

DAFTAR PUSTAKA

- Adibrata, M. F. (2020). *Monitoring Sistem Penghitungan Barang Otomatis Menggunakan NodeMCU ESP8266*. Medan: Universitas Sumatera Utara.
- Alakel, W., Ahmad, I., & Santoso, E. B. (2019). Sistem Informasi Akuntasi Persediaan Obat Metode First In First Out (Studi Kasus: Rumah Sakit Bhayangkara Polda Lampung). *Jurnal TEKNOKOMPAK*, 13(1), 39.
- Aminuddin, M. (2021). *Perancangan Pintu Otomatis Menggunakan Sensor Temperatur Berbasis Arduino Untuk Melaksanakan Protokol Kesehatan Covid-19 di Ruang Kuliah*. Banjarmasin: Universitas Islam Kalimantan Muhammad Arsyad Al Banjari.
- Arsul, A. A. (2020). *Pengembangan Teknologi Smart Hybrid Reader Untuk Perbaikan Tata Kelola Perparkiran di Fakultas Teknik Universitas Hasanuddin*. Makassar: Universitas Hasanuddin.
- Fadil, M., & Thamrin. (2020). Perancangan Alat Ukur Indeks Massa Tubuh (IMT) Digital Berbasis Mikrokontroler. *Jurnal Vocational Teknik Elektronika dan Informatika*, 8(1).
- Fauzi, N. A., Hapsari, G. I., & Rosmiati, M. (2019). Prototipe Sistem Monitoring Berat Muatan Truk. *e-Proceeding of Applied Science*, 5(3), 2436.
- Gintoro, T. A., & William. (2010). Sistem Smart Class Room Berbasis Smart Card dan Bahasa Pemrograman C++. *Seminar Nasional Aplikasi Teknologi Informasi (SNATI)*. Yogyakarta.
- Hariyadi. (2017). *Kajian Kinerja Pelayanan Angkutan Umum Bus Antar Kota Antar Provinsi Trayek Kota Medan - Kota Subulussalam*. Medan: Universitas Muhammadiyah Sumatera Utara.
- Hartiwati, E. N. (2022). Aplikasi Inventori Barang Menggunakan Java dengan phpMyAdmin. *Cross-border*, 5(1), 603.
- Hasibuan, H. A., Kristyawati, D., Syukriah, F., & Jamilah. (2022). Rancang Bangun Prototipe Monitoring Parkir Otomatis Menggunakan Sensor Infrared Berbasis Arduino Uno. *Syntax Literate: Jurnal Ilmiah Indonesia*, 7(6), 6821.
- Irawan, J. D., Prasetyo, S., & Adi, S. (2016). Pengembangan Kunci Elektronik Menggunakan RFID dengan Sistem IoT. *Industri Inovatif: Jurnal Teknik Industri*, 6(2), 28-32.
- Kamarudin, N. H. (2017). *Air Quality Sensing Device for Murdoch Library*. Perth: Murdoch University.

- Kurnia, M. (2017). *Implementasi Sistem Pengaman Sepeda Motor Menggunakan Radio Frequency Identification (RFID) dan E-KTP Berbasis Mikrokontroler*. Pekanbaru: Universitas Islam Negeri Sultan Syarif Kasim Riau.
- Last Minute Engineers.* (n.d.). Retrieved Juni 8, 2022, from <https://lastminuteengineers.com/esp8266-nodemcu-arduino-tutorial/>
- Lukmanulhakim, A. (2020). *Alat Peraga Interaktif Blok Huruf, Angka dan Kata untuk Anak Usia Dini*. Bandung: Universitas Komputer Indonesia.
- Natsir, M., Rendra, D. B., & Anggara, A. D. (2019). Implementasi IoT untuk Sistem Kendali AC Otomatis Pada Ruang Kelas di Universitas Serang Raya. *PROSISKO: Jurnal Pengembangan Riset dan Observasi Sistem Komputer*, 6(1), 69-72.
- Novaldy, F., P, A. T., R, M. G., & Awan, N. (2019). *Rancang Bangun Prototype Counter Barang Berbasis Arduino Uno*. Tegal: Politeknik Harapan Bersama.
- Pradana, P. A. (2015). *Perekaman Data Akses Kamar Hotel dengan RFID Berbasis Web*. Yogyakarta: Universitas Sanata Dharma.
- Putra, D. P., & Wagyana, A. (2021). Rancang Bangun Sistem Pendekripsi Tinggi Badan dan Antrian Otomatis Pada Pintu Masuk Wahana Bermain. *TESLA : Jurnal Teknik Elektro*, 23(1), 73.
- Saputra, D. D., & Hadijaja, D. (2019). *Sistem Kontrol Kuantitas Pakan Ayam Berbasis Arduino Mega*. Sidoarjo: Universitas Muhammadiyah Sidoarjo.
- Sarmidi, & Rahmat, S. I. (2019). Sistem Peringatan Dini Banjir Menggunakan Sensor Ultrasonik Berbasis Arduino Uno. *Jurnal Manajemen dan Teknik Informatika (JUMANTAKA)*, 3(1), 33.
- Secure Technology Alliance.* (n.d.). Retrieved Juni 26, 2022, from https://www.securetechalliance.org/resources/pdf/RFID_and_Contactless_Smart_Cards_FAQ_FINAL_042105.pdf
- Septiani, M. (2019). *Efektivitas Pengelolaan dan Operasional Angkutan Trans Siginjai di Provinsi Jambi*. Jambi: Universitas Islam Negeri Sultan Thaha Saifuddin.
- Standisyah, R. E., & Restu N.S, I. (2017). Implementasi phpMyAdmin Rancangan Sistem Pengadministrasian. *Unisda Journal of Mathematics and Computer Science*, 3(2), 39-40.
- Syahputra, H. (2016). Rancang Bangun Alat Penghitung Penumpang Bus Trans Padang Berbasis Mikrokontroler Atmega32. *Majalah Ilmiah*, 23(2), 42-46.
- Tanjung, A. (2015). *Aplikasi Liquid Crystal Display (LCD) 16x2 Sebagai Tampilan Pada Coconut Milk Auto Machine*. Palembang: Politeknik Negeri Sriwijaya.

