

LAMPIRAN

Kode Program Perangkat Absensi

```
#include <SPI.h> // Untuk Komunikasi Serial Dari
RFID - Arduino
#include <WiFi.h> // Untuk WiFi
#include <Wire.h> // Header Untuk LCD
#include <MFRC522.h> // Header Nya RFID
#include <HTTPClient.h> // Untuk Request Data
#include <ArduinoJson.h> // Untuk Parsing Data
#include <LiquidCrystal_I2C.h> // Untuk LCD

#define SS_PIN 4
#define RST_PIN 2

MFRC522 MRC522(SS_PIN, RST_PIN);
LiquidCrystal_I2C LCD(0x27,16,2);

const char* SSID_User = "ARWANA";
const char* PASS_User = "rumahwar";

String Endpoint =
"http://192.168.1.6/projectf_absensi_1_api/absensi/checklog";

void Parsing_Json_Post(String Data_Json) {
  char JSON[200];
  StaticJsonDocument<200> DOC;
  Data_Json.toCharArray(JSON,200);
  DeserializationError error = deserializeJson(DOC,JSON);
  if (error) {
    Serial.print(F("deserializeJson() failed: "));
    Serial.println(error.c_str());
    return;
  }
  const int Status = DOC["status"];
  String Nama = DOC["nama"];
  if(Status == 200){
    LCD.setCursor(0,0);LCD.print(Nama);
    LCD.setCursor(0,1);LCD.print("Berhasil Absensi");
  }
  else if(Status == 150){
    LCD.setCursor(1,1);LCD.print("Gagal Absensi");
  }
  else if(Status == 125){
    LCD.setCursor(2,1);LCD.print("Sudah Absensi");
  }
  else if(Status == 100){
    LCD.setCursor(1,0);LCD.print("ID RFID Tidak");
    LCD.setCursor(3,1);LCD.print("Terdaftar");
  }
  else if(Status == 0){
    LCD.setCursor(3,0);LCD.print("Mohon Maaf");
    LCD.setCursor(0,1);LCD.print("Tidak Bisa Absen");
  }
  else{
```

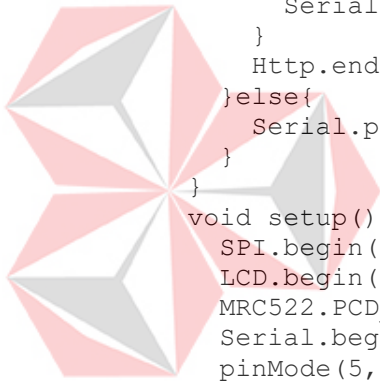
```

    LCD.setCursor(0,0);LCD.print("Terjadi Gangguan");
    LCD.setCursor(2,1);LCD.print("Pada Koneksi");
}
digitalWrite(5,HIGH); delay(250); digitalWrite(5,LOW);
delay(1000); LCD.clear();
}
void Memposting_data(String ID_RFID){
    if(WiFi.status()== WL_CONNECTED){
        HTTPClient Http;
        Http.begin(Endpoint);
        Http.addHeader("Content-Type",          "application/x-www-form-
urlencoded");

        String Posting_Data = "uid="+ID_RFID;
        int  HttpStatusCode = Http.POST(Posting_Data); // Karena
Menggunakan Protokol HTTP Method Dan Nilai Balasan Pasti Integer
200 Kalo Berhasil

        if(HttpStatusCode > 0){
            String Data_Json = Http.getString();
            Parsing_Json_Post(Data_Json);
        }
        else{
            Serial.println(HttpStatusCode);
        }
        Http.end();
    }else{
        Serial.println("WiFi Disconnected");
    }
}
void setup(){
    SPI.begin();
    LCD.begin();
    MRC522.PCD_Init();
    Serial.begin(9600);
    pinMode(5,OUTPUT); // Untuk Buzzer
}
void loop(){
    if(WiFi.status() != WL_CONNECTED){
        WiFi.begin(SSID_User,PASS_User);
        LCD.setCursor(1,0);LCD.print("Mencari Koneksi");
        LCD.setCursor(6,1);LCD.print("WiFi");
        while(WiFi.status() != WL_CONNECTED){
            delay(500);
        }
        LCD.clear();
    }//If Status WiFi
    else{
        LCD.setCursor(4,0);LCD.print("Silahkan");
        LCD.setCursor(5,1);LCD.print("Absen");
        if ( MRC522.PICC_IsNewCardPresent()){
            if ( MRC522.PICC_ReadCardSerial()){
                int Data[5]; String ID_RFID = "";LCD.clear();
                for (byte i = 0; i < MRC522.uid.size; i++){
                    Data[i] = MRC522.uid.uidByte[i];
                }
                for (byte a = 0; a < MRC522.uid.size; a++){
                    ID_RFID += String(Data[a],HEX);
                }
            }
        }
    }
}

