**Nama : Bayu Prasetya Adji Sugiyarto**

**NIM : A11.2019.11688**

**Pertemuan : 7**

**Kelompok : A11.4304**

**HelloSharedPrefs**

**Text

Description automatically generated with low confidence**

**String.xml**

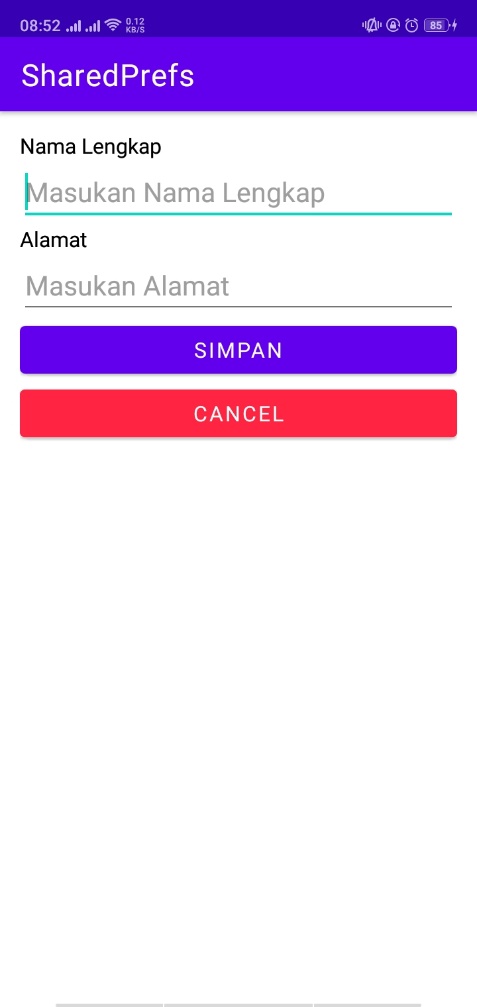
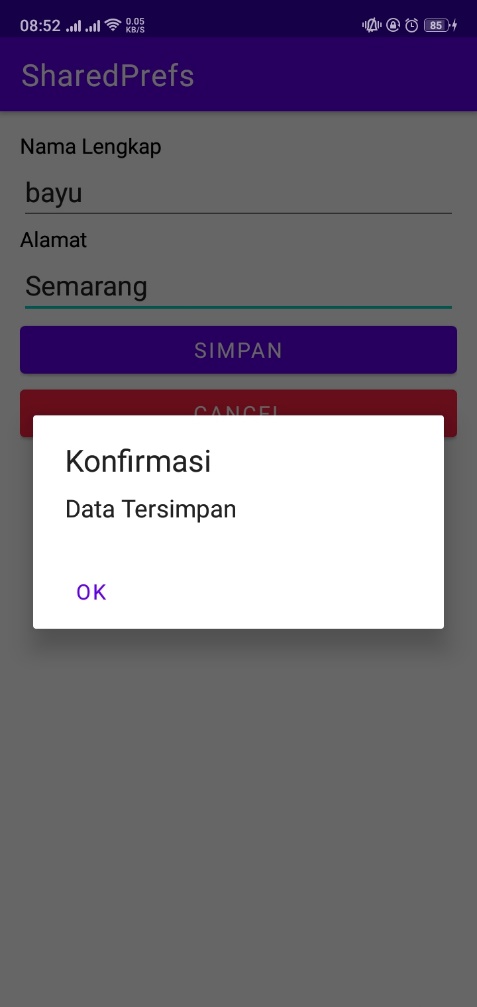
<**resources**>  
 <**string name="app\_name"**>Hello Shared Prefs</**string**>  
 <**string name="blue\_button"**>Blue</**string**>  
 <**string name="green\_button"**>Green</**string**>  
 <**string name="red\_button"**>Red</**string**>  
 <**string name="black\_button"**>Black</**string**>  
 <**string name="default\_count"**>0</**string**>  
 <**string name="count\_button"**>Count</**string**>  
 <**string name="reset\_button"**>Reset</**string**>  
</**resources**>

**Activities\_main.xml**

*<?***xml version="1.0" encoding="utf-8"***?>*<**LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:orientation="vertical"  
 android:paddingBottom="@dimen/activity\_vertical\_margin"  
 android:paddingLeft="@dimen/activity\_horizontal\_margin"  
 android:paddingRight="@dimen/activity\_horizontal\_margin"  
 android:paddingTop="@dimen/activity\_vertical\_margin"  
 tools:context="com.example.android.hellosharedprefs.MainActivity"**>  
  
 <**TextView  
 android:id="@+id/count\_textview"  
 android:layout\_width="match\_parent"  
 android:layout\_height="0dp"  
 android:layout\_weight="60"  
 android:background="@color/default\_background"  
 android:gravity="center"  
 android:text="@string/default\_count"  
 android:textColor="@android:color/white"  
 android:textSize="112sp"** />  
  
 <**LinearLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="0dp"  
 android:layout\_marginBottom="@dimen/activity\_vertical\_margin"  
 android:layout\_marginTop="@dimen/activity\_vertical\_margin"  
 android:layout\_weight="10"  
 android:orientation="horizontal"**>  
  
 <**Button  
 android:id="@+id/black\_background\_button"  
 style="@style/AppTheme.Button.Colored"  
 android:background="@android:color/black"  
 android:onClick="changeBackground"  
 android:text="@string/black\_button"** />  
  