- Utama, A. D. (2010). *Perancangan Sistem Perparkiran Kendaraan Roda Empat Menggunakan Teknologi RFID di Universitas Sebelas Maret*. Surakarta: Universitas Sebelas Maret.
- Wicaksono, F. A. (2011). Pembuatan Report dan Pengaksesan Presensi Smart Card Melalui SMS Gateway. *EEPIS final project*.
- Wicaksono, M. F. (2017). Implementasi Modul Wifi NodeMCU ESP8266 Untuk Smart Home. *KOMPUTIKA-Jurnal Sistem Komputer*, 6(1), 3.
- Wicaksono, M. F., & Hidayat. (2017). *Mudah Belajar Mikrokontroler Arduino*. Bandung: Informatika Bandung.
- Yahya, R. (2019). *Pembangunan Smart Card Student dengan Teknologi NFC (Near Field Communication) di SMK ICB CT*. Bandung: Universitas Komputer Indonesia.

LAMPIRAN

Lampiran 1 Source Code pada Arduino IDE

```
#include <SPI.h>
#include <MFRC522.h>
#include <LiquidCrystal_I2C.h>

#include <ESP8266HTTPClient.h>
#include <ESP8266WiFi.h>

//Network SSID
const char* ssid = "Galaxy A313396";
const char* password = "qvvg7555";

//pengenalan host (server)
const char* host = "192.168.137.156";

//variabel untuk LCD dan IR
LiquidCrystal_I2C lcd(0x27, 16, 2);
int irPin1 = 16;
int irPin2 = 5;
int count = 0;
boolean state1 = true;
boolean state2 = true;
boolean insideState = false;
boolean outsideIr = false;
boolean isPeopleExiting = false;
int a=1;

//sediakan variabel untuk RFID
#define SDA1_PIN 15 //D8
#define SDA2_PIN 2 //D4
#define PIN_RST 0 //D3
#define LED 3
#define JML_READER 2

//array yang menampung pin SDA
byte PIN_SDA[] = {SDA1_PIN, SDA2_PIN} ;

//variabel untuk RFID
MFRC522 mfrc522[JML_READER] ;

unsigned long previousMillis_1 = 0;
unsigned long previousMillis_2 = 0;
const long interval = 100;

void setup() {
```

```

SPI.begin();
lcd.begin(16, 2);
lcd.init();
lcd.backlight();
lcd.setCursor(0,0);
lcd.print("Selamat Datang!");

Serial.begin(9600);
pinMode(irPin1, INPUT);
pinMode(irPin2, INPUT);
pinMode(LED, OUTPUT);
digitalWrite(LED, HIGH);

//setting koneksi wifi
WiFi.hostname("NodeMCU");
WiFi.begin(ssid, password);
//cek koneksi wifi
while (WiFi.status() != WL_CONNECTED){
    //progress sedang mencari wifi
    Serial.print(".");
    digitalWrite(LED, LOW);
    delay(100);
    digitalWrite(LED, HIGH);
    delay(100);}

digitalWrite(LED, HIGH);
Serial.println("Wifi Connected");
Serial.println("IP Address : ");
Serial.println(WiFi.localIP());

for(int reader=0; reader < JML_READER; reader++){
    mfrc522[reader].PCD_Init(PIN_SDA[reader], PIN_RST);
    lcd.clear();
    lcd.setCursor(0,0);
    lcd.print("Tap Kartu!");
    Serial.println("Dekatkan Kartu RFID Anda ke Reader");
    Serial.println();
}

void loop() {
    for(int reader=0; reader < JML_READER; reader++){
        digitalWrite(LED, LOW);
        if(mfrc522[reader].PICC_IsNewCardPresent() &&
mfrc522[reader].PICC_ReadCardSerial()){

            //sediakan sebuah variabel untuk menampung kode tag rfid
}
}
}

