

DAFTAR PUSTAKA

- [1] I. Lee and K. Lee, “The Internet of Things (IoT): Applications, investments, and challenges for enterprises,” *Bus. Horiz.*, vol. 58, no. 4, pp. 431–440, 2015.
- [2] M. S. HADIS, “SISTEM PENGUNCIAN CERDAS PADA PINTU MEMANFAATKAN MAC ADDRESS DARI TEKNOLOGI BLUETOOTH SMART,” no. Agustus, p. 6, 2018.
- [3] R. Heriyanto and S. Riyadi, “APLIKASI SMART CARD e-KTP BERBASIS RFID UNTUK SISTEM KEAMANAN RUANGAN,” vol. 2, no. 2, 2017.
- [4] O. G. Chiagozie and N. G. Okarafor, “RADIO FREQUENCY IDENTIFICATION (RFID) BASED ATTENDANCE SYSTEM WITH AUTOMATIC DOOR UNIT,” vol. 2, no. 2, pp. 168–183, 2012.
- [5] S. Siswanto, M. Anif, D. N. Hayati, and Y. Yuhefizar, “Pengamanan Pintu Ruangan Menggunakan Arduino Mega 2560, MQ-2, DHT-11 Berbasis Android,” *J. RESTI (Rekayasa Sist. dan Teknol. Informasi)*, vol. 3, no. 1, pp. 66–72, 2019.
- [6] G. K. Verma and P. Tripathi, “A Digital Security System with Door Lock System Using RFID Technology,” *Int. J. Comput. Appl.*, vol. 5, no. 11, pp. 6–8, 2010.
- [7] O. K. Sulaiman and A. Widarma, “Sistem Internet Of Things (IoT) Berbasis Cloud Computing dalam Campus Area Network,” *ReseachGate*, no. April, pp. 9–12, 2017.

A. Amrullah, K. M. Lhaksana, and D. Adytia, “Pembangunan dan pengujian protokol MQTT & WebSocket untuk Aplikasi IoT Rumah Cerdas berbasis Android,” *e-Proceeding Eng.*, vol. 5, no. 2, pp. 3760–3769, 2018.



- [9] A. S. Gunarjati, “TEKNOLOGI IOT PADA MONITORING DAN OTOMASI KOLAM PEMBESARAN IKAN LELE BERBASIS MIKROKONTROLER,” *Univ. Islam Indones.*, vol. Vol 3, no, 2019.
- [10] G. G. ECY NATALIANA, IQBAL SYAMSU, “Sistem Monitoring Parkir Mobil menggunakan Sensor Infrared berbasis RASPBERRY PI,” *Inst. Teknol. Nas.*, vol. Vol 2, No, 2014.
- [11] D. WAHYUNI, “PERANCANGAN PROTOTYPE SMART PARKING SYSTEM SEBAGAI INFORMASI KETERSEDIAAN TEMPAT PARKIR BERBASIS ARDUINO MEGA 2560,” *Univ. Sriwij. INDRALAYA*, vol. 8, no. 5, p. 55, 2019.
- [12] W. Rankl and W. Effing, *Smart Card Handbook*. 2010.
- [13] D. Institut *et al.*, “Pengembangan dan Implementasi Smart Campus Berbasis Smart Card,” vol. 2, 2019.
- [14] M. R. Adithama and I. G. E. W. Putra, “Analisis Pembacaan dan Penulisan Data Buku Menggunakan RFID Mifare RC-522 untuk Perpustakaan,” *Politek. Negeri Denpasar*, pp. 23–34, 2019.
- [15] T. Santoso, “Naskah publikasi rancang bangun sistem pembayaran non tunai menggunakan rfid berbasis internet of things,” 2019.
- [16] M. A. C. Addres, “Sistem Cerdas Keamanan Ruangan Berbasis,” vol. 1, no. 1, pp. 132–136, 2018.
- [17] R. H. Suki, Nurussa’adah, and A. Zainuri, “IMPLEMENTASI RFID SEBAGAI PENGAMAN PADA SEPEDA MOTOR UNTUK MENGURANGI TINDAK PENCURIAN,” *J. Mhs. TEUB*, vol. 1, no. 7, pp. 1–5, 2014.

A, *Android Overview*, vol. 1908, no. January. 2011.

Sonita and R. F. Fardianitama, “Aplikasi E-Order Menggunakan Firebase



- Dan Algoritme Knuth,” *J. Pseudocode*, vol. 5, no. 2, pp. 38–45, 2018.
- [20] E. G. S. Nugroho, “APLIKASI MONITORING POSISI SMARTPHONE BERBASIS ANDROID,” 2018.
- [21] R. Karim and S. S. Sumendap, “Pentingnya Penggunaan Jaringan Wi-Fi Dalam Memenuhi Kebutuhan Informasi Pemustaka Pada Kantor Perpustakaan dan Kearsipan Daerah Kota Tidore Kepulauan,” vol. V, no. 2, 2016.
- [22] J. Oliver, “Analisis Quality of Service (QoS) Pada Jaringan Internet (Studi Kasus : Fakultas Kedokteran Universitas Tanjungpura,” *Hilos Tensados*, vol. 1, no., pp. 1–476, 2019.
- [23] R. K. Sitanggang, “Perancangan Instrument Miniatur Monitoring Arus Listrik PLN,” *Univ. Sumatera Utara*, vol. 2, pp. 1–23, 2015.
- [24] R. Kurniawar, “ANALISIS TINGKAT EFISIENSI DAYA DAN BIAYA PENGGUNAAN LISTRIK SEBELUM DAN SESUDAH MENGGUNAKAN INVERTOR PADA RUMAH TANGGA,” 2019.
- [25] F. Imansyah *et al.*, “Analisis Simulasi Pengaruh Uji Kuat Sinyal Wifi Dari Bahan-Bahan Obstacle,” *J. Teknol.*, vol. 2, no. 1, pp. 1–6, 2019.



LAMPIRAN



Lampiran I

Program Software Mikrokontroler

```
////////////////////////////////////  
////////////////////////////////////  
////////////////////////////////////  
////////////////////////////////////  
////////////////////////////////////  
//menghubungkan program dengan library diluar program saat di  
compile  
//mendefinisikan variable variable program  
  
#include <SPI.h>  
#include <MFRC522.h>  
#include <WiFi.h>  
#include "FirebaseESP32.h"  
#include <elapsedMillis.h>  
#include "time.h"  
#include <Wire.h>  
#include <LiquidCrystal_I2C.h>  
  
LiquidCrystal_I2C lcd(0x27,20,4);  
  
#define FIREBASE_HOST "https://access-room-cahya-default-  
rtbd.firebaseio.com/"  
#define FIREBASE_AUTH "fPSDZz21e7VRLiQz5DEgj4lcr5wQ3dKhhZqSEjQj"  
#define WIFI_SSID "oon-nee"  
#define WIFI_PASSWORD "lagal1g0"  
  
#define SS_PIN 5  
#define RST_PIN 4  
  
const char* ntpServer = "pool.ntp.org";  
const long gmtOffset_sec = 28800;  
const int daylightOffset_sec = 0;  
  
char test[3];  
char nilai[3];  
char copy [3];  
long cardId;  
char *sis;   
String nama;  
String waktu;  
  
int readDB;  
int readCard;  
int queue;  
int direct;  
int sign;  
int allowed;  
int timing;  
int idState;
```



```

int monitorC;

elapsedMillis timeElapseddrr;
elapsedMillis timeElapsedread;
elapsedMillis timeElapsedTimeR;
elapsedMillis timeElapsedreg;
elapsedMillis timeElapsedregcheck;

FirebaseData firebaseData;

MFRC522 mfrc522(SS_PIN, RST_PIN); // Create MFRC522 instance

////////////////////////////////////
////////////////////////////////////
////////////////////////////////////
////////////////////////////////////
////////////////////////////////////
//melakukan inisiasi sebelum program loop dieksekusi
//-menentukan peran I/O
//-menentukan kondisi kondisi awal I/O
//-melakukan inisiasi komunikasi serial
//-menghubungkan alat dengan wifi
//-menghubungkan alat dengan database
void setup() {

    Serial.begin(9600);
    SPI.begin();
    mfrc522.PCD_Init();

    pinMode(13, OUTPUT);
    pinMode(34, INPUT);
    pinMode(15, INPUT);

    digitalWrite(13, LOW);

    lcd.init();
    lcd.backlight();

    lcd.setCursor(0, 0);
    lcd.print("Pintu Terkunci");

    lcd.setCursor(0, 2);
    lcd.print("Stat: Connecting..");

    // lcd.setCursor(0, 3);
    // lcd.print("silahkan menghubungi admin");

    delay(1000);
    WiFi.begin(WIFI_SSID, WIFI_PASSWORD);
    while (WiFi.status() != WL_CONNECTED)

```



```

if(digitalRead(34) == HIGH || digitalRead(15) == LOW){
    digitalWrite(13, HIGH);

    Serial.println("kunci dibuka dari dalam/bypass");
    Serial.println("");

    delay(3000);
    Serial.println("pintu dikunci");
    Serial.println("");
    digitalWrite(13, LOW);
}
}

Serial.println();
Serial.print("Connected with IP: ");
Serial.println(WiFi.localIP());
Serial.println();

Firebase.begin(FIREBASE_HOST, FIREBASE_AUTH);

Serial.println("--------------------------------");
Serial.println("Connected...");

readDB = 1500;
readCard = 200;
lcd.clear();

lcd.setCursor(0, 0);
lcd.print("Pintu Terkunci");

lcd.setCursor(0, 2);
lcd.print("Stat: Connected!");

lcdState = 1;

configTime(gmtOffset_sec, daylightOffset_sec, ntpServer);
// Serial.println("silahkan scan atau buka lewat aplikasi");
}

////////////////////////////////////
////////////////////////////////////
////////////////////////////////////
////////////////////////////////////
////////////////////////////////////
//fungsi ini merupakan fungsi loop, yang akan selalu dieksekusi
selama alat berjalan. didalam fungsi ini akan dipanggil fungsi
selain seperti fungsi pembacaan kartu, penulisan, DLL.

loop() {
    lcdState != 1){