 <**Button  
 android:id="@+id/red\_background\_button"  
 style="@style/AppTheme.Button.Colored"  
 android:background="@color/red\_background"  
 android:onClick="changeBackground"  
 android:text="@string/red\_button"** />  
  
 <**Button  
 android:id="@+id/blue\_background\_button"  
 style="@style/AppTheme.Button.Colored"  
 android:background="@color/blue\_background"  
 android:onClick="changeBackground"  
 android:text="@string/blue\_button"** />  
  
 <**Button  
 android:id="@+id/green\_background\_button"  
 style="@style/AppTheme.Button.Colored"  
 android:background="@color/green\_background"  
 android:onClick="changeBackground"  
 android:text="@string/green\_button"** />  
 </**LinearLayout**>  
  
 <**LinearLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="0dp"  
 android:layout\_weight="10"  
 android:gravity="center"  
 android:orientation="horizontal"**>  
  
 <**Button  
 android:id="@+id/count\_button"  
 style="@style/AppTheme.Button"  
 android:layout\_marginRight="@dimen/activity\_horizontal\_margin"  
 android:layout\_marginEnd="@dimen/activity\_horizontal\_margin"  
 android:onClick="countUp"  
 android:text="@string/count\_button"** />  
  
 <**Button  
 android:id="@+id/reset\_button"  
 style="@style/AppTheme.Button"  
 android:onClick="reset"  
 android:text="@string/reset\_button"** />  
  
 </**LinearLayout**>  
</**LinearLayout**>

**MainActivity.java**

**package** com.example.android.hellosharedprefs;  
  
**import** android.content.SharedPreferences;  
**import** android.graphics.drawable.ColorDrawable;  
**import** android.support.v4.content.ContextCompat;  
**import** android.support.v7.app.AppCompatActivity;  
**import** android.os.Bundle;  
**import** android.view.View;  
**import** android.widget.TextView;  
  
**public class** MainActivity **extends** AppCompatActivity {  
 *// Current count.* **private int mCount** = 0;  
 *// Current background color.* **private int mColor**;  
 *// Text view to display both count and color.* **private** TextView **mShowCountTextView**;  
  
 *// Key for current count* **private final** String **COUNT\_KEY** = **"count"**;  
 *// Key for current color* **private final** String **COLOR\_KEY** = **"color"**;  
  
 *// Shared preferences object* **private** SharedPreferences **mPreferences**;  
 *// Name of shared preferences file* **private static final** String ***mSharedPrefFile*** = **"com.example.android.hellosharedprefs"**;  
  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_main***);  
  
 *// Initialize views, color, preferences* **mShowCountTextView** = (TextView) findViewById(R.id.***count\_textview***);  
 **mColor** = ContextCompat.*getColor*(**this**, R.color.***default\_background***);  
 **mPreferences** = getSharedPreferences(***mSharedPrefFile***, ***MODE\_PRIVATE***);  
   
 *// Restore preferences* **mCount** = **mPreferences**.getInt(**COUNT\_KEY**, 0);  
 **mShowCountTextView**.setText(String.*format*(**"%s"**, **mCount**));  
 **mColor** = **mPreferences**.getInt(**COLOR\_KEY**, **mColor**);  
 **mShowCountTextView**.setBackgroundColor(**mColor**);  
 }  
  
 @Override  
 **protected void** onPause() {  
 **super**.onPause();  
  
 SharedPreferences.Editor preferencesEditor = **mPreferences**.edit();  
 preferencesEditor.putInt(**COUNT\_KEY**, **mCount**);  
 preferencesEditor.putInt(**COLOR\_KEY**, **mColor**);  
 preferencesEditor.apply();  
 }  
  
  
 **public void** changeBackground(View view) {  
 **int** color = ((ColorDrawable) view.getBackground()).getColor();  
 **mShowCountTextView**.setBackgroundColor(color);  
 **mColor** = color;  
 }  
  
  
 **public void** countUp(View view) {  
 **mCount**++;  
 **mShowCountTextView**.setText(String.*format*(**"%s"**, **mCount**));  
 }  
  
  
 **public void** reset(View view) {  
 *// Reset count* **mCount** = 0;  
 **mShowCountTextView**.setText(String.*format*(**"%s"**, **mCount**));  
  
 *// Reset color* **mColor** = ContextCompat.*getColor*(**this**, R.color.***default\_background***);  
 **mShowCountTextView**.setBackgroundColor(**mColor**);  
  
 *// Clear preferences* SharedPreferences.Editor preferencesEditor = **mPreferences**.edit();  
 preferencesEditor.clear();  
 preferencesEditor.apply();  
  
 }  
}

**SharedPrefs**

**String.xml**

<resources>  
 <string name="app\_name">SharedPrefs</string>  
 <string name="txt\_nama">Nama Lengkap</string>  
 <string name="txt\_alamat">Alamat</string>  
 <string name="btn\_simpan">Simpan</string>  
 <string name="btn\_cancel">Cancel</string>  
 <string name="hint\_nama">Masukan Nama Lengkap</string>  
 <string name="hint\_alamat">Masukan Alamat</string>  
</resources>

**Activities\_main.xml**

*<?*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:layout\_marginHorizontal="15dp"  
 android:layout\_marginVertical="15dp"  
 tools:context=".MainActivity">  
  