```

```

String IDTAG = "";
for(byte i=0; i < mfrc522[reader].uid.size; i++){
    IDTAG += mfrc522[reader].uid.uidByte[i];}

digitalWrite(LED, HIGH);
digitalWrite(LED, LOW);
Serial.println(IDTAG);

//kirim nomor kartu RFID untuk disimpan ke tabel tmprfid & tmprrfid
WiFiClient client;
const int httpPort = 80;
if(!client.connect(host, httpPort)){
    Serial.println("Connection Failed!");
    return; }

//uji reader
unsigned long currentMillis_1 = millis();
if (currentMillis_1 - previousMillis_1 >= interval){
    previousMillis_1 = currentMillis_1;

    if(reader==0){
        //terkirim ke link kartu masuk
        String Link;
        HTTPClient http;
        Link = "http://192.168.137.156/data-bus/kartumasuk.php?nomasuk=" +
IDTAG;
        http.begin(Link);
        int httpCode = http.GET();
        String payload = http.getString();
        Serial.println(payload);
        lcd.setCursor(0,0);
        lcd.print(payload);
        http.end();}
    }

unsigned long currentMillis_2 = millis();
if (currentMillis_2 - previousMillis_2 >= interval){
    previousMillis_2 = currentMillis_2;

    if(reader==1){
        //terkirim ke link kartu masuk
        String Link;
        HTTPClient http;
        Link = "http://192.168.137.156/data-bus/kartukeluar.php?nokartu=" +
IDTAG;
        http.begin(Link);
```

```
int httpCode = http.GET();
String payload = http.getString();
Serial.println(payload);
lcd.setCursor(0,0);
lcd.print(payload);
http.end();}
}

digitalWrite(LED, HIGH);

//halt PICC / istirahatkan
mfrc522[reader].PICC_HaltA();
//hentikan proses enkripsi
mfrc522[reader].PCD_StopCrypto1();
}

if (!digitalRead(irPin1) && a==1 && state1){
    outsideIr = true;
    a++;
    state1 = false;}

if (!digitalRead(irPin2) && a==2 && state2 && count <=31){
    //Serial.println("Masuk ruangan");
    outsideIr = true;
    a = 1;
    count++;
    Serial.print("Jumlah Penumpang di Bus: ");
    Serial.println(count);
    lcd.setCursor(0,1);
    lcd.print("Jmlh di Bus: ");
    lcd.setCursor(14,1);
    lcd.print(count);
    state2 = false; }

if (!digitalRead(irPin2) && a==1 && state2){
    outsideIr = true;
    a = 2;
    state2 = false; }

if (!digitalRead(irPin1) && a==2 && state1){
    if(count > 0){
        //Serial.println("Keluar ruangan");
        outsideIr = true;
        count--;
        Serial.print("Jumlah penumpang di Bus: ");
        Serial.println(count);}
```

```

lcd.setCursor(0,1);
lcd.print("Jmlh di Bus: ");
lcd.setCursor(14,1);
lcd.print(count);
lcd.print(" ");
a = 1;
state1 = false;}
}
if (digitalRead(irPin1)){
state1 = true;}
}

if (digitalRead(irPin2)){
state2 = true;}
}

```

Lampiran 2 Program Halaman Login

```

<?php
session_start();
if (isset($_SESSION['login'])){
header("Location: index.php");
exit; }

require 'koneksi.php';
if (isset($_POST['login'])){
$username = $_POST['username'];
$password = $_POST['password'];
$hasil = mysqli_query($koneksi, "select * from users where
username='$username'");
if (mysqli_num_rows($hasil) === 1){
$row = mysqli_fetch_assoc($hasil);
if (password_verify($password, $row['password'])){
$_SESSION['login'] = true;
header("Location: index.php");
exit; }
}
$error = true; }

<!DOCTYPE html>
<html>
<head>
<?php include "header.php"; ?>
<title>Halaman Login</title>
</head>
<body>

```

```
<?php if (isset($error)){
echo "
<script>
    alert('Username/Password Salah');
</script>";
}
?>
<div align="right" style="padding-top: 10px; padding-right: 12px">
<a href="keberangkatan.php">
<button style="align:right; background-color: #CC704B; border-color:white"
class="btn btn-primary">Cek Bus</button></a>
</div>

<div style="padding-top: 50px">
</div>
<div class ="container-fluid" align="center" style="padding-top: 30px;
background-color:#A2B38B; color: #525E75; width: 25%; min-width: 300px;
border-radius: 20px">
<h2>Login</h2>
<br>

<form method="POST">
    <div class="form-group">
        <label>Username :</label>
        <input type="text" name="username" id="username" class="form-control"
style="width: 200px" required="">
    </div>
    <div class="form-group">
        <label>Password :</label>
        <input type="password" name="password" id="password" class="form-
control" style="width: 200px" required="">
    </div>
    <br>
    <button class="btn btn-primary" style="background-color:#066163; border-
color:white" type="submit" name="login">Login</button>
    <input type="button" class="btn btn-primary" style="background-
color:#066163; border-color:white" value="Sign Up"
onclick="window.location.href='registrasi.php'" />
</form>
<br><br>
</div>
</body>
</html>
```

Lampiran 3 Program Halaman Registrasi

```

<?php
session_start();
if (isset($_SESSION['login'])){
    header("Location: login.php");
    exit;}

require 'koneksi.php';
if (isset($_POST['register'])){
    if(registrasi($_POST) > 0){
        echo "
        <script>
            alert('User baru berhasil ditambahkan.');
        </script>"}

    else{
        echo mysqli_error($koneksi);}
}
?>

<!DOCTYPE html>
<html>
<head>
    <?php include "header.php"; ?>
    <title>Halaman Registrasi</title>
</head>
<body>
    <div style="padding-top: 50px">
    </div>
    <div class = "container-fluid" align="center" style="padding-top: 30px;
background-color:#A2B38B; color: #525E75; width: 40%; min-width: 300px;
border-radius: 20px">
        <h1>Sign Up!</h1>
        <br><br>

        <form method="POST">
            <div class="form-group">
                <label>Username :</label>
                <input type="text" name="username" id="username" class="form-control"
style="width: 200px" required="">
            </div>
            <div class="form-group">
                <label>Password :</label>
                <input type="password" name="password" id="password" class="form-
control" style="width: 200px" required="">
            </div>
        </form>
    </div>
</body>
</html>

