

## **SOURCE CODING WEBSITE**

### **Config QR Code Entrance:**

```
<?php  
$db = "albright_batch_5";  
$host = "localhost";  
$user = "albright_client";  
$pass = "albrightbatch5";  
$table = "barcode";
```

### **Config QR Code Exit:**

```
<?php  
$db = "albright_batch_5";  
$host = "localhost";  
$user = "albright_client";  
$pass = "albrightbatch5";  
$table2 = "barcode2";
```

### **Index:**

```
<!DOCTYPE html>  
<html>  
<head>  
    <title>Data Tabel</title>  
    <style>  
        table {  
            border-collapse: collapse;  
            width: 100%;  
        }  
  
        th, td {  
            text-align: left;  
            padding: 8px;  
        }  
  
        th {  
            background-color: #f2f2f2;  
        }  
    </style>
```

```
</head>
<body>
<?php
    include 'config.php';
    $koneksi = mysqli_connect($host, $user, $pass, $db);

    // Mengambil data dari tabel dalam database
    $sql = "SELECT * FROM $table"; // Ganti 'nama_tabel' dengan nama
    tabel yang sesuai
    $result = $koneksi->query($sql);
    // date_default_timezone_set('Asia/Jakarta');
    // Menampilkan data dalam bentuk tabel
    echo "<h1>Data MASUK BARCODE</h1>";
    echo "<table>";
    echo "<tr>";
    echo "<th>Nama</th>";
    echo "<th>Nomor Identitas</th>";
    echo "<th>Institusi</th>";
    echo "<th>Alamat</th>";
    echo "<th>Telepon</th>";
    echo "<th>Waktu</th>";
    echo "</tr>";

    if ($result->num_rows > 0) {
        while($row = $result->fetch_assoc()) {
            echo "<tr>";
            echo "<td>" . $row["nama"] . "</td>";
            echo "<td>" . $row["no_identitas"] . "</td>";
            echo "<td>" . $row["institusi"] . "</td>";
            echo "<td>" . $row["alamat"] . "</td>";
            echo "<td>" . $row["telepon"] . "</td>";
            echo "<td>" . $row["created_at"] . "</td>";
            echo "</tr>";
        }
    } else {
        echo "<tr><td colspan='5'>Tidak ada data</td></tr>";
    }

    echo "</table>";

    // Menutup koneksi database
```

```
$koneksi->close();
?>

<?php
    include 'config2.php';
    $koneksi = mysqli_connect($host, $user, $pass, $db);
    // Mengambil data dari tabel dalam database
    $sql = "SELECT * FROM $table2"; // Ganti 'nama_tabel' dengan nama
    tabel yang sesuai
    $result = $koneksi->query($sql);
    // date_default_timezone_set('Asia/Jakarta');

    // Menampilkan data dalam bentuk tabel
    echo "<h1>Data KELUAR BARCODE</h1>";
    echo "<table>";
    echo "<tr>";
    echo "<th>Nama</th>";
    echo "<th>Nomor Identitas</th>";
    echo "<th>Institusi</th>";
    echo "<th>Alamat</th>";
    echo "<th>Telepon</th>";
    echo "<th>Waktu</th>";
    echo "</tr>";

    if ($result->num_rows > 0) {
        while($row = $result->fetch_assoc()) {
            echo "<tr>";
            echo "<td>" . $row["nama"] . "</td>";
            echo "<td>" . $row["no_identitas"] . "</td>";
            echo "<td>" . $row["institusi"] . "</td>";
            echo "<td>" . $row["alamat"] . "</td>";
            echo "<td>" . $row["telepon"] . "</td>";
            echo "<td>" . $row["created_at"] . "</td>";
            echo "</tr>";
        }
    } else {
        echo "<tr><td colspan='5'>Tidak ada data</td></tr>";
    }

    echo "</table>";
```

```

    // Menutup koneksi database
    $koneksi->close();
?>

</body>
</html>

```

### Kirim Data:

```

<?php

include 'config.php';

$koneksi = mysqli_connect($host, $user, $pass, $db);

$nama = $_POST['nama'];
$no_identitas = $_POST['no_identitas'];
$institusi = $_POST['institusi'];
$alamat = $_POST['alamat'];
$telepon = $_POST['telepon'];

// auto increment 1 , mengembalikan nilai id menjadi 1 jika dikosongkan
mysqli_query($koneksi, "ALTER TABLE $table AUTO_INCREMENT=1");

// simpan data ke table sensor
$simpan = mysqli_query(
    $koneksi,
    "insert into $table (nama, no_identitas, institusi, alamat,
telepon) values
('$nama','$no_identitas','$institusi','$alamat','$telepon')"
);

// uji simpan untuk memberikan response
if ($simpan)
    echo "Berhasil dikirim";
else
    echo "Gagal terkirim";