```



```

    lcd.clear();
}

    lcd.setCursor(0, 0);
    lcd.print("Pintu Terkunci");

    lcd.setCursor(0, 2);
    lcd.print("Stat: Connected!");

    if(timeElapsedTimeR > 6000){
        timePost();
        timeElapsedTimeR = 0;
    }

    lcdState = 1;
    timeElapsedreg = 0;

if (timeElapsedregcheck > 5000){
    Serial.println("mengecek kondisi penulisan");
    Serial.println("");
    monitorC = 0;
    Firebase.getInt(firebaseData, "/DLL/writeMode");
    writing = firebaseData.intData();
    while(writing == 1){

        if(monitorC != 1){
            Serial.println("alat dalam kondisi penulisan");
            Serial.println("");
            monitorC = 1;
        }

        if(digitalRead(34) == HIGH || digitalRead(15) == LOW){
            digitalWrite(13, HIGH);

            Serial.println("kunci dibuka dari dalam/bypass");
            Serial.println("");

            delay(3000);
            Serial.println("pintu dikunci");
            Serial.println("");
            digitalWrite(13, LOW);
        }
    }

    reg();
    if (timeElapsedreg > 5000){
        Firebase.getInt(firebaseData, "/DLL/writeMode");
        writing = firebaseData.intData();
        timeElapsedreg = 0;

        if(writing == 1){
            if(monitorC != 2){

```




```

Serial.println("alat tidak dalam kondisi penulisan");
Serial.println("");
monitorC = 2;
}
timeElapseddregcheck = 0;
}

if(digitalRead(34) == HIGH || digitalRead(15) == LOW){
    digitalWrite(13, HIGH);

    Serial.println("kunci dibuka dari dalam/bypass");
    Serial.println("");

    delay(3000);
    Serial.println("pintu dikunci");
    Serial.println("");
    digitalWrite(13, LOW);
}

    if(timeElapseddrr > readDB && queue == 0){

        Serial.println("memeriksa pembukaan aplikasi");
        Serial.println("");

        Firebase.getInt(firebaseData, "/Open/id");
        direct = firebaseData.intData();
        if(direct > 0){

            Serial.println("kunci dibuka melalui aplikasi");
            Serial.println("user ID: "+String(direct));
            Serial.println("");
            infoDB();
            queue = 1;
        }
        timeElapseddrr = 0;

        Serial.println("pemeriksaan selesai");
        Serial.println("");
    }

    if(timeElapseddread > readCard && queue == 0){

        Serial.println("memeriksa pembukaan kartu");
        Serial.println("");

        if ( mfrc522.PICC_IsNewCardPresent() ) {
            Serial.println("kartu terdeteksi");
            Serial.println("");

            lcd.clear();

            setCursor(0, 0);
            print("Pintu Terkunci");

```



```

lcd.setCursor(0, 2);
lcd.print("Stat: Memeriksa..");

scan();
infoDB();
queue = 1;
}

timeElapsedread = 0;

    Serial.println("pemeriksaan selesai");
    Serial.println("");
}

if (allowed != 1 && queue == 1){

    Serial.println("ID yang di scan / buka aplikasi tidak
terdaftar, atau di block oleh admin");
    Serial.println("");
lcd.clear();
    lcd.setCursor(0, 0);
    lcd.print("Pintu Terkunci");

    lcd.setCursor(0, 2);
    // lcd.clear();
    lcd.print("Tidak terdaftar/");

    lcd.setCursor(0, 3);
    // lcd.clear();
    lcd.print("diblock admin");

    delay(3000);

    queue = 0;
    allowed = 0;
    direct = 0;
    lcd.clear();

    lcd.setCursor(0, 0);
    lcd.print("Pintu Terkunci");

    lcd.setCursor(0, 2);
    lcd.print("Stat: Connected!");
}

if (allowed == 1 && queue == 1){

    Serial.println("ID yang di scan / buka aplikasi terdaftar
nama "+nama);
    Serial.println("");
}

```



```

Serial.println("membuka kunci pintu");
Serial.println("");
digitalWrite(13, HIGH);

lcd.clear();
lcd.setCursor(0, 0);
lcd.print("Kunci Terbuka");

lcd.setCursor(0, 1);
lcd.print("selamat datang ");

lcd.setCursor(0, 2);
lcd.print(nama+"!");

delay(3000);
Serial.println("mengunci kunci pintu");
digitalWrite(13, LOW);

lcd.clear();

lcd.setCursor(0, 0);
lcd.print("Pintu Terkunci");

lcd.setCursor(0, 2);
lcd.print("Stat: Connected!");

lcd.setCursor(0, 3);
lcd.print("menulis log..");

Serial.println("");

struct tm timeinfo;
getLocalTime(&timeinfo);
char timeStringBuff[50];
strftime(timeStringBuff, sizeof(timeStringBuff),
"%A, %B %d %Y %H:%M:%S", &timeinfo);

Serial.println("menulis log");
Serial.println("");

Firebase.getInt(firebaseData, "/DLL/lastLog");
logn = firebaseData.intData() + 1;

Firebase.setString(firebaseData,
"/Logs/"+String(logn)+"/nama", nama);
Firebase.setString(firebaseData,
"/Logs/"+String(logn)+"/waktu", timeStringBuff);
Firebase.setInt(firebaseData, "/DLL/lastLog", logn);
Firebase.setInt(firebaseData, "/Open/id", 0);

Serial.println("penulisan log selesai");
Serial.println("");

```



```

queue = 0;
allowed = 0;
direct = 0;

}

}

/////////////////////////////////////////////////////////////////
/////////////////////////////////////////////////////////////////
/////////////////////////////////////////////////////////////////
/////////////////////////////////////////////////////////////////
//fungsi yang akan dipanggil pada fungsi loop, yang berfungsi
untuk mengambil data pengguna dari database

void infoDB(){
    Firebase.getInt(firebaseData,
"/User/"+String(direct)+"/access");
    allowed = firebaseData.intData();

    Firebase.getString(firebaseData,
"/User/"+String(direct)+"/nama");
    nama = firebaseData.stringData();
}

/////////////////////////////////////////////////////////////////
/////////////////////////////////////////////////////////////////
/////////////////////////////////////////////////////////////////
/////////////////////////////////////////////////////////////////
//fungsi yang akan dipanggil pada fungsi loop, yang berfungsi
untuk melakukan pengambilan data waktu pada internet

void timePost(){
    struct tm timeinfo;
    getLocalTime(&timeinfo);
    char timeNow[50];
    strftime(timeNow, sizeof(timeNow), "%H:%M:%S", &timeinfo);
    lcd.setCursor(0, 3);
    lcd.print("Time: ");

    lcd.setCursor(6, 3);
    lcd.print(timeNow);

    if(WiFi.status() == WL_CONNECTED){

        lcd.setCursor(0, 2);
        lcd.print("Stat: Connected!");
    }

    (WiFi.status() != WL_CONNECTED){
        WiFi.begin(WIFI_SSID, WIFI_PASSWORD);
        lcd.clear();
        lcd.setCursor(0, 0);

```



```

        lcd.print("Pintu Terbuka");

        lcd.setCursor(0, 2);
        lcd.print("Stat: Connecting..");

    }
}

////////////////////////////////////
////////////////////////////////////
////////////////////////////////////
////////////////////////////////////
////////////////////////////////////
//fungsi yang akan dipanggil pada fungsi loop, yang berfungsi
untuk melakukan pembacaan ID kartu yang pada scanner, untuk
digunakan pada saat ingin membuka pintu

void scan(){

    MFRC522::MIFARE_Key key;
    for (byte i = 0; i < 6; i++) key.keyByte[i] = 0xFF;

    byte block;
    byte len;
    MFRC522::StatusCode status;

    if ( ! mfr522.PICC_ReadCardSerial() ) {
        return;
    }

    Serial.print(F("card UID:")); //Dump UID
    for (byte i = 0; i < mfr522.uid.size; i++) {
        Serial.print(mfr522.uid.uidByte[i] < 0x10 ? " 0" : " ");
        Serial.print(mfr522.uid.uidByte[i], HEX);
    }

    byte buffer2[300];
    block = 1;

    status =
mfr522.PCD_Authenticate(MFRC522::PICC_CMD_MF_AUTH_KEY_A, 1,
&key, &(mfr522.uid)); //line 834
    if (status != MFRC522::STATUS_OK) {
//    Serial.print(F("Authentication failed: "));
//    Serial.println
(mfr522.GetStatusCodeName(status));
        return;
    }

    status = mfr522.MIFARE_Read(block, buffer2, &len);
    if (status != MFRC522::STATUS_OK) {
        Serial.print(F("Reading failed: "));
        Serial.println
(mfr522.GetStatusCodeName(status));
    }
}

```



```

    return;
}

//PRINT LAST NAME
for (uint8_t i = 0; i < 4; i++) {
    test[i] = char(buffer2[i]);
    nilai[i] = test[i];
}
direct = strtol(nilai, &sisas, 10);

//Serial.print
("babi"+String(direct)+"anjing");

//-----

// Serial.println
(F("\n**End Reading**\n"));

mfrc522.PICC_HaltA();
mfrc522.PCD_StopCryptol();

Serial.println("");
Serial.println("user ID: "+String(direct));
Serial.println("");

}
////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
//fungsi yang akan dipanggil pada fungsi loop, yang berfungsi
untuk melakukan registrasi ID kartu pada database, dan juga
menulis ID kartu pada RFID

void reg(){
    Firebase.getInt(firebaseData, "/DLL/LastId");
    int idNew = firebaseData.intData() + 1;

    if (lcdState!= 9){

        lcd.clear();
    }

    //setCursor(0, 0);
    print("Pendaftaran");

    //setCursor(0, 1);
    print("Kartu Baru");