```

```

</div>
<div class="form-group">
    <label>Konfirmasi Password :</label>
    <input type="password" name="password2" id="password2" class="form-control" style="width: 200px" required="">
</div>
<br>
<button class="btn btn-primary" style="background-color:#066163; border-color:white" type="submit" name="register">Register</button>
<input type="button" class="btn btn-primary" style="background-color:#066163; border-color:white" value="Login"
onclick="window.location.href='login.php'" />

</form>
<br><br>
</div>
</body>
</html>

```

Lampiran 4 Program Halaman Index

```

<?php
session_start();
if(!isset($_SESSION['login'])){
    header("Location: login.php");
    exit;
?>

<!DOCTYPE html>
<html>
<head>
    <?php include "header.php"; ?>
    <title>Menu Utama</title>
</head>
<body>
    <?php include "menu.php"; ?>

    <!-- isi -->
    <div class="container-fluid" style="padding-top: 10%; text-align: center">
        <h1>
            Selamat Datang <br>
            SISTEM PENGHITUNG PENUMPANG BUS OTOMATIS <br>
        </h1>
    </div>

    <br><br>

```

```
<?php include "footer.php"; ?>
</body>
</html>
```

Lampiran 5 Program Halaman Kondisi Bus Terkini

```
<?php
session_start();
?>

<!DOCTYPE html>
<html>
<head>
<?php include "header.php"; ?>
<meta http-equiv="refresh" content="3">
<title>Cek Keberangkatan</title>

<!-- scanning membaca kartu RFID -->
<script type="text/javascript">
$(document).ready(function() {
    setInterval(function() {
        $("#cekawal").load('bacakartu.php'), 0);
    });
</script>
</head>
<style>
.depanbus{width: 420px; height: 30px; background: #843f36; margin-top: 10px;
margin-right: 10px; color: white; text-align: center;}
.box1-1{width: 50px; height: 50px; background: #B73E3E; margin-right: 10px;
color: white; text-align: center;}
.box1-2{width: 50px; height: 50px; background: #54B435; margin-right: 10px;
color: white; text-align: center;}
.circle{width: 70px; height: 70px; background: #ccc; margin-top: 10px; margin-left: 210px; border-radius: 50%; float: left; border: 8px solid #6a633e;}
</style>
<body>

<!-- isi -->
<div class="container-fluid" style="padding-top: 20px">
<a href="login.php" style="padding-left: 12px">back &#8594;</a>

<div id="cekawal"></div>
<h3>Kondisi Bus Terkini</h3>
<div style="display: inline-flex; ">
    <div class="depanbus">Depan Bus</div>
</div>
```

```

<br>
<div style="display: inline-flex; padding-left: 80px">
    <div class="circle"></div>
</div>
<br>
<br>
<table class="table table-bordered" style="width: 420px">

<?php
    error_reporting(0);
    include "koneksi.php";

    //baca tanggal saat ini
    date_default_timezone_set('Asia/Makassar');
    $tanggal = date('Y-m-d');

    $kolom = 4;
    $i = 1;

    $sql = mysqli_query($koneksi, "select a.letak, b.nokartu, b.keterangan,
        c.tanggal from counter c, berangkat b, kursipenumpang a where
        a.nokartu=b.nokartu and b.nokartu=c.nokartu order by a.letak");

    while($data = mysqli_fetch_array($sql)){
        if(($i) % $kolom==1){
            echo'<tr style="text-align: center">';
        }
        <td>
        <?php

            if($data['keterangan']==1){
                echo '<p class="box1-2">'.$data['letak'].'</p>';
            } else{
                echo '<p class="box1-1">'.$data['letak'].'</p>';
            }
        </td>
        <?php

            if((($i) % $kolom==0){
                echo '</tr>';
                $i++;
            }
        </table>
    </div>

<br><br>

```

```
<?php include "footer.php"; ?>

</body>
</html>
```

Lampiran 6 Program Halaman Data Bus

```
<?php
session_start();
if (!isset($_SESSION['login'])){
    header("Location: login.php");
    exit;}
?>

<!DOCTYPE html>
<html>
<head>
<?php include "header.php"; ?>
<title>Data Bus</title>
</head>
<body>

<?php include "menu.php"; ?>

<!-- isi -->
<div class="container-fluid">
<h3>Data Bus</h3>
<table class="table table-bordered" style="width: 25%">
<thead>
<tr style="background-color: #9FC088; color: white">
<th style="width: 10px; text-align: center">No.</th>
<th style="width: 200px; text-align: center">Daftar Bus</th>
</tr>
</thead>
<tbody>
<tr>
<td style="text-align: center">1.</td>
<td style="text-align: center">
<a href="datakursi.php">Bus O1</a>
</td>
</tr>
<tr>
<td style="text-align: center">2.</td>
<td style="text-align: center">
<a href="comingsoon.php">Bus O2</a>
</td>
</tr>
<tr>
```

```

<td style="text-align: center">3.</td>
<td style="text-align: center">
    <a href="comingsoon.php">Bus O3</a>
</tr>
</tbody>
</div>

<br><br>
<?php include "footer.php"; ?>

</body>
</html>