```

## SOURCE CODING HARDWARE

### **ESP32-CAM:**

```

//>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
>>>>>>>>>>>>>>>>> 01 ESP32 Cam QR Code Scanner
/*
*/
/* ===== Including the libraries. */
#include "esp_camera.h"
#include "soc/soc.h"
#include "soc/rtc_CNTL_reg.h"
#include "quirc.h"
#include <WiFi.h>
#include <HTTPClient.h>
#define WIFI_SSID "Tanah"
#define WIFI_PASS "janganlupaminum"
// const char *host = "albright.my.id";
const char *serverName = "http://albright.my.id/barcode/kirimdata.php"; // Alamat server
untuk mengirimkan data

/* ===== */
// creating a task handle
TaskHandle_t QRCodeReader_Task;

/* ===== Select camera model */
#ifndef CAMERA_MODEL_WROVER_KIT
#ifndef CAMERA_MODEL_ESP_EYE
#ifndef CAMERA_MODEL_M5STACK_PSRAM
#ifndef CAMERA_MODEL_M5STACK_WITHOUT_PSRAM
#ifndef CAMERA_MODEL_M5STACK_WITHOUT_PSRAM
#define CAMERA_MODEL_AI_THINKER
/* ===== */
/* ===== GPIO of camera models */
#endif
#endif
#endif
#endif
#endif
#ifndef PWDN_GPIO_NUM
#define PWDN_GPIO_NUM -1
#ifndef RESET_GPIO_NUM
#define RESET_GPIO_NUM -1
#ifndef XCLK_GPIO_NUM
#define XCLK_GPIO_NUM 21
#ifndef SIOD_GPIO_NUM
#define SIOD_GPIO_NUM 26
#ifndef SIOC_GPIO_NUM
#define SIOC_GPIO_NUM 27
#define Y9_GPIO_NUM 35

```

```
#define Y8_GPIO_NUM 34
#define Y7_GPIO_NUM 39
#define Y6_GPIO_NUM 36
#define Y5_GPIO_NUM 19
#define Y4_GPIO_NUM 18
#define Y3_GPIO_NUM 5
#define Y2_GPIO_NUM 4
#define VSYNC_GPIO_NUM 25
#define HREF_GPIO_NUM 23
#define PCLK_GPIO_NUM 22

#elif defined(CAMERA_MODEL_ESP_EYE)
#define PWDN_GPIO_NUM -1
#define RESET_GPIO_NUM -1
#define XCLK_GPIO_NUM 4
#define SIOD_GPIO_NUM 18
#define SIOC_GPIO_NUM 23

#define Y9_GPIO_NUM 36
#define Y8_GPIO_NUM 37
#define Y7_GPIO_NUM 38
#define Y6_GPIO_NUM 39
#define Y5_GPIO_NUM 35
#define Y4_GPIO_NUM 14
#define Y3_GPIO_NUM 13
#define Y2_GPIO_NUM 34
#define VSYNC_GPIO_NUM 5
#define HREF_GPIO_NUM 27
#define PCLK_GPIO_NUM 25

#elif defined(CAMERA_MODEL_M5STACK_PSRAM)
#define PWDN_GPIO_NUM -1
#define RESET_GPIO_NUM 15
#define XCLK_GPIO_NUM 27
#define SIOD_GPIO_NUM 25
#define SIOC_GPIO_NUM 23

#define Y9_GPIO_NUM 19
#define Y8_GPIO_NUM 36
#define Y7_GPIO_NUM 18
#define Y6_GPIO_NUM 39
#define Y5_GPIO_NUM 5
#define Y4_GPIO_NUM 34
#define Y3_GPIO_NUM 35
```

```
#define Y2_GPIO_NUM 32
#define VSYNC_GPIO_NUM 22
#define HREF_GPIO_NUM 26
#define PCLK_GPIO_NUM 21

#elif defined(CAMERA_MODEL_M5STACK_WITHOUT_PSRAM)
#define PWDN_GPIO_NUM -1
#define RESET_GPIO_NUM 15
#define XCLK_GPIO_NUM 27
#define SIOD_GPIO_NUM 25
#define SIOC_GPIO_NUM 23

#define Y9_GPIO_NUM 19
#define Y8_GPIO_NUM 36
#define Y7_GPIO_NUM 18
#define Y6_GPIO_NUM 39
#define Y5_GPIO_NUM 5
#define Y4_GPIO_NUM 34
#define Y3_GPIO_NUM 35
#define Y2_GPIO_NUM 17
#define VSYNC_GPIO_NUM 22
#define HREF_GPIO_NUM 26
#define PCLK_GPIO_NUM 21

#elif defined(CAMERA_MODEL_AI_THINKER)
#define PWDN_GPIO_NUM 32
#define RESET_GPIO_NUM -1
#define XCLK_GPIO_NUM 0
#define SIOD_GPIO_NUM 26
#define SIOC_GPIO_NUM 27

#define Y9_GPIO_NUM 35
#define Y8_GPIO_NUM 34
#define Y7_GPIO_NUM 39
#define Y6_GPIO_NUM 36
#define Y5_GPIO_NUM 21
#define Y4_GPIO_NUM 19
#define Y3_GPIO_NUM 18
#define Y2_GPIO_NUM 5
#define VSYNC_GPIO_NUM 25
#define HREF_GPIO_NUM 23
#define PCLK_GPIO_NUM 22
#else
#error "Camera model not selected"

```

```

#endif
/* ===== Variables declaration */

struct QRCodeData {
    bool valid;
    int dataType;
    uint8_t payload[1024];
    int payloadLen;
};

struct quirc *q = NULL;
uint8_t *image = NULL;
camera_fb_t *fb = NULL;
struct quirc_code code;
struct quirc_data data;
quirc_decode_error_t err;
struct QRCodeData qrCodeData;
String QRCodeResult = "";
int trig = 12;

int kirim = 0;
/* ===== */

/*
____ VOID SETUP()
void setup() {
    // put your setup code here, to run once:

    // Disable brownout detector.
    WRITE_PERI_REG(RTC_CNTL_BROWN_OUT_REG, 0);

    /* ----- Init serial communication speed (baud rate). */
    Serial.begin(115200);
    Serial.setDebugOutput(true);
    Serial.println();
    pinMode(trig, OUTPUT);
    WiFi.begin(WIFI_SSID, WIFI_PASS);
    while (WiFi.status() != WL_CONNECTED) {
        // digitalWrite(D4, LOW);
        delay(500);
        Serial.print(".");
    }
}