```



```

lcd.setCursor(0, 3);
lcd.print("ID Kartu :"+String(idNew));

lcdState = 9;

MFRC522::MIFARE_Key key;
for (byte i = 0; i < 6; i++) key.keyByte[i] = 0xFF;

if ( ! mfrc522.PICC_IsNewCardPresent() ) {
    return;
}

// Select one of the cards
if ( ! mfrc522.PICC_ReadCardSerial() ) {
    return;
}

Serial.println("kartu terdeteksi");
Serial.println("");

// Serial.print(F("Card UID:")); //Dump UID
for (byte i = 0; i < mfrc522.uid.size; i++) {
    // Serial.print(mfrc522.uid.uidByte[i] < 0x10 ? " 0" : " ");
    // Serial.print(mfrc522.uid.uidByte[i], HEX);
}
// Serial.print(F(" PICC type: ")); // Dump PICC type
MFRC522::PICC_Type piccType = MFRC522::PICC_GetType(mfrc522.uid.sak);
// Serial.println(mfrc522.PICC_GetTypeName(piccType));

byte buffer[34];
byte block;
MFRC522::StatusCode status;
byte len;

// Serial.setTimeout(20000L) ; // wait until 20 seconds for
input from serial
// Ask personal data: Family name

for (byte i=0; i<sizeof(String(idNew)); i++){
    buffer[i] = String(idNew)[i];
}
for (byte i = sizeof(String(idNew))-1; i < 30; i++) buffer[i]
= ' '; // pad with spaces

block = 1;
// Serial.println(F("Authenticating using key A..."));
MFRC522::PICC_PCD_Authenticate(MFRC522::PICC_CMD_MF_AUTH_KEY_A, block,
mfrc522.uid);
if (status != MFRC522::STATUS_OK) {

```



```

// Serial.print(F("PCD_Authenticate() failed: "));
// Serial.println(mfrc522.GetStatusCodeName(status));

    if (lcdState != 10){
        lcd.clear();
    }
    Serial.println("penulisan kartu gagal");
    Serial.println("");

    lcd.setCursor(0, 0);
    lcd.print("Pendaftaran");

    lcd.setCursor(0, 1);
    lcd.print("Kartu Baru");

    lcd.setCursor(0, 3);
    lcd.print("Menulis Gagal");
    lcdState = 10;
    return;
}
// else Serial.println(F("PCD_Authenticate() success: "));

// Write block
status = mfrc522.MIFARE_Write(block, buffer, 16);
if (status != MFRC522::STATUS_OK) {
// Serial.print(F("MIFARE_Write() failed: "));
// Serial.println(mfrc522.GetStatusCodeName(status));

    if (lcdState != 10){
        lcd.clear();
    }
    Serial.println("penulisan kartu gagal");
    Serial.println("");

    lcd.setCursor(0, 0);
    lcd.print("Pendaftaran");

    lcd.setCursor(0, 1);
    lcd.print("Kartu Baru");

    lcd.setCursor(0, 3);
    lcd.print("Menulis Gagal");
    lcdState = 10;
    return;
}
// else Serial.println(F("MIFARE_Write() success: "));

block = 2;
// Serial.println(F("Authenticating using key A..."));
// Serial.println("as");
// Serial.println(mfrc522.PCD_Authenticate(MFRC522::PICC_CMD_MF_AUTH_KEY_A, block,
// mfrc522.uid));
if (status != MFRC522::STATUS_OK) {

```




```

//      Serial.print(F("PCD_Authenticate() failed: "));
//      Serial.println(mfrc522.GetStatusCodeName(status));
    if (lcdState != 10){
        lcd.clear();
    }
    Serial.println("penulisan kartu gagal");
    Serial.println("");

    lcd.setCursor(0, 0);
    lcd.print("Pendaftaran");

    lcd.setCursor(0, 1);
    lcd.print("Kartu Baru");

    lcd.setCursor(0, 3);
    lcd.print("Menulis Gagal");
    lcdState = 10;
    return;
}

// Write block
status = mfrc522.MIFARE_Write(block, &buffer[16], 16);
if (status != MFRC522::STATUS_OK) {
//      Serial.print(F("MIFARE_Write() failed: "));
//      Serial.println(mfrc522.GetStatusCodeName(status));
    if (lcdState != 10){
        lcd.clear();
    }

    Serial.println("penulisan kartu gagal");
    Serial.println("");

    lcd.setCursor(0, 0);
    lcd.print("Pendaftaran");

    lcd.setCursor(0, 1);
    lcd.print("Kartu Baru");

    lcd.setCursor(0, 3);
    lcd.print("Menulis Gagal");
    lcdState = 10;
    return;
}
// else Serial.println(F("MIFARE_Write() success: "));

if (status == MFRC522::STATUS_OK) {

    if(lcdState != 11){
        lcd.clear();

        Serial.println("penulisan kartu sukses");
        Serial.println("");
    }
}

```



```

lcd.setCursor(0, 0);
lcd.print("Pendaftaran");

lcd.setCursor(0, 1);
lcd.print("Kartu Baru");

lcd.setCursor(0, 3);
lcd.print("Menulis Sukses");
lcdState = 11;

Firebase.setInt(firebaseData, "/DLL/writeMode", 0);
writing = 0;

}

mfr522.PICC_HaltA(); // Halt PICC
mfr522.PCD_StopCryptol(); // Stop encryption on PCD

}
////////////////////////////////////
////////////////////////////////////
////////////////////////////////////
////////////////////////////////////
////////////////////////////////////

```

LAMPIRAN 2

PROGRAM SOFTWARE APLIKASI ADMIN

1. SPALASH SCREEN ADMIN

```

package id.cahyarezky.appcahya.ui;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Context;
import android.content.Intent;
import android.content.SharedPreferences;
import android.os.Bundle;
import android.os.Handler;
import android.view.animation.Animation;
import android.view.animation.AnimationUtils;

```



```

import android.widget.ImageView;

import id.cahyarezky.appcahya.R;
import id.cahyarezky.appcahya.model.Logs;

public class SlashScreenActivity extends AppCompatActivity {

    private ImageView logo;
    Animation splash;

    public static Context contextOfApplication;
    private Integer ID_KEY = 0;
    private Integer id_key = 0;
    private Integer id_new;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_slash_screen);
        logo = findViewById(R.id.splash);
        splash = AnimationUtils.loadAnimation(this,R.anim.app_splash);
        logo.startAnimation(splash);

        Handler handler = new Handler();
        handler.postDelayed(new Runnable() {
            @Override
            public void run() {
                Intent splash = new Intent(SlashScreenActivity.this,
LoginAdminActivity.class);
                startActivity(splash);
                finish();
            }
        },7000);

```



```

    }
}

<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:background="@color/grey_10"
    android:layout_height="match_parent">

    <ImageView
        android:id="@+id/splash"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentStart="true"
        android:layout_alignParentTop="true"
        android:layout_alignParentEnd="true"
        android:layout_alignParentBottom="true"
        android:layout_marginTop="200dp"
        android:layout_marginBottom="200dp"
        android:fontFamily="@font/leaguespartanbold"
        android:gravity="center"
        android:src="@drawable/splash"
        android:textSize="50dp" />

</RelativeLayout>

```

2. REGISTER



```

id.cahyarezky.appcahya.ui;
androidx.annotation.NonNull;
androidx.appcompat.app.AppCompatActivity;

```

```

import android.app.Dialog;
import android.content.Intent;
import android.os.Bundle;
import android.os.Handler;
import android.view.View;
import android.widget.Button;
import android.widget.CompoundButton;
import android.widget.EditText;
import android.widget.Switch;
import android.widget.TextView;
import android.widget.Toast;

import com.google.firebase.database.DataSnapshot;
import com.google.firebase.database.DatabaseError;
import com.google.firebase.database.DatabaseReference;
import com.google.firebase.database.FirebaseDatabase;
import com.google.firebase.database.ValueEventListener;

import id.cahyarezky.appcahya.R;
import id.cahyarezky.appcahya.model.User;

public class RegisterUserActivity extends AppCompatActivity {
    public static final int REQUEST_UPDATE = 200;
    public static final int RESULT_UPDATE = 201;
    public static final int RESULT_ADD = 101 ;
    public static final int REQUEST_ADD = 100;
    public static final String EXTRA_DATA = "extra";
    public static final String EXTRA_ID = "ss";
    private TextView idregis;
    private EditText edt_name;
    private EditText edt_username;
    private EditText edt_password;
    private Button btn_daftar_kartu;
    private Button btn_dafatirkan_akun;
    private Switch aSwitch;
    Dialog myDialog;
    DatabaseReference reference,reference2;
    Integer idPendaftaran;
    private TextView sukses,title;
    boolean isEdit = false;
    private User Userdata;
    Intent intent;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_register_user);
        reference = FirebaseDatabase.getInstance().getReference("DLL");

```



```

edt_name = findViewById(R.id.edt_nama);
edt_password = findViewById(R.id.edt_password);
edt_username = findViewById(R.id.edt_username);
btn_daftar_kartu = findViewById(R.id.btn_daftar);
btn_dafatrkan_akun = findViewById(R.id.btn_daftarkan);
idregis = findViewById(R.id.idregis);
title = findViewById(R.id.title);
aSwitch = findViewById(R.id.switch1);
myDialog = new Dialog(this);

Userdata = getIntent().getParcelableExtra(EXTRA_DATA);
if (Userdata != null){
    isEdit = true;
    idregis.setText(String.valueOf(Userdata.getId()));
    aSwitch.setVisibility(View.VISIBLE);

//    edt_username.setEnabled(false);
//    edt_password.setEnabled(false);
//    edt_name.setEnabled(false);
    idPendaftaran = Userdata.getId();
} else {
    aSwitch.setVisibility(View.GONE);
    Userdata = new User();

reference.addListenerForSingleValueEvent(new ValueEventListener() {
    @Override
    public void onDataChange(@NonNull DataSnapshot dataSnapshot) {
        String id_from_db = dataSnapshot.child("LastId").getValue().toString();
        idPendaftaran = Integer.valueOf(id_from_db)+1;
        String St_pendaftaran = String.valueOf(idPendaftaran);
        idregis.setText(St_pendaftaran);
    }

    @Override
    public void onCancelled(@NonNull DatabaseError databaseError) {

    }
});
}
String actionBarTitle;
String btnTitle;
reference2 =
FirebaseDatabase.getInstance().getReference("User").child(String.valueOf(idPendaft
aran));
if(isEdit){