 <TextView  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:id="@+id/txtnama"  
 android:textColor="@color/black"  
 android:text="@string/txt\_nama"/>  
  
 <EditText  
 android:id="@+id/inp\_nama"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="@string/hint\_nama"/>  
  
 <TextView  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:id="@+id/txtalamat"  
 android:textColor="@color/black"  
 android:text="@string/txt\_alamat"/>  
  
 <EditText  
 android:id="@+id/inp\_alamat"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="@string/hint\_alamat"/>  
  
 <Button  
 android:id="@+id/btn\_simpan"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="@string/btn\_simpan"  
 android:onClick="simpan"/>  
  
 <Button  
 android:id="@+id/btn\_cancel"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="@string/btn\_cancel"  
 android:backgroundTint="@color/red"  
 android:onClick="batal"/>  
  
</LinearLayout>

**MainActivity.java**

package com.example.sharedprefs;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.app.Activity;  
import android.app.AlarmManager;  
import android.app.AlertDialog;  
import android.content.DialogInterface;  
import android.content.SharedPreferences;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.EditText;  
import android.widget.TextView;  
import android.widget.Toast;  
  
public class MainActivity extends AppCompatActivity {  
 TextView txtNama, txtAlamat;  
 private SharedPreferences mPrefenrences;  
 private static final String *mSharedPredFile* = "com.a71b.belajarsharedprefs";  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.activity\_main);  
  
 txtNama = (EditText) findViewById(R.id.inp\_nama);  
 txtAlamat = (EditText) findViewById(R.id.inp\_alamat);  
 }  
  
 public void simpan(View view){  
 mPrefenrences = getSharedPreferences(mSharedPredFile, Activity.MODE\_PRIVATE);  
 SharedPreferences.Editor editor = mPrefenrences.edit();  
 editor.putString("namaku", txtNama.getText().toString());  
 editor.putString("alamatku", txtAlamat.getText().toString());  
 editor.commit();  
 pesan();  
 }  
  
 public void batal(View view){  
 txtAlamat.setText("");  
 txtNama.setText("");  
 }  
  
 private void pesan(){  
 AlertDialog.Builder psn = new AlertDialog.Builder(this);  
 psn.setTitle("Konfirmasi");  
 psn.setMessage("Data Tersimpan");  
 psn.setNeutralButton("OK", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface dialog, int which) {  
 Toast.makeText(getApplicationContext(), " Sukses simpan", Toast.LENGTH\_SHORT).show();  
 }  
 });  
 psn.show();  
 }  
}

**NoteInternal**

Graphical user interface

Description automatically generated with medium confidence

**String.xml**

<resources>

    <string *name*="app\_name">noteinternal</string>

    <string *name*="txt\_title">Enter The Text!</string>

    <string *name*="btn\_read">Read Notes</string>

    <string *name*="btn\_save">Save The Notes</string>

    <string *name*="btn\_saveSd">Save The Notes to SD</string>

    <string *name*="btn\_readSD">Read Note from SD</string>

</resources>

**Activity\_main.xml**

<?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:layout\_marginVertical*="10dp"

*android:layout\_marginHorizontal*="10dp"

*android:orientation*="vertical"

*tools:context*=".MainActivity">

    <TextView

*android:layout\_width*="match\_parent"

*android:layout\_height*="wrap\_content"

*android:text*="@string/txt\_title" />

    <EditText

*android:id*="@+id/inputText"

*android:layout\_width*="match\_parent"

*android:layout\_height*="180dp"

*android:gravity*="top"/>

    <Button

*android:id*="@+id/simpanIntern"

*android:layout\_width*="match\_parent"

*android:layout\_height*="wrap\_content"

*android:text*="@string/btn\_save"/>

    <Button

*android:id*="@+id/loadIntern"

*android:layout\_width*="match\_parent"

*android:layout\_height*="wrap\_content"

*android:text*="@string/btn\_read"/>

    <Button

*android:id*="@+id/simpanExtern"

*android:layout\_width*="match\_parent"

*android:layout\_height*="wrap\_content"

*android:text*="@string/btn\_saveSd"/>

    <Button

*android:id*="@+id/loadExtern"

*android:layout\_width*="match\_parent"

*android:layout\_height*="wrap\_content"

*android:text*="@string/btn\_readSD"/>

</LinearLayout>

**MainActivity.java**

*package* *com.example.noteinternal*;

*import* *androidx.appcompat.app.AppCompatActivity*;

*import* *android.media.MediaParser*;

*import* *android.os.Bundle*;

*import* *android.os.Environment*;

*import* *android.widget.Button*;

*import* *android.widget.EditText*;

*import* *android.widget.TextView*;

*import* *android.widget.Toast*;

*import* *java.io.BufferedReader*;

*import* *java.io.DataInputStream*;

*import* *java.io.File*;

*import* *java.io.FileInputStream*;

*import* *java.io.FileNotFoundException*;

*import* *java.io.FileOutputStream*;

*import* *java.io.IOException*;

*import* *java.io.InputStream*;

*import* *java.io.InputStreamReader*;

*import* *java.io.OutputStream*;

*import* *java.io.OutputStreamWriter*;

*import* *java.nio.charset.StandardCharsets*;

*import* *java.util.ArrayDeque*;

*public* *class* MainActivity *extends* AppCompatActivity {

*EditText* inputText;

