[i]=s.charCodeAt(i)&0xFF;

      returnbuf;

}

$("#button-a").click(function(){

      saveAs(newBlob([s2ab(wbout)],{

        type:"application/octet-stream"

      }),'Presensi.xlsx');

});

</script>


<!--datatablesfunction-->

<script>

$(document).ready(function(){

      vartable=$('#example').DataTable({

        blengthChange:false,

        bPaginate:false,

        bInfo:false,
```

```
        buttons:[{
            extend:'pdf',
            className: 'btn-danger'
        },
        {
            extend:'excel',
            className:'btn-success'
        },
        {
            extend:'print',
            className:'btn-info'
        }
    ]
    });

    table.buttons().container()
    .appendTo('#example_wrapper .col-md-6:eq(0)');

});
</script>

<script>
$(document).ready(function(){
    $('.bulan').datepicker({
    format:"yyyy-mm",
    autoclose:true,
    viewMode:"months",
    minViewMode:"months"
    });
});
</script>

<script>
$(document).ready(function(){
    vartable=$('#pegawai').DataTable({
    blengthChange:false,
    bPaginate:true,
    bInfo:false,
    });

    table.buttons().container()
    .appendTo('#example_wrapper .col-md-6:eq(0)');
});
</script>

</body>

</html>
```