```

```

Serial.println("");
Serial.print("Connected to ");
Serial.println(WIFI_SSID);
Serial.print("IP address: ");
Serial.println(WiFi.localIP());
Serial.println();
/* ----- */

/* ----- Camera configuration. */
Serial.println("Start configuring and initializing the camera... ");
camera_config_t config;
config.ledc_channel = LEDC_CHANNEL_0;
config.ledc_timer = LEDC_TIMER_0;
config.pin_d0 = Y2_GPIO_NUM;
config.pin_d1 = Y3_GPIO_NUM;
config.pin_d2 = Y4_GPIO_NUM;
config.pin_d3 = Y5_GPIO_NUM;
config.pin_d4 = Y6_GPIO_NUM;
config.pin_d5 = Y7_GPIO_NUM;
config.pin_d6 = Y8_GPIO_NUM;
config.pin_d7 = Y9_GPIO_NUM;
config.pin_xclk = XCLK_GPIO_NUM;
config.pin_pclk = PCLK_GPIO_NUM;
config.pin_vsync = VSYNC_GPIO_NUM;
config.pin_href = HREF_GPIO_NUM;
config.pin_sscb_sda = SIOD_GPIO_NUM;
config.pin_sscb_scl = SIOC_GPIO_NUM;
config.pin_pwdn = PWDN_GPIO_NUM;
config.pin_reset = RESET_GPIO_NUM;
config.xclk_freq_hz = 10000000;
config.pixel_format = PIXFORMAT_GRAYSCALE;
config.frame_size = FRAMESIZE_QVGA;
config.jpeg_quality = 15;
config.fb_count = 1;

#if defined(CAMERA_MODEL_ESP_EYE)
pinMode(13, INPUT_PULLUP);
pinMode(14, INPUT_PULLUP);
#endif

esp_err_t err = esp_camera_init(&config);
if (err != ESP_OK) {
    Serial.printf("Camera init failed with error 0x%x", err);
    ESP.restart();
}

```

```

}

sensor_t *s = esp_camera_sensor_get();
s->set_framesize(s, FRAMESIZE_QVGA);

Serial.println("Configure and initialize the camera successfully.");
Serial.println();
/* ----- */

/* ----- create "QRCodeReader_Task" using the
xTaskCreatePinnedToCore() function */
xTaskCreatePinnedToCore(
    QRCodeReader, /* Task function.*/
    "QRCodeReader_Task", /* name of task.*/
    10000, /* Stack size of task */
    NULL, /* parameter of the task */
    1, /* priority of the task */
    &QRCodeReader_Task, /* Task handle to keep track of created task */
    0); /* pin task to core 0 */
/* ----- */
}

/*
____ */
void loop() {

    if (QRCodeResult == "Nama: Aditya Ramadhan, Jurusan: Teknik Elektro, NPM:
061920352352") {
        Serial.println("Berhasil1");
        digitalWrite(trig, HIGH);
        String nama = "Aditya Ramadhan";
        String no_identitas = "061920352352/Telkom";
        String institusi = "UPT. PERPUSTAKAAN ELEKTRO POLSRI";
        String alamat = "Jl. KH Wahid Hasyim Lrg. Berdikari";
        String telepon = "/081273359573";
        kirim = 1;
        delay(1500);
        if (kirim == 1) {
            sendDataPhp(nama, no_identitas, institusi, alamat, telepon);
            delay(200);
            kirim = 0;
        }
        // Serial.println("Data Dikirim");
        delay(1000);
    }
}

```

```

digitalWrite(trig, LOW);
Serial.print("TUTUP");
QRCodeResult = "";
}

if (QRCodeResult == "Nama: Agnes Frenica, Jurusan: Teknik Elektro, NPM: 061940350253")
{
    Serial.print("Berhasil2");
    digitalWrite(trig, HIGH);
    String nama = "Agnes Frenica";
    String no_identitas = "061940350253/Telkom";
    String institusi = "UPT. PERPUSTAKAAN ELEKTRO POLSRI";
    String alamat = "Rusun Blok. 29A Lt. 1 No. 1";
    String telepon = "0995406729700";
    kirim = 1;
    delay(1500);
    if (kirim == 1) {
        sendDataPhp(nama, no_identitas, institusi, alamat, telepon);
        delay(200);
        kirim = 0;
    }
    delay(1000);
    digitalWrite(trig, LOW);
    Serial.print("TUTUP");
    QRCodeResult = "";
}

if (QRCodeResult == "Nama: Aprilliya NurmalaSari, Jurusan: Teknik Elektro, NPM: 061940352355") {
    Serial.print("Berhasil3");
    digitalWrite(trig, HIGH);
    String nama = "Aprilliya NurmalaSari";
    String no_identitas = "061940352355/Telkom";
    String institusi = "UPT. PERPUSTAKAAN ELEKTRO POLSRI";
    String alamat = "Jl. Pepaya raya blok B no 48 rt. 41 rw. 13";
    String telepon = "081271417935";
    kirim = 1;
    delay(1500);
    if (kirim == 1) {
        sendDataPhp(nama, no_identitas, institusi, alamat, telepon);
        delay(200);
        kirim = 0;
    }
    delay(1000);
}