*Button* btnSimpanIntern, btnLoadInter, btnSimpanExtern, btnLoadExtern;

*File* externalFile;

*String* Data = "";

*static* *final* *int* READ\_BLOCK\_SIZE = 100;

    @*Override*

*protected* *void* onCreate(*Bundle* savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(*R*.*layout*.*activity\_main*);

        inputText = findViewById(*R*.*id*.*inputText*);

        btnSimpanIntern = findViewById(*R*.*id*.*simpanIntern*);

        btnLoadInter = findViewById(*R*.*id*.*loadIntern*);

        btnSimpanExtern = findViewById(*R*.*id*.*simpanExtern*);

        btnLoadExtern = findViewById(*R*.*id*.*loadExtern*);

*String* path = *this*.getFilesDir().getAbsolutePath()+"/catatan.txt";

*File* file = new File(path);

*btnSimpanIntern*.setOnClickListener(view *->* {

            if (*inputText*.getText().toString().isEmpty()){

*Toast*.makeText(*this*, "Mohon masukkan catatan",

*Toast*.*LENGTH\_SHORT*).show();

            }else{

                try {

*FileOutputStream* fileOut = openFileOutput("catatan.txt",

                            MODE\_PRIVATE);

*OutputStreamWriter* outputWriter = new

                            OutputStreamWriter(fileOut);

*outputWriter*.write(*inputText*.getText().toString());

*outputWriter*.close();

*Toast*.makeText(getBaseContext(), "Catatan berhasil disimpan di "+path, *Toast*.*LENGTH\_SHORT*).show();

*inputText*.setText("");

                } catch (*FileNotFoundException* e) {

*e*.printStackTrace();

                } catch (*IOException* e) {

*e*.printStackTrace();

                }

            }

        });

*btnLoadInter*.setOnClickListener(view *->* {

            if (*file*.exists()){

                try {

*FileInputStream* fileIn = openFileInput("catatan.txt");

*InputStreamReader* inputRead = new InputStreamReader(fileIn);

*char*[] inputBuffer = new *char*[READ\_BLOCK\_SIZE];

*StringBuilder* s = new StringBuilder();

*int* charRead;

                    while ((charRead = *inputRead*.read(inputBuffer)) > 0){

*String* readString = *String*.copyValueOf(inputBuffer,0,charRead);

*s*.append(readString);

                    }

*inputRead*.close();

*inputText*.setText(*s*.toString());

                } catch (*FileNotFoundException* e) {

*e*.printStackTrace();

                } catch (*IOException* e) {

*e*.printStackTrace();

                }

            }else {

*Toast*.makeText(*this*, "Anda belum menulis catatan", *Toast*.*LENGTH\_SHORT*).show();

            }

        });

        if (!isExternalStorageAvailable() || isExternalStorageReadOnly()) {

*btnSimpanExtern*.setEnabled(false);

        } else {

*String* filename = "AndroidRion.txt";

*String* filepath = "Penyimpanan\_Aplikasi";

            externalFile = new File(getExternalFilesDir(filepath), filename);

        }

*btnSimpanExtern*.setOnClickListener(view *->* {

            if (*inputText*.getText().toString().isEmpty()){

*Toast*.makeText(*this*, "Mohon masukkan Catatan", *Toast*.*LENGTH\_SHORT*).show();

            }else{

                try {

*FileOutputStream* fos = new FileOutputStream(externalFile);

*fos*.write(*inputText*.getText().toString().getBytes());

*fos*.close();

*Toast*.makeText(getBaseContext(), "Catatan berhasil disimpan " + externalFile, *Toast*.*LENGTH\_SHORT*).show();

                } catch (*FileNotFoundException* e) {

*e*.printStackTrace();

                } catch (*IOException* e) {

*e*.printStackTrace();

                }*inputText*.setText("");

            }

        });

*btnLoadExtern*.setOnClickListener(view *->* {

            try {

*FileInputStream* fis = new FileInputStream(externalFile);

*DataInputStream* in = new DataInputStream(fis);

*BufferedReader* br = new BufferedReader(new InputStreamReader(in));

*String* strLine;

                while ((strLine = *br*.readLine()) != null){

                    Data = Data + strLine;

                }

*in*.close();

            } catch (*FileNotFoundException* e) {

*e*.printStackTrace();

            } catch (*IOException* e) {

*e*.printStackTrace();

            }*inputText*.setText(Data);

        });

    }

*private* *boolean* isExternalStorageReadOnly() {

*String* extStorageState = *Environment*.getExternalStorageState();

        return *Environment*.*MEDIA\_MOUNTED\_READ\_ONLY*.equals(extStorageState);