```

Lampiran 7 Program Halaman Data Kursi Bus

```

<?php
session_start();
if (!isset($_SESSION['login'])){
    header("Location: login.php");
    exit;
?>

<!DOCTYPE html>
<html>
<head>
    <?php include "header.php"; ?>
    <title>Data Kursi Bus</title>
</head>
<body>
    <?php include "menu.php"; ?>
    <a href="databus.php" style="padding-left: 12px">back &#8594;</a>
    <!-- isi -->
    <div class="container-fluid">
        <h3>Data Kursi Bus</h3>
        <table class="table table-bordered" style="width: 50%">
            <thead>
                <tr style="background-color: #9FC088; color: white">
                    <th style="width: 10px; text-align: center">No.</th>
                    <th style="width: 300px; text-align: center">No. Kartu</th>
                    <th style="width: 300px; text-align: center">Letak Kursi</th>
                    <th style="width: 200px; text-align: center">Aksi</th>
                </tr>
            </thead>
            <tbody>
                <?php

```

```

//koneksi ke database
include "koneksi.php";
//baca data penumpang
$sql = mysqli_query($koneksi, "select * from kursipenumpang order by
letak");
$no = 0;
while($data = mysqli_fetch_array($sql)){
    $no++;
?
|  |  |  |  | |
|---|---|---|---|---|
| > <?php echo $no; ?>. </td>  > <?php echo $data['nokartu']; ?> </td>  > <?php echo $data['letak']; ?> </td>  <a href="edit.php?id=<?php echo $data['id']; ?>">Edit</a> | <a href="hapus.php?id=<?php echo $data['id']; ?>" onclick="return confirm('Yakin menghapus data ini?')">Hapus</a> | | | |

</tr>
<?php } ?>
</tbody>
</table>

<!-- tombol tambah data karyawan --&gt;
&lt;a href="tambah.php"&gt; &lt;button class="btn btn-primary" style="background-
color:#614124; border-color:white"&gt;Tambah Data Kursi&lt;/button&gt;&lt;/a&gt;
&lt;/div&gt;

&lt;br&gt;&lt;br&gt;
&lt;?php include "footer.php"; ?&gt;

&lt;/body&gt;
&lt;/html&gt;
</pre>

```

Lampiran 8 Program Halaman Rekap Data Admin

```

<?php
session_start();
if (!isset($_SESSION['login'])){
    header("Location: login.php");
    exit;
?
<!DOCTYPE html>
<html>

```

```

<head>
<?php include "header.php"; ?>
<title>Rekapitulasi Penumpang Bus</title>
</head>
<body>

<?php include "menu.php"; ?>

<!-- isi -->
<div class="container-fluid">
<h3>Rekap Data Bus</h3>
<table class="table table-bordered" style="width: 25%">
<thead>
<tr style="background-color: #9FC088; color: white">
<th style="width: 10px; text-align: center">No.</th>
<th style="width: 200px; text-align: center">Daftar Bus</th>
</tr>
</thead>
<tbody>
<tr>
<td style="text-align: center">1.</td>
<td style="text-align: center">
<a href="counter.php">Bus O1</a>
</td>
</tr>
<tr>
<td style="text-align: center">2.</td>
<td style="text-align: center">
<a href="comingsoon.php">Bus O2</a>
</td>
</tr>
<tr>
<td style="text-align: center">3.</td>
<td style="text-align: center">
<a href="comingsoon.php">Bus O3</a>
</td>
</tr>
</tbody>
</div>

<br><br>
<?php include "footer.php"; ?>

</body>
</html>

```

Lampiran 9 Program Halaman Rekap Data Bus Terkini

<?php

```

session_start();
if (!isset($_SESSION['login'])){
    header("Location: login.php");
    exit;
?>

<!DOCTYPE html>
<html>
<head>
    <?php include "header.php"; ?>
    <meta http-equiv="refresh" content="5">
    <title>Rekapitulasi Terkini</title>

    <!-- scanning membaca kartu RDID -->
    <script type="text/javascript">
        $(document).ready(function(){
            setInterval(function(){
                $("#cekkartu").load('bacakartu.php'), 50);})
            </script>
    </head>
    <body>

        <?php include "menu.php"; ?>
        <a href="databus.php" style="padding-left: 12px">back &#8594;</a>
        <!-- isi -->
        <div class="container-fluid">
            <div id="cekkartu"></div>

            <h3>Rekap Data Penumpang Terkini</h3>
            <table class="table table-bordered" style="width: 75%">
                <thead>
                    <tr style="background-color: #9FC088; color: white">
                        <th style="width: 10px; text-align: center">No.</th>
                        <th style="width: 150px; text-align: center">Letak Kursi</th>
                        <th style="width: 250px; text-align: center">Tanggal</th>
                        <th style="width: 250px; text-align: center">Jam Masuk</th>
                        <th style="width: 200px; text-align: center;">Keterangan</th>
                    </tr>
                </thead>
                <tbody>
                    <?php
                        include "koneksi.php";
                        $hapus = mysqli_query($koneksi, "update counter set tanggal=null,
                        jam_masuk=null where timediff(now(), waktu) >= '08:00:00' ");
                    </tbody>
            </table>
        </div>
    </body>