```

```

digitalWrite(trig, LOW);
Serial.print("TUTUP");
QRCodeResult = "";
}

if (QRCodeResult == "Nama: Atika Juliadrianni, Jurusan: Teknik Elektro, NPM: 061940351942") {
    Serial.print("Berhasil4");
    digitalWrite(trig, HIGH);
    String nama = "Atika Juliadrianni";
    String no_identitas = "061940351942/Telkom";
    String institusi = "UPT. PERPUSTAKAAN ELEKTRO POLSRI";
    String alamat = "Jl. Guru-Guru No.44 rt.003 Rw.001 Kel.Indralaya Raya Kec.Indralaya Kab.Ogan Ilir";
    String telepon = "081272242141";
    kirim = 1;
    delay(1500);
    if (kirim == 1) {
        sendDataPhp(nama, no_identitas, institusi, alamat, telepon);
        delay(200);
        kirim = 0;
    }
    delay(1000);
    digitalWrite(trig, LOW);
    Serial.print("TUTUP");
    QRCodeResult = "";
}

if (QRCodeResult == "Nama: Ayu Antika Sekar Kinasih, Jurusan: Teknik Elektro, NPM: 061940351943") {
    Serial.print("Berhasil5");
    digitalWrite(trig, HIGH);
    String nama = "Ayu Antika Sekar Kinasih";
    String no_identitas = "061940351943/Telkom";
    String institusi = "UPT. PERPUSTAKAAN ELEKTRO POLSRI";
    String alamat = "Komplek Lestari Permai Blok N 9 Beringin 3 Prumnas Sukadana";
    String telepon = "081377626973";
    kirim = 1;
    delay(1500);
    if (kirim == 1) {
        sendDataPhp(nama, no_identitas, institusi, alamat, telepon);
        delay(200);
        kirim = 0;
    }
}

```

```

delay(1000);
digitalWrite(trig, LOW);
Serial.print("TUTUP");
QRCodeResult = "";
}

if (QRCodeResult == "Nama: Choirunnisa, Jurusan: Teknik Elektro, NPM: 061940351945") {
    Serial.print("Berhasil6");
    digitalWrite(trig, HIGH);
    String nama = "Choirunnisa";
    String no_identitas = "061940351945/Telkom";
    String institusi = "UPT. PERPUSTAKAAN ELEKTRO POLSRI";
    String alamat = "Jln. Lunjuk Jaya Prumnas Griya Poli";
    String telepon = "085266895574";
    kirim = 1;
    delay(1500);
    if (kirim == 1) {
        sendDataPhp(nama, no_identitas, institusi, alamat, telepon);
        delay(200);
        kirim = 0;
    }
    delay(1000);
    digitalWrite(trig, LOW);
    Serial.print("TUTUP");
    QRCodeResult = "";
}

if (QRCodeResult == "Nama: Fadhila Desti Rahmani, Jurusan: Teknik Elektro, NPM: 061940351946") {
    Serial.print("Berhasil7");
    digitalWrite(trig, HIGH);
    String nama = "Fadhila Desti Rahmani";
    String no_identitas = "061940351946/Telkom";
    String institusi = "UPT. PERPUSTAKAAN ELEKTRO POLSRI";
    String alamat = "Jl. Ariodillah 1 No 4315B";
    String telepon = "08994353283";
    kirim = 1;
    delay(1500);
    if (kirim == 1) {
        sendDataPhp(nama, no_identitas, institusi, alamat, telepon);
        delay(200);
        kirim = 0;
    }
    delay(1000);
}

```

```

digitalWrite(trig, LOW);
Serial.print("TUTUP");
QRCodeResult = "";
}

if (QRCodeResult == "Nama: Handava Wardana, Jurusan: Teknik Elektro, NPM: 061940351947") {
    Serial.print("Berhasil8");
    digitalWrite(trig, HIGH);
    String nama = "Handava Wardana";
    String no_identitas = "061940351947/Telkom";
    String institusi = "UPT. PERPUSTAKAAN ELEKTRO POLSRI";
    String alamat = "Jl.Tembok Baru Gg. Bersama";
    String telepon = "0895420110404";
    kirim = 1;
    delay(1500);
    if (kirim == 1) {
        sendDataPhp(nama, no_identitas, institusi, alamat, telepon);
        delay(200);
        kirim = 0;
    }
    delay(1000);
    digitalWrite(trig, LOW);
    Serial.print("TUTUP");
    QRCodeResult = "";
}

if (QRCodeResult == "Nama: Horas Sitorus, Jurusan: Teknik Elektro, NPM: 061940351948") {
    Serial.print("Berhasil9");
    digitalWrite(trig, HIGH);
    String nama = "Horas Sitorus";
    String no_identitas = "061940351948/Telkom";
    String institusi = "UPT. PERPUSTAKAAN ELEKTRO POLSRI";
    String alamat = "Jl. Tuanku Imam Bonjol. No 34A. Kelurahan Satria";
    String telepon = "085833837713";
    kirim = 1;
    delay(1500);
    if (kirim == 1) {
        sendDataPhp(nama, no_identitas, institusi, alamat, telepon);
        delay(200);
        kirim = 0;
    }
    delay(1000);
}

```

```

digitalWrite(trig, LOW);
Serial.print("TUTUP");
QRCodeResult = "";
}

if (QRCodeResult == "Nama: Indah Sari Putri Pratama, Jurusan: Teknik Elektro, NPM:
061940352339") {
    Serial.print("Berhasil10");
    digitalWrite(trig, HIGH);
    String nama = "Indah Sari Putri Pratama";
    String no_identitas = "061940352339/Telkom";
    String institusi = "UPT. PERPUSTAKAAN ELEKTRO POLSRI";
    String alamat = "Jl. Letkol HM Effendi No.52";
    String telepon = "081310756431";
    kirim = 1;
    delay(1500);
    if (kirim == 1) {
        sendDataPhp(nama, no_identitas, institusi, alamat, telepon);
        delay(200);
        kirim = 0;
    }
    delay(1000);
    digitalWrite(trig, LOW);
    Serial.print("TUTUP");
    QRCodeResult = "";
}

if (QRCodeResult == "Nama: Intan Putri Ayu Agita, Jurusan: Teknik Elektro, NPM:
061940350254") {
    Serial.print("Berhasil11");
    digitalWrite(trig, HIGH);
    String nama = "Intan Putri Ayu Agita";
    String no_identitas = "061940350254/Telkom";
    String institusi = "UPT. PERPUSTAKAAN ELEKTRO POLSRI";
    String alamat = "Jln. Lunjuk Jaya Seroja 5";
    String telepon = "082377993067";
    kirim = 1;
    delay(1500);
    if (kirim == 1) {
        sendDataPhp(nama, no_identitas, institusi, alamat, telepon);
        delay(200);
        kirim = 0;
    }
    delay(1000);
}