    }

*private* *boolean* isExternalStorageAvailable() {

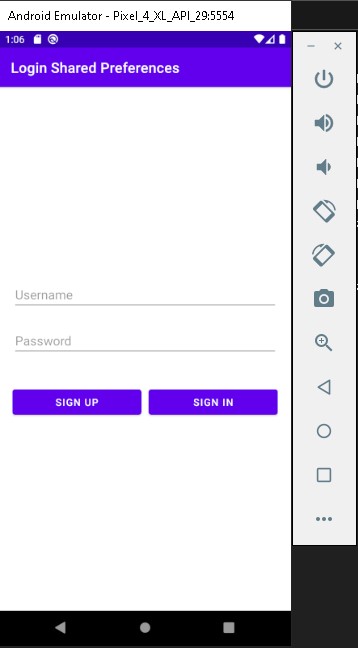
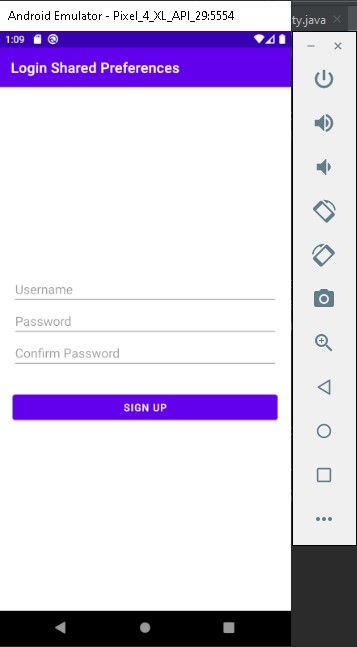
*String* extStorageState = *Environment*.getExternalStorageState();

        return *Environment*.*MEDIA\_MOUNTED*.equals(extStorageState);

    }

}

**RegisterSharedPref**

****

**Activity\_main.xml**

<?xml *version*="1.0" *encoding*="utf-8"?>

<RelativeLayout *xmlns:android*="http://schemas.android.com/apk/res/android"

*xmlns:tools*="http://schemas.android.com/tools"

*android:layout\_width*="match\_parent"

*android:layout\_height*="match\_parent"

*android:padding*="30dp"

*tools:context*=".MainActivity">

    <LinearLayout

*android:layout\_width*="match\_parent"

*android:layout\_height*="wrap\_content"

*android:orientation*="vertical">

        <TextView

*android:layout\_width*="wrap\_content"

*android:layout\_height*="wrap\_content"

*android:textSize*="20sp"

*android:text*="Masuk sebagai"/>

        <TextView

*android:id*="@+id/tv\_namaMain"

*android:layout\_width*="wrap\_content"

*android:layout\_height*="wrap\_content"

*android:textSize*="30sp"

*tools:text*="Namaku adalah"/>

    </LinearLayout>

    <Button

*android:id*="@+id/button\_logoutMain"

*android:layout\_width*="match\_parent"

*android:layout\_height*="wrap\_content"

*android:layout\_alignParentBottom*="true"

*android:layout\_marginTop*="10dp"

*android:text*="Log Out" />

</RelativeLayout>

**Activity\_login.xml**

<?xml *version*="1.0" *encoding*="utf-8"?>

<LinearLayout *xmlns:android*="http://schemas.android.com/apk/res/android"

*xmlns:tools*="http://schemas.android.com/tools"

*android:layout\_width*="match\_parent"

*android:layout\_height*="match\_parent"

*android:gravity*="center"

*android:padding*="18dp"

*android:orientation*="vertical"

*tools:context*=".LoginActivity">

        <EditText

*android:id*="@+id/et\_emailSignin"

*android:layout\_width*="match\_parent"

*android:layout\_height*="wrap\_content"

*android:hint*="Username"

*android:inputType*="textEmailAddress"

*android:maxLines*="1"

*android:singleLine*="true"

*android:imeOptions*="actionNext"/>

        <EditText

*android:id*="@+id/et\_passwordSignin"

*android:layout\_width*="match\_parent"

*android:layout\_height*="wrap\_content"

*android:layout\_marginBottom*="30dp"

*android:hint*="Password"

*android:inputType*="textPassword"

*android:maxLines*="1"

*android:singleLine*="true"

*android:imeActionId*="6"

*android:imeActionLabel*="Sign In"

*android:imeOptions*="actionDone" />

        <LinearLayout

*android:layout\_width*="match\_parent"

*android:layout\_height*="wrap\_content">

            <Button

*android:id*="@+id/button\_signupSignin"

*android:layout\_width*="0dp"

*android:layout\_height*="wrap\_content"

*android:text*="Sign Up"

*android:layout\_weight*="1"/>

            <Button

*android:id*="@+id/button\_signinSignin"

*android:layout\_width*="0dp"

*android:layout\_height*="wrap\_content"

*android:text*="Sign In"

*android:layout\_weight*="1"/>

        </LinearLayout>

</LinearLayout>

**Activity\_register.xml**

<?xml *version*="1.0" *encoding*="utf-8"?>

<LinearLayout *xmlns:android*="http://schemas.android.com/apk/res/android"

*xmlns:tools*="http://schemas.android.com/tools"

*android:layout\_width*="match\_parent"

*android:layout\_height*="match\_parent"

*android:gravity*="center"

*android:padding*="18dp"

*android:orientation*="vertical"

*tools:context*=".RegisterActivity">

    <EditText

*android:id*="@+id/et\_emailSignup"

*android:layout\_width*="match\_parent"

*android:layout\_height*="wrap\_content"

*android:hint*="Username"

*android:inputType*="textEmailAddress"

*android:maxLines*="1"

*android:singleLine*="true"

*android:imeOptions*="actionNext"/>

    <EditText

*android:id*="@+id/et\_passwordSignup"

*android:layout\_width*="match\_parent"

*android:layout\_height*="wrap\_content"

*android:hint*="Password"

*android:inputType*="textPassword"

*android:maxLines*="1"

*android:singleLine*="true"

