Login page with Database connection

**activity\_main.xml**

<?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:layout\_height="match\_parent"

tools:context=".MainActivity">

<TextView

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:id="@+id/tv1"

android:text="REGISTRATION"

android:textSize="30dp"

android:textAlignment="center"/>

<EditText

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:id="@+id/rollno"

android:textColorHint="@color/black"

android:maxLines="1"

android:inputType="textPhonetic"

android:singleLine="true"

android:hint="roll no"

android:textSize="25dp"

android:textColor="@color/black"

android:layout\_below="@+id/tv1"

android:layout\_marginTop="55dp"/>

<EditText

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:id="@+id/username"

android:textColorHint="@color/black"

android:hint="username"

android:singleLine="true"

android:inputType="text"

android:textColor="@color/black"

android:textSize="25dp"

android:layout\_below="@+id/rollno"

android:layout\_marginTop="20dp"/>

<EditText

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:id="@+id/password"

android:singleLine="true"

android:inputType="textPassword"

android:textColor="@color/black"

android:textColorHint="@color/black"

android:hint="password"

android:textSize="25dp"

android:layout\_below="@+id/username"

android:layout\_marginTop="20dp"/>

<EditText

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:id="@+id/repassword"

android:textColor="@color/black"

android:textColorHint="@color/black"

android:hint="retype password"

android:singleLine="true"

android:inputType="textPassword"

android:textSize="25dp"

android:layout\_below="@+id/password"

android:layout\_marginTop="20dp"/>

<Button

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:id="@+id/btnSignUp"

android:text="Register"

android:textAllCaps="false"

android:layout\_below="@+id/repassword"

android:backgroundTint="@android:color/holo\_blue\_dark"

android:textSize="25dp"

android:layout\_marginTop="50dp"

app:cornerRadius="36dp"/>

<Button

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:id="@+id/btnSignIn"

android:text="Sign In "

android:textAllCaps="false"

android:layout\_below="@+id/btnSignUp"

android:backgroundTint="@android:color/holo\_green\_light"

android:textSize="25dp"

android:layout\_marginTop="20dp"

app:cornerRadius="36dp"/>

</RelativeLayout>

**MainActivity.java**

package com.example.loginpagewithdatabase;

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.Toast;

public class MainActivity extends AppCompatActivity {

EditText rollno,username,password,repassword;

Button btnSignUp,btnSignIn;

DBHelper myDB;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

rollno = (EditText) findViewById(R.id.rollno);

username = (EditText) findViewById(R.id.username);

password = (EditText) findViewById(R.id.password);

repassword = (EditText) findViewById(R.id.repassword);

btnSignUp = (Button) findViewById(R.id.btnSignUp);

btnSignIn = (Button) findViewById(R.id.btnSignIn);

myDB = new DBHelper(this);

btnSignUp.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

String roll = rollno.getText().toString();

String user = username.getText().toString();

String pass = password.getText().toString();

String repass = repassword.getText().toString();

if(roll.equals("")||user.equals("")||pass.equals("")||repass.equals(""))

{

Toast.makeText(MainActivity.this,"Fill all the fields.", Toast.LENGTH\_SHORT).show();

}

else

{

if (pass.equals(repass))

{

Boolean usercheckResult = myDB.checkuser(user);

if(usercheckResult == false)

{

Boolean regResult = myDB.insertData(roll,pass);

if(regResult == true)

{

Toast.makeText(MainActivity.this, "Registration Successful", Toast.LENGTH\_SHORT).show();

Intent intent = new Intent(MainActivity.this,loginActivity.class);

startActivity(intent);

}

else

{

Toast.makeText(MainActivity.this, "Registration Failed \n please enter new users only", Toast.LENGTH\_SHORT).show();

}

}

else

{

Toast.makeText(MainActivity.this, "user already exists.\n Please sign in", Toast.LENGTH\_SHORT).show();

}

}

else

{

Toast.makeText(MainActivity.this, "Password mismatch", Toast.LENGTH\_SHORT).show();