```

```

digitalWrite(trig, LOW);
Serial.print("TUTUP");
QRCodeResult = "";
}

if (QRCodeResult == "Nama: Khansa Ghazalah Syauqiyah, Jurusan: Teknik Elektro, NPM: 061940351949") {
    Serial.print("Berhasil12");
    digitalWrite(trig, HIGH);
    String nama = "Khansa Ghazalah Syauqiyah";
    String no_identitas = "061940351949/Telkom";
    String institusi = "UPT. PERPUSTAKAAN ELEKTRO POLSRI";
    String alamat = "Jl. Srijaya Komp Pemda Tk 1 Blok F No.9 Kel. Srijaya Kec. Alang-Alang Lebar";
    String telepon = "088707025907";
    kirim = 1;
    delay(1500);
    if (kirim == 1) {
        sendDataPhp(nama, no_identitas, institusi, alamat, telepon);
        delay(200);
        kirim = 0;
    }
    delay(1000);
    digitalWrite(trig, LOW);
    Serial.print("TUTUP");
    QRCodeResult = "";
}

if (QRCodeResult == "Nama: Khoirul Anam, Jurusan: Teknik Elektro, NPM: 061940352340") {
    Serial.print("Berhasil13");
    digitalWrite(trig, HIGH);
    String nama = "Khoirul Anam";
    String no_identitas = "061940352340/Telkom";
    String institusi = "UPT. PERPUSTAKAAN ELEKTRO POLSRI";
    String alamat = "Jl. Kancil Putih Demang Lebar Daun Gg. Bersama";
    String telepon = "082279084036";
    kirim = 1;
    delay(1500);
    if (kirim == 1) {
        sendDataPhp(nama, no_identitas, institusi, alamat, telepon);
        delay(200);
        kirim = 0;
    }
}

```

```

delay(1000);
digitalWrite(trig, LOW);
Serial.print("TUTUP");
QRCodeResult = "";
}

if (QRCodeResult == "Nama: Khotifah Puji Lestari, Jurusan: Teknik Elektro, NPM: 061940351950") {
    Serial.print("Berhasil14");
    digitalWrite(trig, HIGH);
    String nama = "Khotifah Puji Lestari";
    String no_identitas = "061940351950/Telkom";
    String institusi = "UPT. PERPUSTAKAAN ELEKTRO POLSRI";
    String alamat = "Jln. D.I Panjaitan Lr. Asli RT.13 No.610";
    String telepon = "081350684088";
    kirim = 1;
    delay(1500);
    if (kirim == 1) {
        sendDataPhp(nama, no_identitas, institusi, alamat, telepon);
        delay(200);
        kirim = 0;
    }
    delay(1000);
    digitalWrite(trig, LOW);
    Serial.print("TUTUP");
    QRCodeResult = "";
}

if (QRCodeResult == "Nama: Luckyta Mayshe Simanjuntak, Jurusan: Teknik Elektro, NPM: 061940352359") {
    Serial.print("Berhasil15");
    digitalWrite(trig, HIGH);
    String nama = "Luckyta Mayshe Simanjuntak";
    String no_identitas = "061940352359/Telkom";
    String institusi = "UPT. PERPUSTAKAAN ELEKTRO POLSRI";
    String alamat = "Komplek Handayani, Blok H3 No. 15";
    String telepon = "0895604848557";
    kirim = 1;
    delay(1500);
    if (kirim == 1) {
        sendDataPhp(nama, no_identitas, institusi, alamat, telepon);
        delay(200);
        kirim = 0;
    }
}

```

```

delay(1000);
digitalWrite(trig, LOW);
Serial.print("TUTUP");
QRCodeResult = "";
}

if (QRCodeResult == "Nama: Maudhy Az Zahra, Jurusan: Teknik Elektro, NPM: 061940350259") {
    Serial.print("Berhasil16");
    digitalWrite(trig, HIGH);
    String nama = "Maudhy Az Zahra";
    String no_identitas = "061940350259/Telkom";
    String institusi = "UPT. PERPUSTAKAAN ELEKTRO POLSRI";
    String alamat = "Jl. KI Merogan Lrg. Ngabehi Kertapati Palembang";
    String telepon = "083171238882";
    kirim = 1;
    delay(1500);
    if (kirim == 1) {
        sendDataPhp(nama, no_identitas, institusi, alamat, telepon);
        delay(200);
        kirim = 0;
    }
    delay(1000);
    digitalWrite(trig, LOW);
    Serial.print("TUTUP");
    QRCodeResult = "";
}

if (QRCodeResult == "Nama: Mega Mardiani, Jurusan: Teknik Elektro, NPM: 061940351951") {
    Serial.print("Berhasil17");
    digitalWrite(trig, HIGH);
    String nama = "Mega Mardiani";
    String no_identitas = "061940351951/Telkom";
    String institusi = "UPT. PERPUSTAKAAN ELEKTRO POLSRI";
    String alamat = "Komplek Permata Baru Blok C 12 No.29 Rt 04 Rw 02 Kel/Desa Permata Baru";
    String telepon = "082177790386";
    kirim = 1;
    delay(1500);
    if (kirim == 1) {
        sendDataPhp(nama, no_identitas, institusi, alamat, telepon);
        delay(200);
        kirim = 0;
    }
}