```

```

date_default_timezone_set('Asia/Makassar');
$tanggal = date('Y-m-d');

$sql = mysqli_query($koneksi, "select b.id, b.tanggal, a.letak,
b.jam_masuk, b.keterangan from kursipenumpang a, counter b where
a.nokartu=b.nokartu order by a.letak");

$no = 0;
while($data = mysqli_fetch_array($sql)){
    $no++;

?>
<tr>
<td style="text-align: center"><?php echo $no; ?></td>
<td style="text-align: center"><?php echo $data['letak']; ?></td>
<td style="text-align: center"><?php echo $data['tanggal']; ?></td>
<td style="text-align: center"><?php echo $data['jam_masuk']; ?>
</td>
<td style="text-align: center">
<?php
if($data['keterangan']==1){
    echo '<p><a href="action.php?id='.$data['id'].'&keterangan=0">
Lunas</a></p>';}
else{
    echo '<p><a href="action.php?id='.$data['id'].'&keterangan=1">
Belum Bayar</a></p>';}
?
</td>
</tr>
<?php } ?>
</tbody>
</table>
</div>

<br><br><br>
<?php include "footer.php"; ?>

</body>
</html>

```

Lampiran 10 Program Halaman Coming Soon

```

<?php
session_start();
if (!isset($_SESSION['login'])){
header("Location: login.php");

```

```

    exit; }
?>

<!DOCTYPE html>
<html>
<head>
<?php include "header.php"; ?>
<title>Data Bus</title>
</head>
<body>

<?php include "menu.php"; ?>
<a href="databus.php" style="padding-left: 12px">back &#8594;</a>
<!-- isi -->
<div class="container-fluid" style="width:100%; text-align: center">
    <h1>Coming Soon</h1>
</div>

<br><br>
<?php include "footer.php"; ?>

</body>
</html>

```

Lampiran 11 Program Baca Kartu

```

<?php
error_reporting(0);
include "koneksi.php";

//baca tabel tmprrfid
$baca_kartu = mysqli_query($koneksi, "select * from tmprfid");
$data_kartu = mysqli_fetch_array($baca_kartu);
$nomasuk = $data_kartu['nomasuk'];
?>

<div class="container-fluid" style="text-align: center">
<?php

if($nomasuk==""){
}
else{
    $cari_kursi = mysqli_query($koneksi, "select * from counter where
nokartu='$nomasuk'");

    date_default_timezone_set('Asia/Makassar');
}

```

```

$tanggal = date('Y-m-d');
$jam = date('H:i:s');
$waktu = date('Y-m-d H:i:s');

$jumlah_kursi = mysqli_num_rows($cari_kursi);
if($jumlah_kursi!==0){
    mysqli_query($koneksi, "update counter set tanggal='$tanggal',
    jam_masuk='$jam', waktu='$waktu' where nokartu='$nomasuk'");

    $data=mysqli_query($koneksi, "select * from barangk where
    nokartu='$nomasuk'");

    if(mysqli_num_rows($data)!==0){
        mysqli_query($koneksi, "update barangk set keterangan=1 where
        nokartu='$nomasuk'");
    }
    //kosongkan tabel tmprfid
    mysqli_query($koneksi, "delete from tmprfid");
}
?>
</div>

```

Lampiran 12 Program Reader Masuk

```

<?php
error_reporting(0);
include "koneksi.php";

//baca nomor kartu dari NodeMCU
$nomasuk = $_GET['nomasuk'];
//kosongkan tabel tmprrfid
mysqli_query($koneksi, "delete from tmprfid");

//simpan nomor kartu yang baru ke tabel tmprfid
$simpan = mysqli_query($koneksi, "insert into tmprfid(nomasuk)
values('$nomasuk')");
if($simpan){
    $carikartu = mysqli_query($koneksi, "select * from tmprfid");
    $datakartu = mysqli_fetch_array($carikartu);
    $nomasuk = $datakartu['nomasuk'];

    $cari_kursi = mysqli_query($koneksi, "select letak from kursipenumpang where
    nokartu=$nomasuk");
    $datakursi = mysqli_fetch_array($cari_kursi);
    $letak = $datakursi['letak'];

    if(mysqli_num_rows($cari_kursi)) {

```

```
    echo "$letak Masuk!";}
else{
    echo "Tidak Terdaftar!";}
}
else
    echo "Gagal Masuk";
?>
```

Lampiran 13 Program Reader Keluar

```
<?php
error_reporting(0);
include "koneksi.php";

//baca nomor kartu dari NodeMCU
$nokartu = $_GET['nokartu'];
//kosongkan tabel tmprfid
mysqli_query($koneksi, "delete from tmprfid");

//simpan nomor kartu yang baru ke tabel tmprfid
$simpan = mysqli_query($koneksi, "insert into tmprfid(nokartu)
values('$nokartu')");
if($simpan){
    $carikartu = mysqli_query($koneksi, "select * from tmprfid");
    $datakartu = mysqli_fetch_array($carikartu);
    $nokartu = $datakartu['nokartu'];

    $cari_kursi = mysqli_query($koneksi, "select letak from kursipenumpang where
nokartu=$nokartu");
    $datakursi = mysqli_fetch_array($cari_kursi);
    $letak = $datakursi['letak'];

    if(mysqli_num_rows($cari_kursi)){
        echo "$letak Keluar!";

        $caridata = mysqli_query($koneksi, "select * from barangkat where
nokartu='$nokartu'");
        $data = mysqli_num_rows($caridata);
        if($data!==0){
            mysqli_query($koneksi, "update barangkat set keterangan='0' where
nokartu='$nokartu'");
        }
    }else{
        echo "Tidak Terdaftar!";
    }
}else
```

```
echo "Gagal Keluar";
?>
```