*android:imeOptions*="actionNext"/>

    <EditText

*android:id*="@+id/et\_passwordSignup2"

*android:layout\_width*="match\_parent"

*android:layout\_height*="wrap\_content"

*android:layout\_marginBottom*="30dp"

*android:hint*="Confirm Password"

*android:inputType*="textPassword"

*android:maxLines*="1"

*android:singleLine*="true"

*android:imeActionLabel*="Sign Up"

*android:imeOptions*="actionDone" />

    <Button

*android:id*="@+id/button\_signupSignup"

*android:layout\_width*="match\_parent"

*android:layout\_height*="wrap\_content"

*android:text*="Sign Up" />

</LinearLayout>

**MainActivity.java**

*package* *fryctze.tutorial.preference*;

*import* *android.content.Intent*;

*import* *android.support.v7.app.AppCompatActivity*;

*import* *android.os.Bundle*;

*import* *android.view.View*;

*import* *android.widget.TextView*;

*public* *class* MainActivity *extends* AppCompatActivity {

    @*Override*

*protected* *void* onCreate(*Bundle* savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(*R*.*layout*.*activity\_main*);

*/\* Deklarasi dan Menginisialisasi variable nama dengan Label Nama dari Layout MainActivity \*/*

*TextView* nama = findViewById(*R*.*id*.*tv\_namaMain*);

*/\* Men-set Label Nama dengan data User sedang login dari Preferences \*/*

*nama*.setText(*Preferences*.getLoggedInUser(getBaseContext()));

*/\* Men-set Status dan User yang sedang login menjadi default atau kosong di*

*\* Data Preferences. Kemudian menuju ke LoginActivity\*/*

        findViewById(*R*.*id*.*button\_logoutMain*).setOnClickListener(new View.OnClickListener() {

            @*Override*

*public* *void* onClick(*View* v) {

*//Menghapus Status login dan kembali ke Login Activity*

*Preferences*.clearLoggedInUser(getBaseContext());

                startActivity(new Intent(getBaseContext(),*LoginActivity*.*class*));

                finish();

            }

        });

    }

}

**LoginActivity.java**

*package* *fryctze.tutorial.preference*;

*import* *android.content.Intent*;

*import* *android.support.v7.app.AppCompatActivity*;

*import* *android.os.Bundle*;

*import* *android.text.TextUtils*;

*import* *android.view.KeyEvent*;

*import* *android.view.View*;

*import* *android.view.inputmethod.EditorInfo*;

*import* *android.widget.EditText*;

*import* *android.widget.TextView*;

*public* *class* LoginActivity *extends* AppCompatActivity {

*private* *EditText* mViewUser, mViewPassword;

    @*Override*

*protected* *void* onCreate(*Bundle* savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(*R*.*layout*.*activity\_login*);

*/\* Menginisialisasi variable dengan Form User dan Form Password dari Layout LoginActivity \*/*

        mViewUser=findViewById(*R*.*id*.*et\_emailSignin*);

        mViewPassword =findViewById(*R*.*id*.*et\_passwordSignin*);

*/\* Menjalankan Method razia() Jika tombol SignIn di keyboard di sentuh \*/*

*mViewPassword*.setOnEditorActionListener(new TextView.OnEditorActionListener() {

            @*Override*

*public* *boolean* onEditorAction(*TextView* v, *int* actionId, *KeyEvent* event) {

                if (actionId == *EditorInfo*.*IME\_ACTION\_DONE* || actionId == *EditorInfo*.*IME\_NULL*) {

                    razia();

                    return true;

                }

                return false;

            }

        });

*/\* Menjalankan Method razia() jika merasakan tombol SignIn disentuh \*/*

        findViewById(*R*.*id*.*button\_signinSignin*).setOnClickListener(new View.OnClickListener() {

            @*Override*

*public* *void* onClick(*View* v) {

                razia();

            }

        });

*/\* Ke RegisterActivity jika merasakan tombol SignUp disentuh \*/*

        findViewById(*R*.*id*.*button\_signupSignin*).setOnClickListener(new View.OnClickListener() {

            @*Override*

*public* *void* onClick(*View* v) {

                startActivity(new Intent(getBaseContext(),*RegisterActivity*.*class*));

            }

        });

    }

*/\*\* ke MainActivity jika data Status Login dari Data Preferences bernilai true \*/*

    @*Override*

*protected* *void* onStart() {

        super.onStart();

        if (*Preferences*.getLoggedInStatus(getBaseContext())){

            startActivity(new Intent(getBaseContext(),*MainActivity*.*class*));

            finish();

        }

    }

*/\*\* Men-check inputan User dan Password dan Memberikan akses ke MainActivity \*/*

*private* *void* razia(){

*/\* Mereset semua Error dan fokus menjadi default \*/*

*mViewUser*.setError(null);

*mViewPassword*.setError(null);

*View* fokus = null;

*boolean* cancel = false;

*/\* Mengambil text dari form User dan form Password dengan variable baru bertipe String\*/*

*String* user = *mViewUser*.getText().toString();

*String* password = *mViewPassword*.getText().toString();

*/\* Jika form user kosong atau TIDAK memenuhi kriteria di Method cekUser() maka, Set error*

*\*  di Form User dengan menset variable fokus dan error di Viewnya juga cancel menjadi true\*/*

        if (*TextUtils*.isEmpty(user)){

*mViewUser*.setError("This field is required");

            fokus = mViewUser;

            cancel = true;