```

```

    }
    delay(1000);
    digitalWrite(trig, LOW);
    Serial.print("TUTUP");
    QRCodeResult = "";
}

if (QRCodeResult == "Nama: Muhammad Fadli Ramadhan, Jurusan: Teknik Elektro, NPM: 061940352343") {
    Serial.print("Berhasil18");
    digitalWrite(trig, HIGH);
    String nama = "Muhammad Fadli Ramadhan";
    String no_identitas = "061940352343/Telkom";
    String institusi = "UPT. PERPUSTAKAAN ELEKTRO POLSRI";
    String alamat = "Perum Bukit Sejahtera Blok EK 21";
    String telepon = "081274278668";
    kirim = 1;
    delay(1500);
    if (kirim == 1) {
        sendDataPhp(nama, no_identitas, institusi, alamat, telepon);
        delay(200);
        kirim = 0;
    }
    delay(1000);
    digitalWrite(trig, LOW);
    Serial.print("TUTUP");
    QRCodeResult = "";
}

if (QRCodeResult == "Nama: Nadia Oktavia, Jurusan: Teknik Elektro, NPM: 061940350255") {
    Serial.print("Berhasil19");
    digitalWrite(trig, HIGH);
    String nama = "Nadia Oktavia";
    String no_identitas = "061940350255/Telkom";
    String institusi = "UPT. PERPUSTAKAAN ELEKTRO POLSRI";
    String alamat = "Jln. KH Wahid Hasyim Lr. Mutiara 2";
    String telepon = "085380478383";
    kirim = 1;
    delay(1500);
    if (kirim == 1) {
        sendDataPhp(nama, no_identitas, institusi, alamat, telepon);
        delay(200);
        kirim = 0;
    }
}

```

```

}

delay(1000);
digitalWrite(trig, LOW);
Serial.print("TUTUP");
QRCodeResult = "";
}

if (QRCodeResult == "Nama: Nur Hopipah, Jurusan: Teknik Elektro, NPM: 061940352346") {
    Serial.print("Berhasil20");
    digitalWrite(trig, HIGH);
    String nama = "Nur Hopipah";
    String no_identitas = "061940352346/Telkom";
    String institusi = "UPT. PERPUSTAKAAN ELEKTRO POLSRI";
    String alamat = "Jl. Sabar Jaya Lrg.Vinus No.06 Banyuasin 1 Mariana";
    String telepon = "085377437538";
    kirim = 1;
    delay(1500);
    if (kirim == 1) {
        sendDataPhp(nama, no_identitas, institusi, alamat, telepon);
        delay(200);
        kirim = 0;
    }
    delay(1000);
    digitalWrite(trig, LOW);
    Serial.print("TUTUP");
    QRCodeResult = "";
}

if (QRCodeResult == "Nama: Puspita Aliya Nabila, Jurusan: Teknik Elektro, NPM: 061940350257") {
    Serial.print("Berhasil21");
    digitalWrite(trig, HIGH);
    String nama = "Puspita Aliya Nabila";
    String no_identitas = "061940350257/Telkom";
    String institusi = "UPT. PERPUSTAKAAN ELEKTRO POLSRI";
    String alamat = "Perum Bukit Asri II Blok. E5 RT.06 Palembang";
    String telepon = "089629315448";
    kirim = 1;
    delay(1500);
    if (kirim == 1) {
        sendDataPhp(nama, no_identitas, institusi, alamat, telepon);
        delay(200);
        kirim = 0;
    }
}

```

```

delay(1000);
digitalWrite(trig, LOW);
Serial.print("TUTUP");
QRCodeResult = "";
}

if (QRCodeResult == "Nama: R.A Jihan Ulima Achva, Jurusan: Teknik Elektro, NPM: 061940351953") {
    Serial.print("Berhasil22");
    digitalWrite(trig, HIGH);
    String nama = "R.A Jihan Ulima Achva";
    String no_identitas = "061940351953/Telkom";
    String institusi = "UPT. PERPUSTAKAAN ELEKTRO POLSRI";
    String alamat = "Jl. Kancil Putih 2 Lt. Bersama 11 Perumahan Green Island Blok E";
    String telepon = "089635924612";
    kirim = 1;
    delay(1500);
    if (kirim == 1) {
        sendDataPhp(nama, no_identitas, institusi, alamat, telepon);
        delay(200);
        kirim = 0;
    }
    delay(1000);
    digitalWrite(trig, LOW);
    Serial.print("TUTUP");
    QRCodeResult = "";
}

if (QRCodeResult == "Nama: Rahmika, Jurusan: Teknik Elektro, NPM: 061940352364") {
    Serial.print("Berhasil23");
    digitalWrite(trig, HIGH);
    String nama = "Rahmika";
    String no_identitas = "061940352364/Telkom";
    String institusi = "UPT. PERPUSTAKAAN ELEKTRO POLSRI";
    String alamat = "Jln. Sapta Marga Lrg Abadi No 19";
    String telepon = "08892953626";
    kirim = 1;
    delay(1500);
    if (kirim == 1) {
        sendDataPhp(nama, no_identitas, institusi, alamat, telepon);
        delay(200);
        kirim = 0;
    }
    delay(1000);
}