```

```

actionBarTitle = "Mengubah Data User";
btnTitle = "Update";
reference2.addListenerForSingleValueEvent(new ValueEventListener() {
    @Override

```



```

public void onDataChange(@NonNull dataSnapshot) {
    if (Integer.parseInt(dataSnapshot.child("access").getValue().toString())
== 1)
        aSwitch.setChecked(true);
    else {
        aSwitch.setChecked(false);
    }
}

@Override
public void onCancelled(@NonNull DatabaseError databaseError) {
}
});

edt_name.setText(Userdata.getNama());
edt_password.setText(Userdata.getPassword());
edt_username.setText(Userdata.getUsername());
}
else {
    actionBarTitle = "Daftar User";
    btnTitle = "Simpan";
}

title.setText(actionBarTitle);
btn_dafatirkan_akun.setText(btnTitle)
aSwitch.setOnCheckedChangeListener(new
CompoundButton.OnCheckedChangeListener() {
    @Override
    public void onCheckedChanged(CompoundButton buttonView, boolean
isChecked) {
        if (isChecked){
            reference2.addListenerForSingleValueEvent(new ValueEventListener() {
                @Override
                public void onDataChange(@NonNull dataSnapshot) {
                    dataSnapshot.getRef().child("access").setValue(1);
                }

                @Override
                public void onCancelled(@NonNull DatabaseError databaseError) {
                }
            });
        }
    }
});
}
else {
    reference2.addListenerForSingleValueEvent(new ValueEventListener() {
        @Override
        public void onDataChange(@NonNull dataSnapshot) {
            dataSnapshot.getRef().child("access").setValue(0);
        }
    });
}
}

```



```

    }

    @Override
    public void onCancelled(@NonNull DatabaseError databaseError) {

    }
    });
}
});

//datadata

btn_daftar_kartu.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        reference.addListenerForSingleValueEvent(new ValueEventListener() {
            @Override
            public void onDataChange(@NonNull DataSnapshot dataSnapshot) {
                dataSnapshot.getRef().child("writeMode").setValue(1);
            }

            @Override
            public void onCancelled(@NonNull DatabaseError databaseError) {

            }
        });
        showup(v);
    }
});

btn_dafatran_akun.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        final String name = edt_name.getText().toString().trim();
        final String username = edt_username.getText().toString().trim();
        final String password = edt_password.getText().toString().trim();

        intent = new Intent();
        // intent.putExtra(EXTRA_ID,Integer.parseInt(id_alatx));
        reference2 =
        FirebaseDatabase.getInstance().getReference("User").child(String.valueOf(idPendaft
        aran));
        if (isEdit){

            reference2.addListenerForSingleValueEvent(new ValueEventListener() {
                @Override

```




```

public void onDataChange(@NonNull DataSnapshot dataSnapshot) {
    dataSnapshot.getRef().child("id").setValue(idPendaftaran);
    dataSnapshot.getRef().child("nama").setValue(name);
    dataSnapshot.getRef().child("username").setValue(username);
    dataSnapshot.getRef().child("password").setValue(password);
}

@Override
public void onCancelled(@NonNull DatabaseError databaseError) {
}
});
setResult(RESULT_UPDATE,intent);
finish();
} else {
reference2.addListenerForSingleValueEvent(new ValueEventListener() {
    @Override
    public void onDataChange(@NonNull DataSnapshot dataSnapshot) {
        dataSnapshot.getRef().child("id").setValue(idPendaftaran);
        dataSnapshot.getRef().child("access").setValue(1);
        dataSnapshot.getRef().child("nama").setValue(name);
        dataSnapshot.getRef().child("username").setValue(username);
        dataSnapshot.getRef().child("password").setValue(password);
        reference.addListenerForSingleValueEvent(new
ValueEventListener() {
            @Override
            public void onDataChange(@NonNull DataSnapshot
dataSnapshot) {
dataSnapshot.getRef().child("LastId").setValue(idPendaftaran);
}
            @Override
            public void onCancelled(@NonNull DatabaseError databaseError)
{
}
        });
}
}

@Override
public void onCancelled(@NonNull DatabaseError databaseError) {
}
});
setResult(RESULT_ADD, intent);

```



```

        finish();
    }

    Toast.makeText(RegisterUserActivity.this, "Pendaftaran selesai",
Toast.LENGTH_SHORT).show();
    }
});

}

public void showup(View v){
    Button cancel;
    myDialog.setContent View(R.layout.layout_pop_up);
    cancel = myDialog.findViewById(R.id.btn_cancel);
    sukses = myDialog.findViewById(R.id.sukses);

    final Handler handler2 = new Handler();
    handler2.postDelayed(new Runnable() {
        @Override
        public void run() {
            Content();
        }
    },1000);

    cancel.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            reference.addListenerForSingleValueEvent(new ValueEventListener() {
                @Override
                public void onDataChange(@NonNull DataSnapshot dataSnapshot) {
                    dataSnapshot.getRef().child("writeMode").setValue(0);
                }

                @Override
                public void onCancelled(@NonNull DatabaseError databaseError) {

                }
            });
            myDialog.dismiss();
            handler.removeCallbacks(runnable);
        }
    });
});
Dialog.show();

```



```

public void Content(){
    reference.addListenerForSingleValueEvent(new ValueEventListener() {
        @Override
        public void onDataChange(@NonNull DataSnapshot dataSnapshot) {
            String mode = dataSnapshot.child("writeMode").getValue().toString();

            if (Integer.parseInt(mode) == 0){
                sukses.setText("Sukses Bro");
                myDialog.dismiss();
                handler.removeCallbacks(runnable);
                Toast.makeText(RegisterUserActivity.this, "Kartu Berhasi terdeteksi",
Toast.LENGTH_SHORT).show();
            }
            else {
                sukses.setText("Belum Terdaftar");
            }
        }

        @Override
        public void onCancelled(@NonNull DatabaseError databaseError) {

        }
    });

    reflash(1000);
}

private void reflash(int milisecond) {
    handler = new Handler();
    runnable = new Runnable() {
        @Override
        public void run() {
            Content();
        }
    };
    handler.postDelayed(runnable,milisecond);
}

@Override
protected void onStop() {
    super.onStop();
}

Handler handler;
Runnable runnable;

```



Optimization Software:
www.balesio.com

```

ersion="1.0" encoding="utf-8"?>
Layout xmlns:android="http://schemas.android.com/apk/res/android"
:tools="http://schemas.android.com/tools"

```

```

android:layout_width="match_parent"
android:layout_height="match_parent"
xmlns:app="http://schemas.android.com/apk/res-auto"
android:id="@+id/register"
android:background="@color/grey_5"
android:orientation="vertical">

<com.google.android.material.appbar.AppBarLayout
    android:id="@+id/appbar"
    android:background="@color/blue_500"
    android:layout_width="match_parent"
    android:layout_height="wrap_content">
    <androidx.appcompat.widget.Toolbar
        android:id="@+id/toolbar"
        android:layout_width="match_parent"
        android:theme="@style/ToolbarTheme"
        app:titleTextAppearance="@style/Toolbar.TitleText"
        android:layout_height="?attr/actionBarSize">
    </androidx.appcompat.widget.Toolbar>
</com.google.android.material.appbar.AppBarLayout>

<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_margin="18dp"
    android:padding="10dp"
    android:orientation="vertical">
    <TextView
        android:id="@+id/title"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:fontFamily="@font/mmedium"
        android:text="Create an Account"
        android:layout_gravity="center"
        android:layout_marginBottom="10dp"
        android:layout_marginEnd="10dp"
        android:textSize="18sp"
        android:textColor="@color/blue_500"
        android:textStyle="bold" />

    <com.google.android.material.textfield.TextInputLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:theme="@style/TextInputLayoutAppearance"
        android:outlineAmbientShadowColor="@color/blue_500"
        android:textColorHint="@color/blue_500"
        android:layout_marginBottom="5dp">

```

EditText



```

        android:layout_gravity="center"
        android:id="@+id/edt_username"
        android:layout_width="match_parent"
        android:layout_height="40dp"
        android:textSize="14sp"
        android:background="@drawable/bg_input_edit"
        android:textColorHint="@color/blue_500"
        android:fontFamily="@font/mmedium"
        android:hint="@string/username"
        android:inputType="textCapSentences"
        android:maxLines="1"
        android:paddingStart="10dp" />
</com.google.android.material.textfield.TextInputLayout>
<com.google.android.material.textfield.TextInputLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:theme="@style/TextInputLayoutAppearance"
    android:textColorHint="@color/blue_500"
    android:layout_marginBottom="5dp">
    <EditText
        android:paddingStart="10dp"
        android:id="@+id/edt_password"
        android:layout_width="match_parent"
        android:layout_height="40dp"
        android:textSize="14sp"
        android:fontFamily="@font/mmedium"
        android:background="@drawable/bg_input_edit"
        android:hint="@string/password"
        android:inputType="textCapSentences"
        android:maxLines="1" />
</com.google.android.material.textfield.TextInputLayout>

<com.google.android.material.textfield.TextInputLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:theme="@style/TextInputLayoutAppearance"
    android:textColorHint="@color/blue_500"
    android:layout_marginBottom="5dp">
    <EditText
        android:paddingStart="10dp"
        android:id="@+id/edt_nama"
        android:layout_width="match_parent"
        android:layout_height="40dp"
        android:textSize="14sp"
        android:fontFamily="@font/mmedium"
        android:background="@drawable/bg_input_edit"
        android:hint="@string/nama"
        android:inputType="textCapSentences"
        android:maxLines="1" />