        }else if(!cekUser(user)){

*mViewUser*.setError("This Username is not found");

            fokus = mViewUser;

            cancel = true;

        }

*/\* Sama syarat percabangannya dengan User seperti di atas. Bedanya ini untuk Form Password\*/*

        if (*TextUtils*.isEmpty(password)){

*mViewPassword*.setError("This field is required");

            fokus = mViewPassword;

            cancel = true;

        }else if (!cekPassword(password)){

*mViewPassword*.setError("This password is incorrect");

            fokus = mViewPassword;

            cancel = true;

        }

*/\* Jika cancel true, variable fokus mendapatkan fokus \*/*

        if (cancel) *fokus*.requestFocus();

        else masuk();

    }

*/\*\* Menuju ke MainActivity dan Set User dan Status sedang login, di Preferences \*/*

*private* *void* masuk(){

*Preferences*.setLoggedInUser(getBaseContext(),*Preferences*.getRegisteredUser(getBaseContext()));

*Preferences*.setLoggedInStatus(getBaseContext(),true);

        startActivity(new Intent(getBaseContext(),*MainActivity*.*class*));finish();

    }

*/\*\* True jika parameter password sama dengan data password yang terdaftar dari Preferences \*/*

*private* *boolean* cekPassword(*String* password){

        return *password*.equals(*Preferences*.getRegisteredPass(getBaseContext()));

    }

*/\*\* True jika parameter user sama dengan data user yang terdaftar dari Preferences \*/*

*private* *boolean* cekUser(*String* user){

        return *user*.equals(*Preferences*.getRegisteredUser(getBaseContext()));

    }

}

**Preference.java**

*package* *fryctze.tutorial.preference*;

*import* *android.content.Context*;

*import* *android.content.SharedPreferences*;

*import* *android.preference.PreferenceManager*;

*public* *class* Preferences {

*/\*\* Pendeklarasian key-data berupa String, untuk sebagai wadah penyimpanan data.*

*\* Jadi setiap data mempunyai key yang berbeda satu sama lain \*/*

*static* *final* *String* KEY\_USER\_TEREGISTER ="user", KEY\_PASS\_TEREGISTER ="pass";

*static* *final* *String* KEY\_USERNAME\_SEDANG\_LOGIN = "Username\_logged\_in";

*static* *final* *String* KEY\_STATUS\_SEDANG\_LOGIN = "Status\_logged\_in";

*/\*\* Pendlakarasian Shared Preferences yang berdasarkan paramater context \*/*

*private* *static* *SharedPreferences* getSharedPreference(*Context* context){

        return *PreferenceManager*.getDefaultSharedPreferences(context);

    }

*/\*\* Deklarasi Edit Preferences dan mengubah data*

*\*  yang memiliki key isi KEY\_USER\_TEREGISTER dengan parameter username \*/*

*public* *static* *void* setRegisteredUser(*Context* context, *String* username){

*SharedPreferences*.*Editor* editor = getSharedPreference(context).edit();

*editor*.putString(KEY\_USER\_TEREGISTER, username);

*editor*.apply();

    }

*/\*\* Mengembalikan nilai dari key KEY\_USER\_TEREGISTER berupa String \*/*

*public* *static* *String* getRegisteredUser(*Context* context){

        return getSharedPreference(context).getString(KEY\_USER\_TEREGISTER,"");

    }

*/\*\* Deklarasi Edit Preferences dan mengubah data*

*\*  yang memiliki key KEY\_PASS\_TEREGISTER dengan parameter password \*/*

*public* *static* *void* setRegisteredPass(*Context* context, *String* password){

*SharedPreferences*.*Editor* editor = getSharedPreference(context).edit();

*editor*.putString(KEY\_PASS\_TEREGISTER, password);

*editor*.apply();

    }

*/\*\* Mengembalikan nilai dari key KEY\_PASS\_TEREGISTER berupa String \*/*

*public* *static* *String* getRegisteredPass(*Context* context){

        return getSharedPreference(context).getString(KEY\_PASS\_TEREGISTER,"");

    }

*/\*\* Deklarasi Edit Preferences dan mengubah data*

*\*  yang memiliki key KEY\_USERNAME\_SEDANG\_LOGIN dengan parameter username \*/*

*public* *static* *void* setLoggedInUser(*Context* context, *String* username){

*SharedPreferences*.*Editor* editor = getSharedPreference(context).edit();

*editor*.putString(KEY\_USERNAME\_SEDANG\_LOGIN, username);

*editor*.apply();

    }

*/\*\* Mengembalikan nilai dari key KEY\_USERNAME\_SEDANG\_LOGIN berupa String \*/*

*public* *static* *String* getLoggedInUser(*Context* context){

        return getSharedPreference(context).getString(KEY\_USERNAME\_SEDANG\_LOGIN,"");

    }

*/\*\* Deklarasi Edit Preferences dan mengubah data*

*\*  yang memiliki key KEY\_STATUS\_SEDANG\_LOGIN dengan parameter status \*/*

*public* *static* *void* setLoggedInStatus(*Context* context, *boolean* status){

*SharedPreferences*.*Editor* editor = getSharedPreference(context).edit();

*editor*.putBoolean(KEY\_STATUS\_SEDANG\_LOGIN,status);

*editor*.apply();