```

```

digitalWrite(trig, LOW);
Serial.print("TUTUP");
QRCodeResult = "";
}

if (QRCodeResult == "Nama: Renata Anggielita, Jurusan: Teknik Elektro, NPM: 061940351954") {
    Serial.print("Berhasil24");
    digitalWrite(trig, HIGH);
    String nama = "Renata Anggielita";
    String no_identitas = "061940351954/Telkom";
    String institusi = "UPT. PERPUSTAKAAN ELEKTRO POLSRI";
    String alamat = "BTN 1 Lindung Indah Kel. Muarabulian Kec. Muarabulian Kab. Batang";
    String telepon = "0895618053551";
    kirim = 1;
    delay(1500);
    if (kirim == 1) {
        sendDataPhp(nama, no_identitas, institusi, alamat, telepon);
        delay(200);
        kirim = 0;
    }
    delay(1000);
    digitalWrite(trig, LOW);
    Serial.print("TUTUP");
    QRCodeResult = "";
}

if (QRCodeResult == "Nama: Salsabila Dina Sari, Jurusan: Teknik Elektro, NPM: 061940350256") {
    Serial.print("Berhasil25");
    digitalWrite(trig, HIGH);
    String nama = "Salsabila Dina Sari";
    String no_identitas = "061940350256/Telkom";
    String institusi = "UPT. PERPUSTAKAAN ELEKTRO POLSRI";
    String alamat = "Jl. Mayjen Ryacudu No.1423 8 Ulu Palembang";
    String telepon = "082176900809";
    kirim = 1;
    delay(1500);
    if (kirim == 1) {
        sendDataPhp(nama, no_identitas, institusi, alamat, telepon);
        delay(200);
        kirim = 0;
    }
    delay(1000);
}

```

```

digitalWrite(trig, LOW);
Serial.print("TUTUP");
QRCodeResult = "";
}

if (QRCodeResult == "Nama: Salwa Deta Mediana, Jurusan: Teknik Elektro, NPM: 061940351955") {
    Serial.print("Berhasil26");
    digitalWrite(trig, HIGH);
    String nama = "Salwa Deta Mediana";
    String no_identitas = "061940351955/Telkom";
    String institusi = "UPT. PERPUSTAKAAN ELEKTRO POLSRI";
    String alamat = "Jln. Penyaringan No.80 Palembang";
    String telepon = "083169697263";
    kirim = 1;
    delay(1500);
    if (kirim == 1) {
        sendDataPhp(nama, no_identitas, institusi, alamat, telepon);
        delay(200);
        kirim = 0;
    }
    delay(1000);
    digitalWrite(trig, LOW);
    Serial.print("TUTUP");
    QRCodeResult = "";
}

if (QRCodeResult == "Nama: Shendy Arsella, Jurusan: Teknik Elektro, NPM: 061940350258") {
    Serial.print("Berhasil27");
    digitalWrite(trig, HIGH);
    String nama = "Shendy Arsella";
    String no_identitas = "061940350258/Telkom";
    String institusi = "UPT. PERPUSTAKAAN ELEKTRO POLSRI";
    String alamat = "Jln. Abikusno CS Lr. Srigading RT.03";
    String telepon = "081377525978";
    kirim = 1;
    delay(1500);
    if (kirim == 1) {
        sendDataPhp(nama, no_identitas, institusi, alamat, telepon);
        delay(200);
        kirim = 0;
    }
    delay(1000);
}

```

```

digitalWrite(trig, LOW);
Serial.print("TUTUP");
QRCodeResult = "";
}

if (QRCodeResult == "Nama: Sherina Humairoh, Jurusan: Teknik Elektro, NPM: 061940351956") {
    Serial.print("Berhasil28");
    digitalWrite(trig, HIGH);
    String nama = "Sherina Humairoh";
    String no_identitas = "061940351956/Telkom";
    String institusi = "UPT. PERPUSTAKAAN ELEKTRO POLSRI";
    String alamat = "Jln. Kol. H. Burlian KM.9";
    String telepon = "081379852469";
    kirim = 1;
    delay(1500);
    if (kirim == 1) {
        sendDataPhp(nama, no_identitas, institusi, alamat, telepon);
        delay(200);
        kirim = 0;
    }
    delay(1000);
    digitalWrite(trig, LOW);
    Serial.print("TUTUP");
    QRCodeResult = "";
}

if (QRCodeResult == "Nama: Shinta Sulistiya N, Jurusan: Teknik Elektro, NPM: 061940352348") {
    Serial.print("Berhasil29");
    digitalWrite(trig, HIGH);
    String nama = "Shinta Sulistiya N";
    String no_identitas = "061940352348/Telkom";
    String institusi = "UPT. PERPUSTAKAAN ELEKTRO POLSRI";
    String alamat = "Jl. Malaka 2 No.107";
    String telepon = "089518541281";
    kirim = 1;
    delay(1500);
    if (kirim == 1) {
        sendDataPhp(nama, no_identitas, institusi, alamat, telepon);
        delay(200);
        kirim = 0;
    }
    delay(1000);
}