```



```

        ID_RFID.toUpperCase();
        Serial.println(ID_RFID);
        Memposting_data(ID_RFID);
        MRC522.PICC_HaltA();
    } //ReadCardSerial
} //IsNewCardPresent
} //Else
} //Loop

```

Kode Program Visual Studio Code

```

<?php
defined('BASEPATH') or exit('No direct script access allowed');

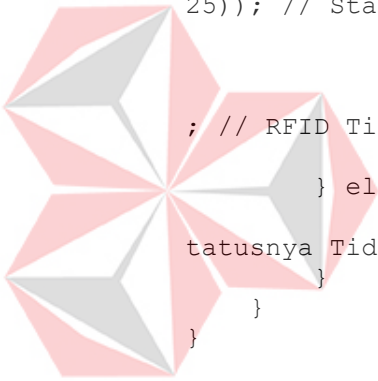
class Absensi extends CI_Controller
{
    function __construct()
    {
        parent::__construct();
        $this->load->model('m_absensi');
    }
    public function Index()
    {
        echo "API Absensi By @ Sasmaka Technology";
    }
    public function Checklog()
    {
        if ($this->input-
>post('uid') && date('G') >= 0 && date('G') < 9) {
            $RFID = $this->input->post('uid');
            $Data = $this->m_absensi-
>m_absensi_checklog($RFID);
            if ($Data) {
                $Status_Absensi = $this->m_absensi-
>m_absensi_status_absensi_pagi($Data);
                $Status_Absensi = $Status_Absensi-
>{'absensi_datang'};
                if ($Status_Absensi == NULL || $Status_Absensi ==
"00:00:00") {
                    $Status = $this->m_absensi-
>m_absensi_savepagi($Data);
                    if ($Status == TRUE) {
                        echo json_encode($Status = array('status'
=> 200, 'nama' => $Data->{'nama_karyawan'}));
                    } else {
                        echo json_encode($Status = array('status'
=> 150));
                    }
                } else {
                    echo json_encode($Status = array('status' => 1
25));
                }
            } else {
                echo json_encode($Status = array('status' => 100))
;
            }
        }
    }
}

```

```

    } elseif ($this->input-
>post('uid') && date('G') >= 17 && date('G') < 24) {
        $RFID          = $this->input->post('uid');
        $Data          = $this->m_absensi-
>m_absensi_checklog($RFID);
        if ($Data) {
            $Status_Absensi = $this->m_absensi-
>m_absensi_status_absensi_malam($Data);
            $Status_Absensi = $Status_Absensi-
>{'absensi_pulang'};
            if ($Status_Absensi == NULL || $Status_Absensi ==
"00:00:00") {
                $Status = $this->m_absensi-
>m_absensi_savemalam($Data);
                if ($Status == TRUE) {
                    echo json_encode($Status = array('status'
=> 200, 'nama' => $Data->{'nama_karyawan'})); // Status Berhasil
                } else {
                    echo json_encode($Status = array('status'
=> 150)); // Status Gagal
                }
            } else {
                echo json_encode($Status = array('status' => 1
25)); // Statusnya Sudah Absen Sebelumnya
            }
        } else {
            echo json_encode($Status = array('status' => 100))
; // RFID Tidak Terdaftar
        }
    } else {
        echo json_encode($Status = array('status' => 0)); // S
tatusnya Tidak bisa Absensi Diluar Jam yang Ditentukan
    }
}

```



BIODATA PENULIS



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