```



```
</com.google.android.material.textfield.TextInputLayout>
```

```
<LinearLayout
```

```
    android:layout_width="match_parent"  
    android:layout_height="wrap_content"  
    android:background="@drawable/bg_input1"  
    android:orientation="horizontal"  
    android:weightSum="5">
```

```
    <TextView
```

```
        android:layout_width="0dp"  
        android:layout_weight="1"  
        android:layout_height="wrap_content"  
        android:text="ID : "  
        android:textAlignment="center"  
        android:textStyle="italic"  
        android:textSize="12dp"  
        android:fontFamily="@font/mmedium"  
        android:textColor="@color/blue_500"/>
```

```
    <TextView
```

```
        android:id="@+id/idregis"  
        android:layout_weight="4"  
        android:layout_width="0dp"  
        android:layout_height="wrap_content"  
        android:text="0"  
        android:textAlignment="center"  
        android:textStyle="italic"  
        android:textSize="12dp"  
        android:fontFamily="@font/mmedium"  
        android:textColor="@color/blue_500"/>
```

```
</LinearLayout>
```

```
<Switch
```

```
    android:id="@+id/switch1"  
    android:visibility="gone"  
    android:layout_width="match_parent"  
    android:layout_height="wrap_content"  
    android:fontFamily="@font/leaguespartanbold"  
    android:textColor="@color/blue_500"  
    android:text="Access" />
```

```
<TextView
```

```
    android:layout_width="match_parent"  
    android:layout_height="wrap_content"  
    android:text="@string/terms_of_service"  
    android:textAlignment="center"  
    android:textStyle="italic"
```



```

        android:textSize="12dp"
        android:fontFamily="@font/mmedium"
        android:textColor="@color/blue_500"/>
</LinearLayout>

<Button
    android:id="@+id/btn_daftar"
    android:textAllCaps="false"
    android:layout_marginEnd="24dp"
    android:layout_marginStart="24dp"
    android:layout_marginBottom="10dp"
    android:fontFamily="@font/mmedium"
    style="@style/Base.Widget.AppCompat.Button.Colored"
    android:layout_width="match_parent"
    android:background="@drawable/bg_btn_blue_primary"
    android:layout_height="40dp"
    android:textSize="14dp"
    android:textStyle="bold"
    android:text="@string/daftar" />

<Button
    android:id="@+id/btn_daftarkan"
    android:textAllCaps="false"
    android:layout_marginEnd="24dp"
    android:layout_marginStart="24dp"
    android:fontFamily="@font/mmedium"
    style="@style/Base.Widget.AppCompat.Button.Colored"
    android:layout_width="match_parent"
    android:background="@drawable/bg_btn_blue_primary"
    android:layout_height="40dp"
    android:textSize="14dp"
    android:textStyle="bold"
    android:text="Daftarkan Akun" />
</LinearLayout>

```

3. MONITORING

```

package id.cahyarezky.appcahya.ui;

import androidx.annotation.NonNull;
import androidx.appcompat.app.AppCompatActivity;
import androidx.recyclerview.widget.LinearLayoutManager;
import androidx.recyclerview.widget.RecyclerView;

import android.os.Bundle;
import android.view.View;
import android.widget.ProgressBar;
import android.widget.Toast;

```



```

import com.google.firebase.database.DataSnapshot;
import com.google.firebase.database.DatabaseError;
import com.google.firebase.database.DatabaseReference;
import com.google.firebase.database.FirebaseDatabase;
import com.google.firebase.database.ValueEventListener;

import java.util.ArrayList;
import java.util.List;

import id.cahyarezky.appcahya.utils.Common;
import id.cahyarezky.appcahya.utils.ItemAdapter;
import id.cahyarezky.appcahya.R;
import id.cahyarezky.appcahya.model.Logs;

public class MonitoringActivity extends AppCompatActivity {
    private RecyclerView rv;
    private ItemAdapter adapter;
    private DatabaseReference reference;
    private List<Logs> datasementara;
    private ProgressBar progressBar;
    LinearLayoutManager mLayoutManager;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_monitoring);
        progressBar = findViewById(R.id.progress_bar);
        rv = findViewById(R.id.rvItems);
        adapter = new ItemAdapter(getApplication());
        datasementara = new ArrayList<>();
        mLayoutManager = new LinearLayoutManager(this);
        mLayoutManager.setReverseLayout(true);
        mLayoutManager.setStackFromEnd(true);
        progressBar.setVisibility(View.VISIBLE);
        reference = FirebaseDatabase.getInstance().getReference(Common.LOGS);
        reference.addListenerForSingleValueEvent(new ValueEventListener() {
            @Override
            public void onDataChange(@NonNull DataSnapshot dataSnapshot) {
                for (DataSnapshot dataSnapshot1 : dataSnapshot.getChildren()){
                    Logs p = dataSnapshot1.getValue(Logs.class);
                    datasementara.add(p);
                    progressBar.setVisibility(View.GONE);
                    Toast.makeText(MonitoringActivity.this, "data tampil",
                    Toast.LENGTH_SHORT).show();
                }
            }
        });
        adapter.setData(datasementara);
        rv.setLayoutManager(mLayoutManager);
    }
}

```




```

        rv.setHasFixedSize(true);
        rv.setAdapter(adapter);
    }

    @Override
    public void onCancelled(@NonNull DatabaseError databaseError) {
        Toast.makeText(MonitoringActivity.this, "dsdssssssssds",
            Toast.LENGTH_SHORT).show();
        progressBar.setVisibility(View.GONE);
    }
});

}

}

<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:orientation="vertical"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".ui.MonitoringActivity">

    <com.google.android.material.appbar.AppBarLayout
        android:id="@+id/appbar"
        android:background="@color/blue_500"
        android:layout_width="match_parent"
        android:layout_height="wrap_content">
        <androidx.appcompat.widget.Toolbar
            android:id="@+id/toolbar"
            android:layout_width="match_parent"
            android:theme="@style/ToolbarTheme"
            app:titleTextAppearance="@style/Toolbar.TitleText"
            android:layout_height="?attr/actionBarSize">
        </androidx.appcompat.widget.Toolbar>
    </com.google.android.material.appbar.AppBarLayout>

    <androidx.recyclerview.widget.RecyclerView
        android:id="@+id/rvItems"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_below="@+id/appbar"
        android:layout_alignParentLeft="true"
        android:layout_alignParentRight="true"

```



```
android:layout_marginLeft="0dp"  
android:layout_marginTop="0dp"  
android:layout_toEndOf="@+id/appbar"  
android:nestedScrollingEnabled="true" />
```

<ProgressBar

```
android:id="@+id/progress_bar"  
style="?android:attr/progressBarStyle"  
android:layout_width="wrap_content"  
android:layout_height="wrap_content"  
android:layout_alignParentStart="true"  
android:layout_alignParentTop="true"  
android:layout_alignParentEnd="true"  
android:layout_alignParentBottom="true"  
android:layout_marginStart="188dp"  
android:layout_marginTop="354dp"  
android:layout_marginEnd="175dp"  
android:layout_marginBottom="329dp"  
android:visibility="gone"  
tools:visibility="visible" />
```

</RelativeLayout>

4. TAMPILAN MENU HOME

```
package id.cahyarezky.appcahya.ui;  
  
import androidx.annotation.Nullable;  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.LinearLayout;  
import android.widget.Toast;  
  
import id.cahyarezky.appcahya.R;  
  
public class MenuActivity extends AppCompatActivity {  
    LinearLayout btn_daftar_masuk, btn_daftar_user_baru, listUserTerdaftar;  
    @Override  
    protected void onCreate(Bundle savedInstanceState) {  
        super.onCreate(savedInstanceState);  
        setContentView(R.layout.activity_menu);  
  
        btn_daftar_masuk = findViewById(R.id.daftarMasuk);  
        btn_daftar_user_baru = findViewById(R.id.daftaruser);  
        listUserTerdaftar = findViewById(R.id.listUserTerdaftar);
```



```

btn_daftar_masuk.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        Intent intent = new Intent(MenuActivity.this, MonitoringActivity.class);
        startActivity(intent);
    }
});

btn_daftar_user_baru.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        Intent intent = new Intent(MenuActivity.this, RegisterUserActivity.class);
        startActivityForResult(intent, RegisterUserActivity.REQUEST_ADD);
    }
});

listUserTerdaftar.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        Intent intent = new Intent(MenuActivity.this, ListUserActivity.class);
        startActivity(intent);
    }
});

@Override
public void onActivityResult(int requestCode, int resultCode, @Nullable Intent
data) {
    super.onActivityResult(requestCode, resultCode, data);
    if (requestCode == RegisterUserActivity.REQUEST_ADD) {
        if (resultCode == RegisterUserActivity.RESULT_ADD) {
            // data();
            Toast.makeText(MenuActivity.this, "ADDED SUCCESSES",
Toast.LENGTH_SHORT).show();
        }
    }
}

<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:context=".ui.MenuActivity">
    google.android.material.appbar.AppBarLayout

```



```

android:id="@+id/appbar"
android:background="@color/blue_500"
android:layout_width="match_parent"
android:layout_height="wrap_content">
<androidx.appcompat.widget.Toolbar
    android:id="@+id/toolbar"
    android:layout_width="match_parent"
    android:layout_height="?attr/actionBarSize">
    <RelativeLayout
        android:layout_width="match_parent"
        android:layout_height="match_parent">
        <TextView
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_alignParentEnd="true"
            android:layout_centerVertical="true"
            android:layout_marginEnd="179dp"
            android:fontFamily="@font/mmedium"
            android:text=""
            android:textSize="16sp"
            android:textStyle="bold" />

        </RelativeLayout>
    </androidx.appcompat.widget.Toolbar>
</com.google.android.material.appbar.AppBarLayout>
<LinearLayout
    android:id="@+id/LL_menu_kategori"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginStart="16dp"
    android:layout_marginTop="60dp"
    android:layout_marginEnd="16dp"
    android:background="@drawable/bg_search"
    android:elevation="3dp"
    android:orientation="vertical"
    android:paddingStart="4dp"
    android:paddingTop="8dp"
    android:paddingEnd="4dp"
    android:paddingBottom="8dp"
    app:layout_constraintTop_toBottomOf="@+id/ly_view_pager">

    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:paddingStart="4dp"
        android:text="Menu"
        android:fontFamily="@font/leaguespartanbold"
        android:textColor="@color/grey_95"

