**10. Create a user registration application that stores the user details in a database table.**

activity\_main.xml

<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:paddingLeft="20dp"

android:paddingRight="20dp"

android:paddingTop="20dp"

android:paddingBottom="20dp" tools:context=".MainActivity">

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:textAppearance="?android:attr/textAppearanceLarge"

android:text="Name"

android:id="@+id/textView"

android:layout\_alignParentTop="true"

android:layout\_alignParentLeft="true"

android:layout\_alignParentStart="true" />

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:textAppearance="?android:attr/textAppearanceLarge"

android:text="Email"

android:id="@+id/textView2"

android:layout\_below="@+id/editText\_name"

android:layout\_alignParentLeft="true"

android:layout\_alignParentStart="true" />

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:textAppearance="?android:attr/textAppearanceLarge"

android:text="Mobile"

android:id="@+id/textView3"

android:layout\_below="@+id/editText\_surname"

android:layout\_alignParentLeft="true"

android:layout\_alignParentStart="true" />

<EditText

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:id="@+id/editText\_name"

android:layout\_alignTop="@+id/textView"

android:layout\_toRightOf="@+id/textView"

android:layout\_toEndOf="@+id/textView" />

<EditText

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:id="@+id/editText\_surname"

android:layout\_alignTop="@+id/textView2"

android:layout\_toRightOf="@+id/textView2"

android:layout\_toEndOf="@+id/textView2" />

<EditText

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:id="@+id/editText\_Marks"

android:layout\_below="@+id/editText\_surname"

android:layout\_toRightOf="@+id/textView3"

android:layout\_toEndOf="@+id/textView3" />

<Button

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Add Data"

android:id="@+id/button\_add"

android:layout\_below="@+id/editText\_Marks"

android:layout\_alignParentLeft="true"

android:layout\_alignParentStart="true"

android:layout\_marginTop="76dp" />

<Button

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="View All"

android:id="@+id/button\_viewAll"

android:layout\_above="@+id/button\_update"

android:layout\_centerHorizontal="true" />

<Button

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Update"

android:id="@+id/button\_update"

android:layout\_below="@+id/button\_add"

android:layout\_alignParentLeft="true"

android:layout\_alignParentStart="true" />

<Button

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Delete"

android:id="@+id/button\_delete"

android:layout\_centerVertical="true"

android:layout\_below="@+id/button\_viewAll"

android:layout\_alignLeft="@+id/button\_viewAll"

android:layout\_alignStart="@+id/button\_viewAll" />

<TextView

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:textAppearance="?android:attr/textAppearanceLarge"

android:text="id"

android:id="@+id/textView\_id"

android:layout\_below="@+id/editText\_Marks"

android:layout\_alignParentLeft="true"

android:layout\_alignParentStart="true" />

<EditText

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:id="@+id/editText\_id"

android:layout\_alignTop="@+id/textView\_id"

android:layout\_toRightOf="@+id/textView3"

android:layout\_toEndOf="@+id/textView3" />

</RelativeLayout>

mainactivity.java::::

package com.example.lab100;

import android.app.AlertDialog;

import android.database.Cursor;

import android.support.v4.app.INotificationSideChannel;

import android.os.Bundle;

import android.view.Menu;

import android.view.MenuItem;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import android.widget.Toast;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

DatabaseHelper myDb;

EditText editName,editSurname,editMarks ,editTextId;

Button btnAddData;

Button btnviewAll;

Button btnDelete;

Button btnviewUpdate;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

myDb = new DatabaseHelper(this);

editName = (EditText)findViewById(R.id.editText\_name);

editSurname = (EditText)findViewById(R.id.editText\_surname);

editMarks = (EditText)findViewById(R.id.editText\_Marks);

editTextId = (EditText)findViewById(R.id.editText\_id);

btnAddData = (Button)findViewById(R.id.button\_add);

btnviewAll = (Button)findViewById(R.id.button\_viewAll);

btnviewUpdate= (Button)findViewById(R.id.button\_update);

btnDelete= (Button)findViewById(R.id.button\_delete);

AddData();

viewAll();

UpdateData();

DeleteData();

}

public void DeleteData() {

btnDelete.setOnClickListener(

new View.OnClickListener() {

@Override

public void onClick(View v) {

Integer deletedRows = myDb.deleteData(editTextId.getText().toString());

if(deletedRows > 0)

Toast.makeText(MainActivity.this,"Data Deleted",Toast.LENGTH\_LONG).show();

else

Toast.makeText(MainActivity.this,"Data not Deleted",Toast.LENGTH\_LONG).show();

}

}

);

}

public void UpdateData() {

btnviewUpdate.setOnClickListener(

new View.OnClickListener() {

@Override

public void onClick(View v) {

boolean isUpdate = myDb.updateData(editTextId.getText().toString(),

editName.getText().toString(),

editSurname.getText().toString(),editMarks.getText().toString());

if(isUpdate == true)