Lampiran 14 Program Update Kondisi Bus Terkini

```
<?php
error_reporting(0);
include "koneksi.php";

$nokartu = $_GET['nokartu'];

$hapus = mysqli_query($koneksi, "delete from berangkat where
nokartu='$nokartu'");

if($hapus){
    echo "
<script>
    alert('Terhapus');
    location.replace('keberangkatan.php');
</script>";}
else{
    echo "
<script>
    alert('Gagal Terhapus');
    location.replace('keberangkatan.php');
</script>";}
?>
```

Lampiran 15 Program Hapus Data

```
<?php
include "koneksi.php";

//baca id data yang akan dihapus
$id = $_GET['id'];

//hapus data
$hapus = mysqli_query($koneksi, "delete from kursipenumpang where id='$id'");

//jika berhasil terhapus tampilkan pesan Terhapus
//kemudian kembali ke data kursipenumpang
if($hapus){
    echo "
<script>
    alert('Terhapus');
    location.replace('datakursi.php');
```

```

</script>";}
else{
echo "
<script>
    alert('Gagal Terhapus');
    location.replace('datakursi.php');
</script>";}
?>

```

Lampiran 16 Program Edit Data

```

<!-- proses penyimpanan -->

<?php
error_reporting(0);
include "koneksi.php";

//baca ID data yang akan di edit
$id = $_GET['id'];
//baca data kursipenumpang berdasarkan id
$cari = mysqli_query($koneksi, "Select * from kursipenumpang where id='$id'");
$hasil = mysqli_fetch_array($cari);

//jika tombol simpan diklik
if(isset($_POST['btnSimpan'])){
//baca isi inputan form
$nokartu = $_POST['nokartu'];
$letak = $_POST['letak'];

$cekletak = mysqli_num_rows(mysqli_query($koneksi, "select letak from
kursipenumpang where letak='$letak'"));

if($cekletak >0){
echo"
<script>
    alert('Data tidak disimpan. Sudah ada data sebelumnya.');
    location.replace('datakursi.php');
</script>";}
else{
//simpan ke tabel kursipenumpang
$simpan = mysqli_query($koneksi, "update kursipenumpang set
nokartu='$nokartu', letak='$letak' where id='$id'");

//jika berhasil tersimpan, tampilkan pesan Tersimpan,
//kembali ke data penumpang
if($simpan){


```

```

echo "
<script>
    alert('Tersimpan');
    location.replace('datakursi.php');
</script>"}
else{
    echo "
<script>
    alert('Gagal Tersimpan');
    location.replace('datakursi.php');
</script>"}
}

?>

<!DOCTYPE html>
<html>
<head>
    <?php include "header.php"; ?>
    <title>Tambah Data Kursi</title>
</head>
<body>
    <?php include "menu.php"; ?>

    <!-- isi -->
    <div class="container-fluid">
        <h3>Tambah Data Kursi</h3>

        <!-- form input -->
        <form method="POST">
            <div class="form-group">
                <label>No. Kartu</label>
                <input type="text" name="nokartu" id="nokartu" placeholder="nomor kartu
RFID" class="form-control" style="width: 200px" value="<?php echo
$hasil['nokartu']; ?>">
            </div>
            <div class="form-group">
                <label>Letak Kursi</label>
                <input type="text" name="letak" id="letak" placeholder="letak kursi"
class="form-control" style="width: 200px" value="<?php echo
$hasil['letak']; ?>">
            </div>

            <a href="datakursi.php" class="btn btn-primary">Back</a>
            <button class="btn btn-primary" name="btnSimpan"
id="btnSimpan">Simpan</button>
        
```

```

</form>
</div>

<br><br>
<?php include "footer.php"; ?>
</body>
</html>

```

Lampiran 17 Program Baca Kartu Untuk Edit

```

<?php
    error_reporting(0);
    include "koneksi.php";
    //baca isi tabel tmprfid
    $sql = mysqli_query($konek, "select nokartu from tmprfid");
    $data = mysqli_fetch_array($sql);
    //baca nokartu
    $nokartu = $data['nokartu'];
?>
<div class="form-group">
    <label>No. Kartu</label>
    <input type="text" name="nokartu" id="nokartu" placeholder="Tempelkan kartu
    rfid Anda" class="form-control" style="width: 200px" value="<?php echo
    $nokartu; ?>">
</div>

```

Lampiran 18 Program Tambah Data

```

<!-- proses penyimpanan -->

<?php
    include "koneksi.php";

    //jika tombol simpan diklik
    if(isset($_POST['btnSimpan'])){
        //baca isi inputan form
        $nokartu = $_POST['nokartu'];
        $letak = $_POST['letak'];

        $cekkartu = mysqli_num_rows(mysqli_query($konek, "select nokartu from
        kursipenumpang where nokartu='$nokartu'"));

        if($cekkartu >0){
            echo"
            <script>
                alert('Kartu sudah terdaftar.');
            </script>
        
```

```

        location.replace('tambah.php');
    </script>";}
else {
    $cekletak = mysqli_num_rows(mysqli_query($koneksi, "select letak from
kursipenumpang where letak='$letak'"));

if($cekletak >0){
    echo"
<script>
    alert('Sudah ada data.');
    location.replace('tambah.php');
</script>"}
else{
    //simpan ke tabel kursipenumpang
    $simpan = mysqli_query($koneksi, "insert into kursipenumpang (nokartu,
letak) values('$nokartu', '$letak')");

    //jika berhasil tersimpan, tampilkan pesan Tersimpan,
    //kembali ke data karyawan
    if($simpan){
        echo "
<script>
    alert('Tersimpan');
    location.replace('datakursi.php');
</script>"}
    else{
        echo "
<script>
    alert('Gagal Tersimpan');
    location.replace('datakursi.php');
</script>"}
    }
}
}

//kosongkan tabel tmprfid
mysqli_query($koneksi, "delete from tmprfid");
?>

<!DOCTYPE html>
<html>
<head>
<?php include "header.php"; ?>
<title>Tambah Data Kursi</title>