```



```
android:textSize="14dp"  
android:textStyle="bold" />
```

```
<TextView
```

```
    android:fontFamily="@font/leaguespartanbold"  
    android:layout_width="match_parent"  
    android:layout_height="wrap_content"  
    android:paddingStart="4dp"  
    android:text="Fitur - Fitur Menu!"  
    android:textColor="@color/grey_80"  
    android:textSize="10dp"  
    android:textStyle="bold" />
```

```
<LinearLayout
```

```
    android:layout_width="match_parent"  
    android:layout_height="wrap_content"  
    android:orientation="horizontal"  
    android:paddingTop="10dp"  
    android:weightSum="3">
```

```
<LinearLayout
```

```
    android:id="@+id/daftarMasuk"  
    android:layout_width="0dp"  
    android:layout_height="wrap_content"  
    android:layout_weight="1"  
    android:gravity="center"  
    android:orientation="vertical">
```

```
<FrameLayout
```

```
    android:layout_width="90dp"  
    android:layout_height="90dp"  
    android:elevation="5dp"  
    android:background="@drawable/bg_circle_blue">
```

```
<ImageView
```

```
    android:layout_width="40dp"  
    android:layout_height="wrap_content"  
    android:layout_gravity="center"  
    android:src="@drawable/computer" />
```

```
</FrameLayout>
```

```
<TextView
```

```
    android:fontFamily="@font/leaguespartanbold"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_marginTop="4dp"  
    android:textAlignment="center"
```



```

        android:text="Daftar Orang Masuk"
        android:textColor="@color/grey_60"
        android:textSize="10sp" />
</LinearLayout>

<LinearLayout
    android:id="@+id/daftaruser"
    android:layout_width="0dp"
    android:layout_height="wrap_content"
    android:layout_weight="1"

    android:gravity="center"
    android:orientation="vertical">

    <FrameLayout
        android:elevation="5dp"
        android:layout_width="90dp"
        android:layout_height="90dp"
        android:background="@drawable/bg_circle_blue">

        <ImageView
            android:layout_width="30dp"
            android:layout_height="wrap_content"
            android:layout_gravity="center"
            android:src="@drawable/smartphone" />
    </FrameLayout>

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="4dp"
        android:fontFamily="@font/leaguespartanbold"
        android:text="Regitrasi User baru"
        android:textAlignment="center"
        android:textColor="@color/grey_60"
        android:textSize="10sp" />
</LinearLayout>

<LinearLayout
    android:id="@+id/listUserTerdaftar"
    android:layout_width="0dp"
    android:layout_height="wrap_content"
    android:layout_weight="1"
    android:gravity="center"
    android:orientation="vertical">

    <FrameLayout
        android:layout_width="90dp"

```



```

        android:layout_height="90dp"
        android:elevation="5dp"
        android:background="@drawable/bg_circle_blue">

        <ImageView
            android:layout_width="40dp"
            android:layout_height="wrap_content"
            android:layout_gravity="center"
            android:src="@drawable/ss" />
    </FrameLayout>

    <TextView
        android:fontFamily="@font/leaguespartanbold"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="4dp"
        android:textAlignment="center"
        android:text="List User Yang terdaftar"
        android:textColor="@color/grey_60"
        android:textSize="10sp" />
</LinearLayout>

</LinearLayout>

</LinearLayout>

</LinearLayout>

```

5. LOGIN

```

package id. cahyarezky.appcahya.ui;

import androidx.annotation.NonNull;
import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.ProgressBar;
import android.widget.Toast;

import com.google.firebase.database.DataSnapshot;
import com.google.firebase.database.DatabaseError;
import com.google.firebase.database.DatabaseReference;
import com.google.firebase.database.FirebaseDatabase;
import com.google.firebase.database.ValueEventListener;

```



```

import java.util.List;

import id.cahyarezky.appcahya.R;
import id.cahyarezky.appcahya.model.Admin;

public class LoginAdminActivity extends AppCompatActivity {
    private EditText edtusername,edtpassword;
    private Button btn_signin;
    private List<Admin> data;
    DatabaseReference reference;
    private ProgressBar progressBar;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_login_admin);
        edtusername = findViewById(R.id.usernameSighIn);
        edtpassword = findViewById(R.id.passwordSighIn);
        btn_signin = findViewById(R.id.btn_sing_in);
        progressBar = findViewById(R.id.progress_bar);

        btn_signin.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                final String username = edtusername.getText().toString().trim();
                final String password = edtpassword.getText().toString().trim();
                progressBar.setVisibility(View.VISIBLE);
                reference = FirebaseDatabase.getInstance().getReference("Admin");
                reference.addListenerForSingleValueEvent(new ValueEventListener() {
                    @Override
                    public void onDataChange(@NonNull DataSnapshot dataSnapshot) {
                        for (DataSnapshot dataSnapshot1 : dataSnapshot.getChildren()){
                            Admin p = dataSnapshot1.getValue(Admin.class);
                            if (p.getUsername().equals(username) &&
                                p.getPassword().equals(password)){
                                Intent intent = new Intent(LoginAdminActivity.this,
                                MenuActivity.class);
                                startActivity(intent);
                                Toast.makeText(LoginAdminActivity.this, "Success",
                                Toast.LENGTH_SHORT).show();
                                finish();
                                progressBar.setVisibility(View.GONE);
                            }
                        }
                    }
                    else {
                        Toast.makeText(LoginAdminActivity.this, "Login Gagal!!!!",
                        Toast.LENGTH_SHORT).show();
                        progressBar.setVisibility(View.GONE);
                    }
                }
            }
        });
    }
}

```




```

    }

    }

    @Override
    public void onCancelled(@NonNull DatabaseError databaseError) {

    }

    });

    }

    });

    }
}

```

```

<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:orientation="vertical"
    android:layout_height="match_parent">

```

```

    <com.google.android.material.appbar.AppBarLayout
        android:id="@+id/appbar"
        android:background="@color/blue_500"
        android:layout_width="match_parent"
        android:layout_height="wrap_content">
        <androidx.appcompat.widget.Toolbar
            android:id="@+id/toolbar"
            android:layout_width="match_parent"
            android:layout_height="?attr/actionBarSize">
            <RelativeLayout
                android:layout_width="match_parent"
                android:layout_height="match_parent">
                <TextView
                    android:layout_width="wrap_content"
                    android:layout_height="wrap_content"
                    android:layout_alignParentEnd="true"
                    android:layout_centerVertical="true"
                    android:layout_marginEnd="179dp"
                    android:fontFamily="@font/mmedium"
                    android:text="Sign In"
                    android:textSize="16sp"
                    android:textStyle="bold" />

```

```

    <TextView
        android:id="@+id/daftar"
        android:layout_width="wrap_content"

```



```

        android:layout_height="wrap_content"
        android:layout_centerVertical="true"
        android:layout_alignParentEnd="true"
        android:layout_marginEnd="21dp"
        android:fontFamily="@font/mmedium"
        android:text="Daftar"
        android:textSize="16sp"
        android:textStyle="bold" />
    </RelativeLayout>
</androidx.appcompat.widget.Toolbar>
</com.google.android.material.appbar.AppBarLayout>

<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginTop="50dp"
    android:layout_marginLeft="24dp"
    android:layout_marginRight="24dp"
    android:layout_marginBottom="24dp"
    android:orientation="vertical">

    <com.google.android.material.textfield.TextInputLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:theme="@style/TextInputLayoutAppearance"
        android:textColorHint="@color/blue_500"
        android:layout_marginBottom="5dp">

        <EditText
            android:layout_marginRight="3dp"
            android:layout_marginLeft="3dp"
            android:layout_marginTop="3dp"
            android:id="@+id/usernameSighIn"
            android:layout_width="match_parent"
            android:layout_height="40dp"
            android:layout_marginBottom="14dp"
            android:textSize="14sp"
            android:hint="Username"
            android:fontFamily="@font/mmedium"
            android:inputType="text"
            android:lines="1"
            android:paddingStart="12dp"
            android:textColor="@color/grey_95" />
    </com.google.android.material.textfield.TextInputLayout>

```

```

com.google.android.material.textfield.TextInputLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:theme="@style/TextInputLayoutAppearance"

```



```

        android:textColorHint="@color/blue_500"
        android:layout_marginBottom="5dp">
        <EditText
            android:layout_margin="3dp"
            android:id="@+id/passwordSignIn"
            android:layout_width="match_parent"
            android:layout_height="40dp"
            android:fontFamily="@font/mmedium"
            android:inputType="textPassword"
            android:hint="Password"
            android:textSize="14dp"
            android:lines="1"
            android:paddingLeft="12dp"
            android:textColor="@color/grey_95" />
    </com.google.android.material.textfield.TextInputLayout>
</LinearLayout>

<LinearLayout
    android:layout_width="match_parent"
    android:layout_marginEnd="60dp"
    android:layout_marginStart="70dp"
    android:layout_height="wrap_content"
    android:orientation="horizontal"
    android:weightSum="5">

    <Button
        android:id="@+id/btn_sign_in"
        android:layout_width="match_parent"
        android:layout_weight="4"
        android:layout_height="50dp"

        android:fontFamily="@font/mmedium"
        android:textStyle="bold"
        android:background="@drawable/bg_btn_blue_primary"
        android:text="log in"
        android:textAllCaps="false"
        android:textColor="#FFF"
        android:textSize="14sp" />

    <ProgressBar
        android:id="@+id/progress_bar"
        android:layout_weight="1"
        style="?android:attr/progressBarStyle"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:visibility="gone"
        tools:visibility="visible" />
</LinearLayout>