    }

*/\*\* Mengembalikan nilai dari key KEY\_STATUS\_SEDANG\_LOGIN berupa boolean \*/*

*public* *static* *boolean* getLoggedInStatus(*Context* context){

        return getSharedPreference(context).getBoolean(KEY\_STATUS\_SEDANG\_LOGIN,false);

    }

*/\*\* Deklarasi Edit Preferences dan menghapus data, sehingga menjadikannya bernilai default*

*\*  khusus data yang memiliki key KEY\_USERNAME\_SEDANG\_LOGIN dan KEY\_STATUS\_SEDANG\_LOGIN \*/*

*public* *static* *void* clearLoggedInUser (*Context* context){

*SharedPreferences*.*Editor* editor = getSharedPreference(context).edit();

*editor*.remove(KEY\_USERNAME\_SEDANG\_LOGIN);

*editor*.remove(KEY\_STATUS\_SEDANG\_LOGIN);

*editor*.apply();

    }

}

**RegisterActivity.java**

*package* *fryctze.tutorial.preference*;

*import* *android.support.v7.app.AppCompatActivity*;

*import* *android.os.Bundle*;

*import* *android.text.TextUtils*;

*import* *android.view.KeyEvent*;

*import* *android.view.View*;

*import* *android.view.inputmethod.EditorInfo*;

*import* *android.widget.EditText*;

*import* *android.widget.TextView*;

*public* *class* RegisterActivity *extends* AppCompatActivity {

*private* *EditText* mViewUser, mViewPassword, mViewRepassword;

    @*Override*

*protected* *void* onCreate(*Bundle* savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(*R*.*layout*.*activity\_register*);

*/\* Menginisialisasi variable dengan Form User, Form Password, dan Form Repassword*

*dari Layout RegisterActivity \*/*

        mViewUser =findViewById(*R*.*id*.*et\_emailSignup*);

        mViewPassword =findViewById(*R*.*id*.*et\_passwordSignup*);

        mViewRepassword =findViewById(*R*.*id*.*et\_passwordSignup2*);

*/\* Menjalankan Method razia() jika merasakan tombol SignUp di keyboard disentuh \*/*

*mViewRepassword*.setOnEditorActionListener(new TextView.OnEditorActionListener() {

            @*Override*

*public* *boolean* onEditorAction(*TextView* v, *int* actionId, *KeyEvent* event) {

                if (actionId == *EditorInfo*.*IME\_ACTION\_DONE* || actionId == *EditorInfo*.*IME\_NULL*) {

                    razia();

                    return true;

                }

                return false;

            }

        });

*/\* Menjalankan Method razia() jika merasakan tombol SignUp disentuh \*/*

        findViewById(*R*.*id*.*button\_signupSignup*).setOnClickListener(new View.OnClickListener() {

            @*Override*

*public* *void* onClick(*View* v) {

                razia();

            }

        });

    }

*/\*\* Men-check inputan User dan Password dan Memberikan akses ke MainActivity \*/*

*private* *void* razia(){

*/\* Mereset semua Error dan fokus menjadi default \*/*

*mViewUser*.setError(null);

*mViewPassword*.setError(null);

*mViewRepassword*.setError(null);

*View* fokus = null;

*boolean* cancel = false;

*/\* Mengambil text dari Form User, Password, Repassword dengan variable baru bertipe String\*/*

*String* repassword = *mViewRepassword*.getText().toString();

*String* user = *mViewUser*.getText().toString();

*String* password = *mViewPassword*.getText().toString();

*/\* Jika form user kosong atau MEMENUHI kriteria di Method cekUser() maka, Set error di Form-*

*\* User dengan menset variable fokus dan error di Viewnya juga cancel menjadi true\*/*

        if (*TextUtils*.isEmpty(user)){

*mViewUser*.setError("This field is required");

            fokus = mViewUser;

            cancel = true;

        }else if(cekUser(user)){

*mViewUser*.setError("This Username is already exist");

            fokus = mViewUser;

            cancel = true;

        }

*/\* Jika form password kosong dan MEMENUHI kriteria di Method cekPassword maka,*

*\* Reaksinya sama dengan percabangan User di atas. Bedanya untuk Password dan Repassword\*/*

        if (*TextUtils*.isEmpty(password)){

*mViewPassword*.setError("This field is required");

            fokus = mViewPassword;

            cancel = true;

        }else if (!cekPassword(password,repassword)){

*mViewRepassword*.setError("This password is incorrect");

            fokus = mViewRepassword;

            cancel = true;

        }

*/\*\* Jika cancel true, variable fokus mendapatkan fokus. Jika false, maka*

*\*  Kembali ke LoginActivity dan Set User dan Password untuk data yang terdaftar \*/*

        if (cancel){

*fokus*.requestFocus();

        }else{

*Preferences*.setRegisteredUser(getBaseContext(),user);

*Preferences*.setRegisteredPass(getBaseContext(),password);

            finish();

        }

    }

*/\*\* True jika parameter password sama dengan parameter repassword \*/*

*private* *boolean* cekPassword(*String* password, *String* repassword){

        return *password*.equals(repassword);

    }

*/\*\* True jika parameter user sama dengan data user yang terdaftar dari Preferences \*/*

*private* *boolean* cekUser(*String* user){

        return *user*.equals(*Preferences*.getRegisteredUser(getBaseContext()));

    }

}