Toast.makeText(MainActivity.this,"Data Update",Toast.LENGTH\_LONG).show();

else

Toast.makeText(MainActivity.this,"Data not Updated",Toast.LENGTH\_LONG).show();

}

}

);

}

public void AddData() {

btnAddData.setOnClickListener(

new View.OnClickListener() {

@Override

public void onClick(View v) {

boolean isInserted = myDb.insertData(editName.getText().toString(),

editSurname.getText().toString(),

editMarks.getText().toString() );

if(isInserted == true)

Toast.makeText(MainActivity.this,"Data Inserted",Toast.LENGTH\_LONG).show();

else

Toast.makeText(MainActivity.this,"Data not Inserted",Toast.LENGTH\_LONG).show();

}

}

);

}

public void viewAll() {

btnviewAll.setOnClickListener(

new View.OnClickListener() {

@Override

public void onClick(View v) {

Cursor res = myDb.getAllData();

if(res.getCount() == 0) {

// show message

showMessage("Error","Nothing found");

return;

}

StringBuffer buffer = new StringBuffer();

while (res.moveToNext()) {

buffer.append("Id :"+ res.getString(0)+"\n");

buffer.append("Name :"+ res.getString(1)+"\n");

buffer.append("Email :"+ res.getString(2)+"\n");

buffer.append("Mobile:"+ res.getString(3)+"\n\n");

}

// Show all data

showMessage("Data",buffer.toString());

}

}

);

}

public void showMessage(String title,String Message){

AlertDialog.Builder builder = new AlertDialog.Builder(this);

builder.setCancelable(true);

builder.setTitle(title);

builder.setMessage(Message);

builder.show();

}

@Override

public boolean onCreateOptionsMenu(Menu menu) {

// Inflate the menu; this adds items to the action bar if it is present.

// getMenuInflater().inflate(R.menu.menu\_main, menu);

return true;

}

@Override

public boolean onOptionsItemSelected(MenuItem item) {

// Handle action bar item clicks here. The action bar will

// automatically handle clicks on the Home/Up button, so long

// as you specify a parent activity in AndroidManifest.xml.

int id = item.getItemId();

//noinspection SimplifiableIfStatement

if (id == R.id.packed) {

return true;

}

return super.onOptionsItemSelected(item);

}

}

databasehelper.java:::

package com.example.lab100;

import android.content.ContentValues;

import android.content.Context;

import android.database.Cursor;

import android.database.sqlite.SQLiteDatabase;

import android.database.sqlite.SQLiteOpenHelper;

/\*\*

\* Created by ProgrammingKnowledge on 4/3/2015.

\*/

public class DatabaseHelper extends SQLiteOpenHelper {

public static final String DATABASE\_NAME = "Student.db";

public static final String TABLE\_NAME = "student\_table";

public static final String COL\_1 = "ID";

public static final String COL\_2 = "NAME";

public static final String COL\_3 = "SURNAME";

public static final String COL\_4 = "MARKS";

public DatabaseHelper(Context context) {

super(context, DATABASE\_NAME, null, 1);

}

@Override

public void onCreate(SQLiteDatabase db) {

db.execSQL("create table " + TABLE\_NAME +" (ID INTEGER PRIMARY KEY AUTOINCREMENT,NAME TEXT,SURNAME TEXT,MARKS INTEGER)");

}

@Override

public void onUpgrade(SQLiteDatabase db, int oldVersion, int newVersion) {

db.execSQL("DROP TABLE IF EXISTS "+TABLE\_NAME);

onCreate(db);

}

public boolean insertData(String name,String surname,String marks) {

SQLiteDatabase db = this.getWritableDatabase();

ContentValues contentValues = new ContentValues();

contentValues.put(COL\_2,name);

contentValues.put(COL\_3,surname);

contentValues.put(COL\_4,marks);

long result = db.insert(TABLE\_NAME,null ,contentValues);

if(result == -1)

return false;

else

return true;

}

public Cursor getAllData() {

SQLiteDatabase db = this.getWritableDatabase();

Cursor res = db.rawQuery("select \* from "+TABLE\_NAME,null);

return res;

}

public boolean updateData(String id,String name,String surname,String marks) {

SQLiteDatabase db = this.getWritableDatabase();

ContentValues contentValues = new ContentValues();

contentValues.put(COL\_1,id);

contentValues.put(COL\_2,name);

contentValues.put(COL\_3,surname);

contentValues.put(COL\_4,marks);

db.update(TABLE\_NAME, contentValues, "ID = ?",new String[] { id });

return true;

}

public Integer deleteData (String id) {

SQLiteDatabase db = this.getWritableDatabase();

return db.delete(TABLE\_NAME, "ID = ?",new String[] {id});

}

}