}

}

}

});

btnSignIn.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

Intent intent = new Intent(MainActivity.this,loginActivity.class);

startActivity(intent);

}

});

}

}

**activity\_login.xml**

<?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:layout\_height="match\_parent"

tools:context=".loginActivity">

<TextView

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:id="@+id/tv2"

android:text="LOGIN"

android:textSize="30dp"

android:layout\_marginTop="40dp"

android:textAlignment="center"/>

<EditText

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:id="@+id/loginroll"

android:hint="roll no"

android:singleLine="true"

android:inputType="textPhonetic"

android:layout\_below="@+id/tv2"

android:layout\_marginTop="150dp"

android:textColor="@color/black"

android:textColorHint="@color/black"

android:textSize="25dp"/>

<EditText

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:id="@+id/loginpassword"

android:hint="password"

android:singleLine="true"

android:inputType="textPassword"

android:layout\_below="@+id/loginroll"

android:layout\_marginTop="40dp"

android:textColor="@color/black"

android:textColorHint="@color/black"

android:textSize="25dp"/>

<Button

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:id="@+id/btnLogin"

android:text="Login"

android:textSize="25dp"

android:textAllCaps="false"

android:layout\_below="@id/loginpassword"

android:backgroundTint="@android:color/holo\_orange\_dark"

android:layout\_marginTop="50dp"

app:cornerRadius="36dp"/>

</RelativeLayout>

**loginActivity.java**

package com.example.loginpagewithdatabase;

import androidx.appcompat.app.AppCompatActivity;

import android.annotation.SuppressLint;

import android.content.Intent;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import android.widget.Toast;

public class loginActivity extends AppCompatActivity {

EditText username,password;

Button btnLogin;

DBHelper myDB;

@SuppressLint("MissingInflatedId")

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_login);

username= (EditText) findViewById(R.id.loginroll);

password = (EditText) findViewById(R.id.loginpassword);

btnLogin = (Button) findViewById(R.id.btnLogin);

myDB = new DBHelper(this);

btnLogin.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

String user = username.getText().toString();

String pass = password.getText().toString();

if(user.equals("")||pass.equals(""))

{

Toast.makeText(getApplicationContext(), "Please enter the credentials", Toast.LENGTH\_SHORT).show();

}

else

{

Boolean result = myDB.checkusernamePassword(user,pass);

if (result == true)

{

Intent intent = new Intent(loginActivity.this,HomeActivity.class);

startActivity(intent);

}

else {

Toast.makeText(getApplicationContext(), "Inavalid credentials", Toast.LENGTH\_SHORT).show();

}

}

}

});

}

}

**activity\_home.xml**

<?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:layout\_height="match\_parent"

tools:context=".HomeActivity">

<TextView

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="This app belongs to CSD-A"

android:textSize="30dp"

android:layout\_centerVertical="true"/>

</RelativeLayout>

**HomeActivity.java**

package com.example.loginpagewithdatabase;

import android.os.Bundle;

import androidx.appcompat.app.AppCompatActivity;

public class HomeActivity extends AppCompatActivity {

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_home);

}

}

**DBHelper.java**

package com.example.loginpagewithdatabase;

import android.content.ContentValues;

import android.content.Context;

import android.database.Cursor;

import android.database.sqlite.SQLiteDatabase;

import android.database.sqlite.SQLiteOpenHelper;

public class DBHelper extends SQLiteOpenHelper {

public DBHelper(Context context)

{

super(context,"Login.db",null,1);

}

@Override

public void onCreate(SQLiteDatabase myDB) {

myDB.execSQL("create Table users(rollno Text primary key, password Text)");

}

@Override

public void onUpgrade(SQLiteDatabase myDB, int i, int i1) {

myDB.execSQL("drop Table if exists users");

}

public Boolean insertData(String rollno, String password){

SQLiteDatabase myDB = this.getWritableDatabase();