```



```
</LinearLayout>
```

6. LIST USER

```
package id.cahyarezky.appcahya.ui;

import androidx.annotation.NonNull;
import androidx.annotation.Nullable;
import androidx.appcompat.app.AppCompatActivity;
import androidx.recyclerview.widget.LinearLayoutManager;
import androidx.recyclerview.widget.RecyclerView;

import android.content.Intent;
import android.os.Bundle;
import android.os.Parcelable;
import android.view.View;
import android.widget.ProgressBar;
import android.widget.Toast;
import com.google.firebase.database.DataSnapshot;
import com.google.firebase.database.DatabaseError;
import com.google.firebase.database.DatabaseReference;
import com.google.firebase.database.FirebaseDatabase;
import com.google.firebase.database.ValueEventListener;

import java.util.ArrayList;
import java.util.List;

import id.ahmadshaadiq.appcahya.R;
import id.ahmadshaadiq.appcahya.model.Logs;
import id.ahmadshaadiq.appcahya.model.User;
import id.ahmadshaadiq.appcahya.utils.Common;
import id.ahmadshaadiq.appcahya.utils.ItemAdapter;
import id.ahmadshaadiq.appcahya.utils.UserAdapter;

public class ListUserActivity extends AppCompatActivity {
    private RecyclerView rvUser;
    private UserAdapter adapter;
    private List<User> datasementara;
    private ProgressBar progressBar;
    private DatabaseReference reference;
    private LinearLayoutManager mLayoutManager;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_list_user);
        rvUser = findViewById(R.id.rvUsers);
        adapter = new UserAdapter(this);
```



```

progressBar = findViewById(R.id.progress_bar);
datasementara = new ArrayList<>();
mLayoutManager = new LinearLayoutManager(this);
mLayoutManager.setReverseLayout(true);
mLayoutManager.setStackFromEnd(true);
progressBar.setVisibility(View.VISIBLE);
Data();
dataFB();
rvUser.setLayoutManager(mLayoutManager);
rvUser.setHasFixedSize(true);
rvUser.setAdapter(adapter);

}

public void Data() {

    adapter.setOnItemClickListener(new UserAdapter.OnItemClickListener() {
        @Override
        public void onItemClick(View v, User user) {
            Intent update = new Intent(ListUserActivity.this,
RegisterUserActivity.class);
            update.putExtra(RegisterUserActivity.EXTRA_DATA, (Parcelable) user);
            startActivityForResult(update, RegisterUserActivity.REQUEST_UPDATE);
        }

        @Override
        public void onDelete(View v, User user) {

        }
    });
}

@Override
protected void onActivityResult(int requestCode, int resultCode, @Nullable Intent
data) {
    super.onActivityResult(requestCode, resultCode, data);
    if (requestCode == RegisterUserActivity.REQUEST_UPDATE) {
        if (resultCode == RegisterUserActivity.RESULT_UPDATE) {
            int id = data.getIntExtra(RegisterUserActivity.EXTRA_ID, 0);
            dataFB();
            Toast.makeText(this, "DATA TERUPDATE",
Toast.LENGTH_SHORT).show();
        }
    }
}

```



```

reference = FirebaseDatabase.getInstance().getReference(Common.USER);
reference.addListenerForSingleValueEvent(new ValueEventListener() {
    @Override
    public void onDataChange(@NonNull DataSnapshot dataSnapshot) {
        for (DataSnapshot dataSnapshot1 : dataSnapshot.getChildren()) {
            User p = dataSnapshot1.getValue(User.class);
            datasegmentara.add(p);
            progressBar.setVisibility(View.GONE);
            Toast.makeText(ListUserActivity.this, "data tampil",
Toast.LENGTH_SHORT).show();
        }
        adapter.clear();
        adapter.addAll(datasegmentara);

    }

    @Override
    public void onCancelled(@NonNull DatabaseError databaseError) {
        Toast.makeText(ListUserActivity.this, "dssssssssssds",
Toast.LENGTH_SHORT).show();
        progressBar.setVisibility(View.GONE);
    }
});
}
}
}

```

```

<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:orientation="vertical"
    android:layout_width="match_parent"
    android:layout_height="match_parent">

    <com.google.android.material.appbar.AppBarLayout
        android:id="@+id/appbar"
        android:background="@color/blue_500"
        android:layout_width="match_parent"
        android:layout_height="wrap_content">
        <androidx.appcompat.widget.Toolbar
            android:id="@+id/toolbar"
            android:layout_width="match_parent"
            android:theme="@style/ToolbarTheme"
            app:titleTextAppearance="@style/Toolbar.TitleText"
            android:layout_height="?attr/actionBarSize">
            <androidx.appcompat.widget.Toolbar>
            </androidx.appcompat.widget.Toolbar>
        </com.google.android.material.appbar.AppBarLayout>

```



```

<androidx.recyclerview.widget.RecyclerView
    android:id="@+id/rvUsers"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_below="@+id/appbar"
    android:layout_alignParentLeft="true"
    android:layout_alignParentRight="true"
    android:layout_marginLeft="0dp"
    android:layout_marginTop="0dp"
    android:layout_toEndOf="@+id/appbar"
    android:nestedScrollingEnabled="true" />

<ProgressBar
    android:id="@+id/progress_bar"
    style="?android:attr/progressBarStyle"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentStart="true"
    android:layout_alignParentTop="true"
    android:layout_alignParentEnd="true"
    android:layout_alignParentBottom="true"
    android:layout_marginStart="188dp"
    android:layout_marginTop="354dp"
    android:layout_marginEnd="175dp"
    android:layout_marginBottom="329dp"
    android:visibility="gone"
    tools:visibility="visible" />

</RelativeLayout>

```

PROGRAM SOFTWARE APLIKASI USER

1. SPALASH SCREEN USER

```

package id.cahyarezky.userappcahya;

import android.content.Context;
import android.content.Intent;
import android.content.SharedPreferences;
import android.os.Bundle;
import android.os.Handler;
import android.view.animation.Animation;
import android.view.animation.AnimationUtils;
import android.widget.ImageView;
import android.widget.TextView;

import androidx.appcompat.app.AppCompatActivity;

```



```

public class SplashScreenAct extends AppCompatActivity {
    private ImageView logo;
    Animation splash;
    public static Context contextOfApplication;
    private Integer ID_KEY = 0;
    private Integer id_key = 0;
    private Integer id_new;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.splash_screen);
        getUserIdLocal();
        logo = findViewById(R.id.splash);
        splash = AnimationUtils.loadAnimation(this,R.anim.app_splash);
        logo.startAnimation(splash);

    }

    public void getUserIdLocal(){
        SharedPreferences sharedPreferences =
        getSharedPreferences(String.valueOf(ID_KEY),MODE_PRIVATE);
        id_new = sharedPreferences.getInt(String.valueOf(id_key),0);

        if (id_new == 0){
            Handler handler = new Handler();
            handler.postDelayed(new Runnable() {
                @Override
                public void run() {
                    Intent splash = new Intent(SplashScreenAct.this, MainActivity.class);
                    startActivity(splash);
                    finish();
                }
            },7000);
        }
        else {
            Handler handler = new Handler();
            handler.postDelayed(new Runnable() {
                @Override
                public void run() {
                    Intent splash = new Intent(SplashScreenAct.this, MenuActivity.class);
                    startActivity(splash);
                    finish();
                }
            },7000);
        }
    }
}

```




```

}

<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout
xmlns:android="http://schemas.android.com/apk/res/android"
xmlns:app="http://schemas.android.com/apk/res-auto"
xmlns:tools="http://schemas.android.com/tools"
android:layout_width="match_parent"
android:background="@color/grey_10"
android:layout_height="match_parent">

    <ImageView
        android:id="@+id/splash"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentStart="true"
        android:layout_alignParentTop="true"
        android:layout_alignParentEnd="true"
        android:layout_alignParentBottom="true"
        android:layout_marginTop="200dp"
        android:layout_marginBottom="200dp"
        android:fontFamily="@font/leaguespartanbold"
        android:gravity="center"
        android:src="@drawable/splash"
        android:textSize="50dp" />

</RelativeLayout>

```

2. LOGIN

```

package id.cahyarezky.userappcahya;

import androidx.annotation.NonNull;
import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
import android.content.SharedPreferences;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.ProgressBar;
import android.widget.Toast;

import com.google.firebase.database.DataSnapshot;
import com.google.firebase.database.DatabaseError;
import com.google.firebase.database.DatabaseReference;
import com.google.firebase.database.FirebaseDatabase;

```



```

import com.google.firebase.database.ValueEventListener;

import java.util.List;

import id.cahyarezky.userappcahya.model.User;

public class MainActivity extends AppCompatActivity {
    private EditText edtusername,edtpassword;
    private Button btn_signin;
    private List<User> data;
    DatabaseReference reference;
    private ProgressBar progressBar;
    private Integer ID_KEY = 0;
    private Integer id_key = 0;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        edtusername = findViewById(R.id.usernameSighIn);
        edtpassword = findViewById(R.id.passwordSighIn);
        btn_signin = findViewById(R.id.btn_sing_in);
        progressBar = findViewById(R.id.progress_bar);

        btn_signin.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                final String username = edtusername.getText().toString().trim();
                final String password = edtpassword.getText().toString().trim();
                progressBar.setVisibility(View.VISIBLE);
                reference = FirebaseDatabase.getInstance().getReference("User");
                reference.addListenerForSingleValueEvent(new ValueEventListener() {
                    @Override
                    public void onDataChange(@NonNull DataSnapshot dataSnapshot) {
                        for (DataSnapshot dataSnapshot1 : dataSnapshot.getChildren()){
                            User p = dataSnapshot1.getValue(User.class);
                            if (p.getUsername().equals(username) &&
                                p.getPassword().equals(password)){
                                SharedPreferences sharedPreferences =
                                getSharedPreferences(String.valueOf(ID_KEY),MODE_PRIVATE);
                                SharedPreferences.Editor editor = sharedPreferences.edit();
                                editor.putInt(String.valueOf(id_key),p.getId());
                                editor.apply();
                                Intent intent = new Intent(MainActivity.this, MenuActivity.class);
                                startActivity(intent);
                                Toast.makeText(MainActivity.this, "Success",
                                Toast.LENGTH_SHORT).show();
                                finish();
                                progressBar.setVisibility(View.GONE);