```

```

<!-- pembacaan no kartu otomatis -->
<script type="text/javascript">
$(document).ready(function(){
    setInterval(function(){
        $("#norfid").load('nokartu.php'), 0);});
    </script>
</head>
<body>
<?php include "menu.php"; ?>

<!-- isi -->
<div class="container-fluid">
    <h3>Tambah Data Kursi</h3>

    <!-- form input -->
    <form method="POST">
        <div id="norfid"></div>
        <div class="form-group">
            <label>Letak Kursi</label>
            <input type="text" name="letak" id="letak" placeholder="letak kursi"
                   class="form-control" style="width: 200px">
        </div>

        <a href="datakursi.php" class="btn btn-primary">Back</a>
        <button class="btn btn-primary" name="btnSimpan"
               id="btnSimpan">Simpan</button>
    </form>
</div>

<br><br>
<?php include "footer.php"; ?>
</body>
</html>

```

Lampiran 19 Program Konfirmasi Pembayaran

```

<?php
    include "koneksi.php";
    $id = $_GET['id'];
    $keterangan = $_GET['keterangan'];
    $sql = "update counter set keterangan=$keterangan where id=$id";
    $update = mysqli_query($koneksi, $sql);
    if($update){
        echo "
        <script>
            alert('Pembayaran Terkonfirmasi!');"
    }

```

```

        location.replace('counter.php');
    </script>";}
else{
    echo "
<script>
    alert('Gagal Konfirmasi!');
    location.replace('counter.php');
</script>"}
?>
```

Lampiran 20 Program Koneksi Website

```

<?php
//urutan = server, userdb, passdb, namadb
$konek = mysqli_connect("localhost", "root", "", "databus");

function registrasi($data){
    global $konek;
    $username = strtolower(stripslashes($data['username']));
    $password = mysqli_real_escape_string($konek, $data['password']);
    $password2 = mysqli_real_escape_string($konek, $data['password2']);
    $result = mysqli_query($konek, "select username from users where
username='$username'");
    if (mysqli_fetch_assoc($result)){
        echo "
<script>
    alert('Username sudah terdaftar');
</script>";
        return false;
    }

    if ($password !== $password2){
        echo "
<script>
    alert('Konfirmasi password tidak sesuai');
</script>";
        return false;
    }

    $password = password_hash($password, PASSWORD_DEFAULT);
    mysqli_query($konek, "insert into users values('$username', '$password')");
    return mysqli_affected_rows($konek);
?>
```

Lampiran 21 Program Header Halaman

```
<meta charset="utf-8">
```

```
<meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
<link rel="stylesheet" type="text/css" href="css/bootstrap.min.css">
<script type="text/javascript" src="jquery/jquery.min.js"></script>
<script type="text/javascript" src="js/bootstrap.min.js"></script>
```

Lampiran 22 Program Menu Halaman

```
<nav class="navbar navbar-inverse" style="background-color: #525E75; border-color:#247881">
<div class="container-fluid" style="color: white">
<div class="navbar-header">
<a href="#" class="navbar-brand">DATA BUS</a>
</div>
<ul class="nav navbar-nav">
<li><a href="index.php"> HOME </a> </li>
<li><a href="databus.php"> Data Bus </a> </li>
<li><a href="rekapbus.php"> Rekapitulasi Penumpang Terkini </a> </li>
</ul>
</div>
</nav>
<div align="right" style="padding-right: 12px">
<a href="logout.php">
<button style="align:right; background-color: #CC704B; border-color:white" class="btn btn-primary">Log Out</button></a>
</div>
```

Lampiran 23 Program Footer Halaman

```
<div class="footer" style="width: 100%; height: 30px; display: flex; justify-content: center; align-items: center; background: #E4E9BE; font-size: 10px; position: fixed; bottom: 0px; z-index: 1">
Counter Penumpang Bus Otomatis
</div>
```

Lampiran 24 Program Logout

```
<?php
session_start();
unset($_SESSION['login']);
session_destroy();
header("Location: login.php");
?>
```

Lampiran 25 Pengeluaran Biaya 1 (Satu) Unit Alat Penghitung

Komponen	Harga	Jumlah	Total
<i>Project Box</i>	Rp11.500	1	Rp11.500
NodeMCU ESP8266	Rp40.000	1	Rp40.000
Sensor IR FC-51	Rp5.500	2	Rp11.000
MRFC522	Rp20.000	2	Rp40.000
<i>Smart Card</i>	Rp1.690	10	Rp16.900
LCD 16x2 I2C	Rp34.000	1	Rp34.000
LED	Rp600	1	Rp600
Jumper	Rp12.000	Secukupnya	Rp12.000
Breadboard	Rp9.700	2	Rp19.400
Biaya Total			Rp185.400