```

```

digitalWrite(trig, LOW);
Serial.print("TUTUP");
QRCodeResult = "";
}

if (QRCodeResult == "Nama: Wardatus Sholihah, Jurusan: Teknik Elektro, NPM: 061940351958") {
    Serial.print("Berhasil30");
    digitalWrite(trig, HIGH);
    String nama = "Wardatus Sholihah";
    String no_identitas = "061940351958/Telkom";
    String institusi = "UPT. PERPUSTAKAAN ELEKTRO POLSRI";
    String alamat = "Jln. S.M. Mansyur Lr. Gelora";
    String telepon = "082177051821";
    kirim = 1;
    delay(1500);
    if (kirim == 1) {
        sendDataPhp(nama, no_identitas, institusi, alamat, telepon);
        delay(200);
        kirim = 0;
    }
    delay(1000);
    digitalWrite(trig, LOW);
    Serial.print("TUTUP");
    QRCodeResult = "";
}

/*
____ */

____ The function to be executed by "QRCodeReader_Task" */
// This function is to instruct the camera to take or capture a QR Code image, then it is processed and translated into text.
void QRCodeReader(void *pvParameters) {
/* ----- */
Serial.println("QRCodeReader is ready.");
Serial.print("QRCodeReader running on core ");
Serial.println(xPortGetCoreID());
Serial.println();
/* ----- */

```

```

/* ----- Loop to read QR Code in real time. */
while (1) {
    q = quirc_new();
    if (q == NULL) {
        Serial.print("can't create quirc object\r\n");
        continue;
    }

    fb = esp_camera_fb_get();
    if (!fb) {
        Serial.println("Camera capture failed");
        continue;
    }

    quirc_resize(q, fb->width, fb->height);
    image = quirc_begin(q, NULL, NULL);
    memcpy(image, fb->buf, fb->len);
    quirc_end(q);

    int count = quirc_count(q);
    if (count > 0) {
        quirc_extract(q, 0, &code);
        err = quirc_decode(&code, &data);

        if (err) {
            Serial.println("Decoding FAILED");
            QRCodeResult = "Decoding FAILED";
        } else {
            Serial.printf("Decoding successful:\n");
            dumpData(&data);
        }
        Serial.println();
    }

    esp_camera_fb_return(fb);
    fb = NULL;
    image = NULL;
    quirc_destroy(q);
}
/* ----- */
}

```

```

/*
____ */
/*
____ Function to display the results of reading the QR Code on the serial monitor. */
void dumpData(const struct quirc_data *data) {
    Serial.printf("Version: %d\n", data->version);
    Serial.printf("ECC level: %c\n", "MLHQ"[data->ecc_level]);
    Serial.printf("Mask: %d\n", data->mask);
    Serial.printf("Length: %d\n", data->payload_len);
    Serial.printf("Payload: %s\n", data->payload);

    QRCodeResult = (const char *)data->payload;
}

void sendDataPhp(String nama, String no_identitas, String institusi, String alamat, String
telepon) {
    WiFiClient client;
    // if (!client.connect(host, 80)) {
    //   Serial.println("connection failed");
    //   return;
    // }
    // String url;
    // url = "http://albright.my.id/barcode/kirimdata.php?nama=" + nama + "&no_identitas="
+ no_identitas + "&institusi=" + institusi + "&alamat=" + alamat;
    // url = "http://albright.my.id/barcode/kirimdata.php?nama=" + nama ;
    //http://bpm.allbright.my.id/kirimdata.php?nama=sedry&bpm=343&kondisi=aman
    HTTPClient http;

    // Membangun string data yang akan dikirimkan
    String postData = "nama=" + nama + "&no_identitas=" + no_identitas + "&institusi=" +
institusi + "&alamat=" + alamat + "&telepon=" + telepon;
    // http.begin(client, postData);
    http.begin(serverName);
    http.addHeader("Content-Type", "application/x-www-form-urlencoded"); // Menetapkan
header HTTP
    // Mengirimkan data
    int httpResponseCode = http.POST(postData);

    // http.GET();
    // String respon = http.getString();
    Serial.println(httpResponseCode);
}

```

```
Serial.print("DATA TEKEREM");
http.end();
}

/*
=====
//<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<
<<<<<<<<<<<<<<<<<<<
```

**Aktuator :**

```
#include <Servo.h> //library servo

Servo myservo; // membuat variabel servo untuk dikendalikan

//int pos = 90; // deklarasi variabel untuk posisi sudut
int trigesp = 10;

int trig = 7; // membuat varibel trig yang di set ke-pin 3
int echo = 6; // membuat variabel echo yang di set ke-pin 2
long durasi, jarak; // membuat variabel durasi dan jarak

int buz = 5;
int LED = 4;

void setup() {
    Serial.begin(9600);
    pinMode(trigesp, INPUT);
    pinMode(trig, OUTPUT); // set pin trig menjadi OUTPUT
    pinMode(echo, INPUT); // set pin echo menjadi INPUT
    pinMode(buz, OUTPUT);
    pinMode(LED, OUTPUT);
    myservo.attach(8); //deklarasi servo pada pin 9
}

void loop() {
    int buka = digitalRead(trigesp);
    // Serial.println(buka);
    SensorU();

    if (buka == 1) {
```

```
digitalWrite(LED, HIGH);
myservo.write(180); // memerintahkan servo ke posisi derajat sesuai nilai variabel pos
delay(4000); // menunggu 15 milidetik
myservo.write(90);
delay(4000);
}
else {
    digitalWrite(LED, LOW);
}
}

void SensorU() {
// program dibawah ini agar trigger memancarkan suara ultrasonic
digitalWrite(trig, LOW);
delayMicroseconds(8);
digitalWrite(trig, HIGH);
delayMicroseconds(8);
digitalWrite(trig, LOW);
delayMicroseconds(8);

durasi = pulseIn(echo, HIGH); // menerima suara ultrasonic
jarak = (durasi / 2) / 29.1; // mengubah durasi menjadi jarak (cm)
if (jarak < 20) {
    digitalWrite(buz, HIGH);
} else {
    digitalWrite(buz, LOW);
}
Serial.println(jarak); // menampilkan jarak pada Serial Monitor
}
```