ContentValues contentValues = new ContentValues();

contentValues.put("rollno",rollno);

contentValues.put("password",password);

long result = myDB.insert("users",null,contentValues);

if (result == -1)

{

return false;

}

else

{

return true;

}

}

public Boolean checkuser(String rollno)

{

SQLiteDatabase myDB = this.getWritableDatabase();

Cursor cursor = myDB.rawQuery("select \* from users where rollno = ?",new String[] {rollno});

if (cursor.getCount()>0)

{

return true;

}

else

{

return false;

}

}

public Boolean checkusernamePassword(String rollno, String password)

{

SQLiteDatabase myDB = this.getWritableDatabase();

Cursor cursor = myDB.rawQuery("select \* from users where rollno = ? and password = ?",new String[] {rollno,password});

if(cursor.getCount()>0)

{

return true;

}

else

{

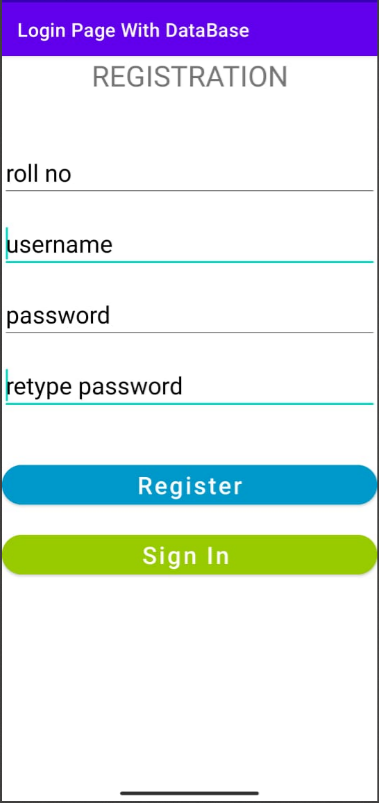
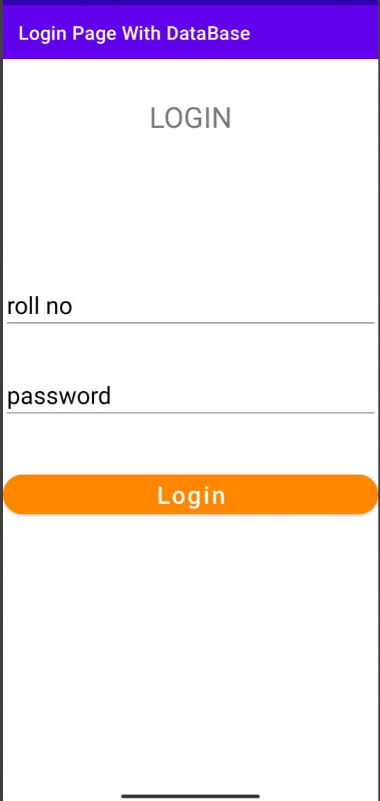
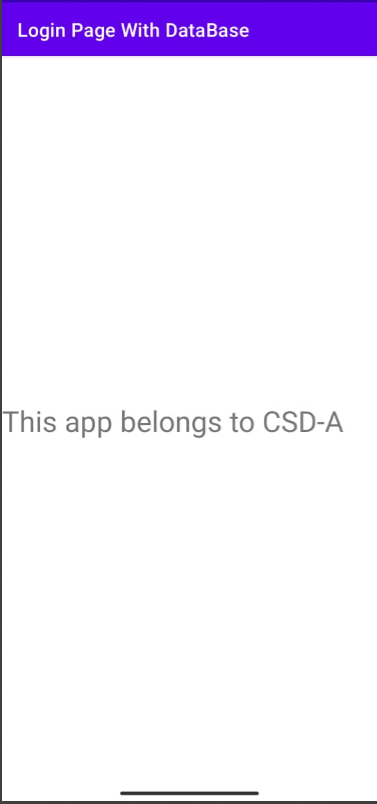
return false;

}

}

}

**Output:-**

**  **