```




```

        android:fontFamily="@font/mmedium"
        android:text="User Application"
        android:textSize="16sp"
        android:textColor="@color/grey_5"
        android:textStyle="bold" />

<TextView
    android:id="@+id/daftar"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_centerVertical="true"
    android:layout_alignParentEnd="true"
    android:layout_marginEnd="21dp"
    android:fontFamily="@font/mmedium"
    android:text="Welcome!!"
    android:textColor="@color/grey_5"
    android:textSize="16sp"
    android:textStyle="bold" />
</RelativeLayout>
</androidx.appcompat.widget.Toolbar>
</com.google.android.material.appbar.AppBarLayout>

<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:layout_marginTop="50dp"
    android:layout_marginLeft="24dp"
    android:layout_marginRight="24dp"
    android:layout_marginBottom="24dp"
    android:orientation="vertical">

    <com.google.android.material.textfield.TextInputLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:theme="@style/TextInputLayoutAppearance"
        android:textColorHint="@color/grey_1000"
        android:layout_marginBottom="5dp">

        <EditText
            android:layout_marginRight="3dp"
            android:layout_marginLeft="3dp"
            android:layout_marginTop="3dp"
            android:id="@+id/usernameSighIn"
            android:layout_width="match_parent"
            android:layout_height="40dp"
            android:layout_marginBottom="14dp"
            android:textSize="14sp"
            android:hint="Username"
            android:fontFamily="@font/mmedium"

```



```

        android:inputType="text"
        android:lines="1"
        android:paddingStart="12dp"
        android:textColor="@color/grey_1000" />
</com.google.android.material.textfield.TextInputLayout>

<com.google.android.material.textfield.TextInputLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:theme="@style/TextInputLayoutAppearance"
    android:textColorHint="@color/grey_1000"
    android:layout_marginBottom="5dp">
    <EditText
        android:layout_margin="3dp"
        android:id="@+id/passwordSighIn"
        android:layout_width="match_parent"
        android:layout_height="40dp"
        android:fontFamily="@font/mmedium"
        android:inputType="textPassword"
        android:hint="Password"
        android:textSize="14dp"
        android:lines="1"
        android:paddingLeft="12dp"
        android:textColor="@color/grey_1000" />
    </com.google.android.material.textfield.TextInputLayout>
</LinearLayout>

<LinearLayout
    android:layout_width="match_parent"
    android:layout_marginEnd="60dp"
    android:layout_marginStart="70dp"
    android:layout_height="wrap_content"
    android:orientation="horizontal"
    android:weightSum="5">

    <Button
        android:id="@+id/btn_sing_in"
        android:layout_width="match_parent"
        android:layout_weight="4"
        android:layout_height="50dp"

        android:fontFamily="@font/mmedium"
        android:textStyle="bold"
        android:background="@drawable/bg_btn_blue_primary"
        android:text="log in"
        android:textAllCaps="false"
        android:textColor="#FFF"
        android:textSize="14sp" />
    </ProgressBar

```



```

        android:id="@+id/progress_bar"
        android:layout_weight="1"
        style="?android:attr/progressBarStyle"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:visibility="gone"
        tools:visibility="visible" />
    </LinearLayout>
</LinearLayout>

```

3. Open Door & Log Out

```

package id.cahyarezky.userappcahya;

import androidx.annotation.NonNull;
import androidx.appcompat.app.AlertDialog;
import androidx.appcompat.app.AppCompatActivity;

import android.content.DialogInterface;
import android.content.Intent;
import android.content.SharedPreferences;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.Switch;
import android.widget.TextView;
import android.widget.Toast;

import com.google.firebase.database.DataSnapshot;
import com.google.firebase.database.DatabaseError;
import com.google.firebase.database.DatabaseReference;
import com.google.firebase.database.FirebaseDatabase;
import com.google.firebase.database.ValueEventListener;

public class MenuActivity extends AppCompatActivity {
    private TextView btn_log_out,nama_selamat,nama_akun;
    private Button btn_open_door;
    private Integer ID_KEY = 0;
    private Integer id_key = 0;
    private Integer id_new;
    private DatabaseReference reference,reference2;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_menu);
        reference = FirebaseDatabase.getInstance().getReference("Open");
        btn_open_door = findViewById(R.id.button);
    }
}

```



```

btn_log_out = findViewById(R.id.Log_out);
nama_akun = findViewById(R.id.nama_akun);
nama_selamat = findViewById(R.id.nama_selamat);
getUseridlocal();
Toast.makeText(this, String.valueOf(id_new), Toast.LENGTH_SHORT).show();
reference2 =
FirebaseDatabase.getInstance().getReference("User").child(String.valueOf(id_new));
reference2.addListenerForSingleValueEvent(new ValueEventListener() {
    @Override
    public void onDataChange(@NonNull DataSnapshot dataSnapshot) {
        nama_akun.setText(dataSnapshot.child("nama").getValue().toString());
        nama_selamat.setText(dataSnapshot.child("nama").getValue().toString() +
"!!!!");
    }

    @Override
    public void onCancelled(@NonNull DatabaseError databaseError) {

    }
});

btn_log_out.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        AlertDialog.Builder alert = new AlertDialog.Builder(v.getContext());
        alert.setMessage("Are you sure to Update this data");
        alert.setPositiveButton("Yes", new DialogInterface.OnClickListener() {
            @Override
            public void onClick(DialogInterface dialog, int which) {
                SharedPreferences sharedPreferences =
getSharedPreferences(String.valueOf(ID_KEY),MODE_PRIVATE);
                SharedPreferences.Editor editor = sharedPreferences.edit();
                editor.putInt(String.valueOf(id_key),0);
                editor.apply();
                Toast.makeText(MenuActivity.this, "Logout",
Toast.LENGTH_SHORT).show();
                Intent intent = new Intent(MenuActivity.this, MainActivity.class);
                startActivity(intent);
                finish();
            }
        });
        alert.setNegativeButton("No", new DialogInterface.OnClickListener() {
            @Override
            public void onClick(DialogInterface dialog, int which) {
                dialog.cancel();
            }
        });
    }
});

```



```

        AlertDialog alertDialog = alert.create();
        alertDialog.show();

    }
});
btn_open_door.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        reference.addListenerForSingleValueEvent(new ValueEventListener() {
            @Override
            public void onDataChange(@NonNull DataSnapshot dataSnapshot) {
                dataSnapshot.getRef().child("id").setValue(id_new);
            }

            @Override
            public void onCancelled(@NonNull DatabaseError databaseError) {

            }
        });
    }
});

}

public void getUserIdlocal(){
    SharedPreferences sharedPreferences =
    getSharedPreferences(String.valueOf(ID_KEY),MODE_PRIVATE);
    id_new = sharedPreferences.getInt(String.valueOf(id_key),0);
}
}

<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:orientation="vertical"
    android:layout_height="match_parent"
    tools:context=".MenuActivity">
    <com.google.android.material.appbar.AppBarLayout
        android:id="@+id/appbar"
        android:background="@color/blue_500"
        android:layout_width="match_parent"
        android:layout_height="wrap_content">
        <androidx.appcompat.widget.Toolbar
            android:id="@+id/toolbar"
            android:layout_width="match_parent"
            android:layout_height="?attr/actionBarSize">
            RelativeLayout

```




```

        android:layout_width="match_parent"
        android:layout_height="match_parent">
        <TextView
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_alignParentEnd="true"
            android:layout_centerVertical="true"
            android:layout_marginEnd="179dp"
            android:fontFamily="@font/mmedium"
            android:text="User Application"
            android:textSize="16sp"
            android:textColor="@color/grey_5"
            android:textStyle="bold" />

        <TextView
            android:padding="5dp"
            android:id="@+id/Log_out"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_centerVertical="true"
            android:layout_alignParentEnd="true"
            android:layout_marginEnd="21dp"
            android:fontFamily="@font/mmedium"
            android:text="Log Out"
            android:background="@color/blue_300"
            android:textColor="@color/grey_5"
            android:textSize="16sp"
            android:textStyle="bold" />
    </RelativeLayout>
</androidx.appcompat.widget.Toolbar>
</com.google.android.material.appbar.AppBarLayout>
<LinearLayout
    android:orientation="vertical"
    android:layout_marginStart="20dp"
    android:layout_marginEnd="20dp"
    android:layout_marginTop="30dp"
    android:layout_width="match_parent"
    android:layout_height="wrap_content">
    <TextView
        android:layout_gravity="center_horizontal"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_alignParentEnd="true"
        android:layout_centerVertical="true"
        android:textAlignment="center"
        android:fontFamily="@font/mmedium"
        android:text="Selamat Datang "

```



```

        android:textSize="40sp"
        android:textColor="@color/grey_1000"
        android:textStyle="bold" />
<TextView
    android:layout_marginBottom="200dp"
    android:id="@+id/nama_selamat"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:textAlignment="center"
    android:fontFamily="@font/mmedium"
    android:text=""
    android:textSize="20sp"
    android:textColor="@color/blue_500"
    android:textStyle="bold" />

<Button
    android:layout_marginTop="20dp"
    android:id="@+id/button"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="Open Door"
    android:background="@drawable/bg_btn_blue_primary"
    android:textAllCaps="false"
    android:textSize="20dp"
    android:fontFamily="@font/leaguespartanbold"
    android:textColor="@color/grey_5"
/>

<LinearLayout
    android:layout_marginTop="20dp"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal"
    android:weightSum="5">
    <ImageView
        android:layout_width="0dp"
        android:layout_height="30dp"
        android:layout_weight="0.5"
        android:src="@drawable/ic_baseline_account_circle_24"/>

    <TextView
        android:id="@+id/nama_akun"
        android:layout_width="0dp"
        android:gravity="center_vertical"
        android:layout_weight="4.5"
        android:layout_height="match_parent"
        android:fontFamily="@font/mmedium"

```



```
        android:text=""  
        android:textSize="14sp"  
        android:textColor="@color/grey_1000"  
        android:textStyle="bold" />  
    </LinearLayout>  
</LinearLayout>  
  
</LinearLayout>
```

