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1NT20IS066

Create a Login and Registration App using SQLite database which provides basic CRUD operations

such as,

Insert a new user

Delete an existing user upon inputting the name

Update the existing user

Display all the users in the form of a String

# activity\_main.xml

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

<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="[http://sche-](http://sche-/) mas.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:id="@+id/textView" android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:text="Login" android:gravity="center" android:textSize="45dp" android:fontFamily="sans-serif-black"

app:layout\_constraintBottom\_toBottomOf="parent" app:layout\_constraintEnd\_toEndOf="parent" app:layout\_constraintStart\_toStartOf="parent" app:layout\_constraintTop\_toTopOf="parent" app:layout\_constraintVertical\_bias="0.044" />

<EditText

android:id="@+id/username" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:ems="10" android:inputType="textPersonName" android:hint="username" app:layout\_constraintBottom\_toBottomOf="parent" app:layout\_constraintEnd\_toEndOf="parent" app:layout\_constraintHorizontal\_bias="0.497" app:layout\_constraintStart\_toStartOf="parent" app:layout\_constraintTop\_toBottomOf="@+id/textView" app:layout\_constraintVertical\_bias="0.06" />

<EditText

android:id="@+id/password" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:ems="10" android:inputType="textPersonName" android:hint="Password" app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent" app:layout\_constraintHorizontal\_bias="0.497" app:layout\_constraintStart\_toStartOf="parent" app:layout\_constraintTop\_toBottomOf="@+id/username" app:layout\_constraintVertical\_bias="0.023" />

<Button

android:id="@+id/register" android:layout\_width="126dp" android:layout\_height="56dp" android:text="Register" app:layout\_constraintBottom\_toBottomOf="parent" app:layout\_constraintEnd\_toEndOf="parent" app:layout\_constraintHorizontal\_bias="0.218" app:layout\_constraintStart\_toStartOf="parent" app:layout\_constraintTop\_toTopOf="parent" app:layout\_constraintVertical\_bias="0.427" />

<Button

android:id="@+id/delete" android:layout\_width="124dp" android:layout\_height="56dp" android:text="Delete" app:layout\_constraintBottom\_toBottomOf="parent" app:layout\_constraintEnd\_toEndOf="parent" app:layout\_constraintHorizontal\_bias="0.815" app:layout\_constraintStart\_toStartOf="parent" app:layout\_constraintTop\_toTopOf="parent" app:layout\_constraintVertical\_bias="0.429" />

<Button

android:id="@+id/update" android:layout\_width="128dp" android:layout\_height="51dp" android:text="Update" app:layout\_constraintBottom\_toBottomOf="parent" app:layout\_constraintEnd\_toEndOf="parent" app:layout\_constraintHorizontal\_bias="0.219" app:layout\_constraintStart\_toStartOf="parent" app:layout\_constraintTop\_toTopOf="parent" app:layout\_constraintVertical\_bias="0.536" />

<Button

android:id="@+id/display" android:layout\_width="129dp" android:layout\_height="52dp" android:text="Display" app:layout\_constraintBottom\_toBottomOf="parent" app:layout\_constraintEnd\_toEndOf="parent" app:layout\_constraintHorizontal\_bias="0.829" app:layout\_constraintStart\_toStartOf="parent" app:layout\_constraintTop\_toTopOf="parent" app:layout\_constraintVertical\_bias="0.536" />

<TextView

android:id="@+id/result" android:layout\_width="331dp" android:layout\_height="102dp" android:gravity="center" android:text="Text" android:textSize="30dp"

app:layout\_constraintBottom\_toBottomOf="parent" app:layout\_constraintEnd\_toEndOf="parent" app:layout\_constraintHorizontal\_bias="0.498"

app:layout\_constraintStart\_toStartOf="parent" app:layout\_constraintTop\_toTopOf="parent" app:layout\_constraintVertical\_bias="0.759" />

</androidx.constraintlayout.widget.ConstraintLayout>

# DBHelper.java

package com.example.sqlite;

import android.content.ContentValues; import android.content.Context; import android.database.Cursor;

import android.database.sqlite.SQLiteDatabase; import android.database.sqlite.SQLiteOpenHelper;

import androidx.annotation.Nullable;

public class DBHelper extends SQLiteOpenHelper {

private static final String *dbName* = "studentd"; // Database Name private static final String *tbName* = "student"; // Table Name private static final int *dbVersion* = 1;

public DBHelper(@Nullable Context context, @Nullable String name, @Nullable SQLiteDatabase.CursorFactory factory, int version) {

super(context, *dbName*, factory, *dbVersion*);

}

@Override

public void onCreate(SQLiteDatabase db) {

db.execSQL("CREATE TABLE " + *tbName* + "(uname VARCHAR(10) ,passw VAR- CHAR(10))" + ";");

}

@Override

public void onUpgrade(SQLiteDatabase db, int i, int i1) { db.execSQL("DROP TABLE IF EXISTS " + *tbName*);

onCreate(db);

}

public long adduser(String name, String pass) { SQLiteDatabase db = this.getWritableDatabase(); ContentValues cv = new ContentValues(); cv.put("uname", name);

cv.put("passw ", pass);

long result = db.insert(*tbName*, null, cv); db.close();

return result;

}

# MainActivity.java

package com.example.sqlite;

import androidx.appcompat.app.AppCompatActivity; import android.os.Bundle;

import android.view.View; import android.widget.Button; import android.widget.EditText; import android.widget.TextView; import android.widget.Toast;

public class MainActivity extends AppCompatActivity { EditText user, pass; // Added 'pass' EditText Button register, delete, update, display; DBHelper dbHelper;

TextView res;

private static final String *dbName* = "studentdb"; private static final String *tbName* = "student"; private static final int *dbVersion* = 1;

@Override

protected void onCreate(Bundle savedInstanceState) { super.onCreate(savedInstanceState); setContentView(R.layout.*activity\_main*);

user = findViewById(R.id.*username*);

pass = findViewById(R.id.*password*); // Assuming you have an EditText with ID 'password'

register = findViewById(R.id.*register*); delete = findViewById(R.id.*delete*); update = findViewById(R.id.*update*); display = findViewById(R.id.*display*); res = findViewById(R.id.*result*);

dbHelper = new DBHelper(MainActivity.this, *dbName*, null, *dbVersion*);

register.setOnClickListener(new View.OnClickListener() { @Override

public void onClick(View view) {

long val = dbHelper.adduser(user.getText().toString(), pass.getText().toString());

if (val == -1)

Toast.*makeText*(MainActivity.this, "Error in adding user", Toast.*LENGTH\_SHORT*).show();

else

Toast.*makeText*(MainActivity.this, "USER REGISTERED", Toast.*LENGTH\_SHORT*).show();

}

});

update.setOnClickListener(new View.OnClickListener() { @Override

public void onClick(View v) { dbHelper.update(user.getText().toString(),

pass.getText().toString());

}

});

delete.setOnClickListener(new View.OnClickListener() { @Override

public void onClick(View v) { dbHelper.delete(user.getText().toString());

}

});

display.setOnClickListener(new View.OnClickListener() { @Override

public void onClick(View view) {

String out = dbHelper.display(MainActivity.this); res.setText(out);

}

});

}

}

# Screenshots:

