Dbconnect

package com.example.student\_database;  
  
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 dbconnect extends SQLiteOpenHelper {  
 private static final String *dbname*="AndroidMCA";  
 public dbconnect(@Nullable Context context) {  
 super(context,*dbname*,null, 1);  
 }  
  
  
  
 @Override  
 public void onCreate(SQLiteDatabase db) {  
 String q="create table student(sid integer primary key,sname text,course text)";  
 db.execSQL(q);  
 }  
  
 @Override  
 public void onUpgrade(SQLiteDatabase sqLiteDatabase, int i, int i1) {  
  
 }  
 public boolean Insert(String n1, String s1, String s2)  
 {  
 SQLiteDatabase db=this.getWritableDatabase();  
 ContentValues cv=new ContentValues();  
 cv.put("sid",n1);  
 cv.put("sname",s1);  
 cv.put("course",s2);  
 long b=db.insert("student",null,cv);  
 if(b==-1)return false;  
 else  
 return true;  
  
 }  
 public Cursor Select()  
 {  
 SQLiteDatabase db=this.getWritableDatabase();  
 Cursor cr=db.rawQuery("select \* from student",null);  
 return cr;  
 }  
 public boolean delete(int n1)  
 {  
 SQLiteDatabase db=this.getWritableDatabase();  
 Cursor c=db.rawQuery("select \* from student where sid=?",new String[]{String.*valueOf*(n1)});  
 if(c.getCount()>0) {  
 long b = db.delete("student", "sid=?", new String[]{String.*valueOf*(n1)});  
 if (b == -1) return false;  
 else  
 return true;  
 }  
 else  
 return false;  
 }  
 public boolean Update(String n1, String s1, String s2)  
 {  
 SQLiteDatabase db=this.getWritableDatabase();  
 ContentValues cv=new ContentValues();  
 cv.put("sname",s1);  
 cv.put("course",s2);  
 Cursor c=db.rawQuery("select \* from student where sid=?",new String[]{n1});  
 if(c.getCount()>0)  
 {  
 long up=db.update("student",cv,"sid=?",new String[]{n1});  
 if(up==-1) return false;  
 else  
 return true;  
 }  
 else  
 return false;  
  
 }  
  
}

Main Activity.java

package com.example.student\_database;  
  
import android.content.Intent;  
import android.os.Bundle;  
  
import com.google.android.material.snackbar.Snackbar;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.view.View;  
  
import androidx.navigation.NavController;  
import androidx.navigation.Navigation;  
import androidx.navigation.ui.AppBarConfiguration;  
import androidx.navigation.ui.NavigationUI;  
  
import com.example.student\_database.databinding.ActivityMainBinding;  
  
import android.view.Menu;  
import android.view.MenuItem;  
  
public class MainActivity extends AppCompatActivity {  
  
 private AppBarConfiguration appBarConfiguration;  
 private ActivityMainBinding binding;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
  
 binding = ActivityMainBinding.*inflate*(getLayoutInflater());  
 setContentView(binding.getRoot());  
  
 setSupportActionBar(binding.toolbar);  
  
 NavController navController = Navigation.*findNavController*(this, R.id.*nav\_host\_fragment\_content\_main*);  
 appBarConfiguration = new AppBarConfiguration.Builder(navController.getGraph()).build();  
 NavigationUI.*setupActionBarWithNavController*(this, navController, appBarConfiguration);  
  
 binding.fab.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 Snackbar.*make*(view, "Replace with your own action", Snackbar.*LENGTH\_LONG*)  
 .setAction("Action", null).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.*insert*) {  
 Intent i=new Intent(MainActivity.this,insert.class);  
 startActivity(i);  
 }  
 if (id == R.id.*select*) {  
 Intent i=new Intent(MainActivity.this,select.class);  
 startActivity(i);  
 }  
 if (id == R.id.*update*) {  
 Intent i=new Intent(MainActivity.this,update.class);  
 startActivity(i);  
 }  
 if (id == R.id.*delete*) {  
 Intent i=new Intent(MainActivity.this,delete.class);  
 startActivity(i);  
 }  
  
 return super.onOptionsItemSelected(item);  
 }  
  
 @Override  
 public boolean onSupportNavigateUp() {  
 NavController navController = Navigation.*findNavController*(this, R.id.*nav\_host\_fragment\_content\_main*);  
 return NavigationUI.*navigateUp*(navController, appBarConfiguration)  
 || super.onSupportNavigateUp();  
 }  
}

Main Activity.xml

<?xml version="1.0" encoding="utf-8"?>  
<androidx.coordinatorlayout.widget.CoordinatorLayout 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">  
  
 <com.google.android.material.appbar.AppBarLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:theme="@style/Theme.Student\_database.AppBarOverlay">  
  
 <androidx.appcompat.widget.Toolbar  
 android:id="@+id/toolbar"  
 android:layout\_width="match\_parent"  
 android:layout\_height="?attr/actionBarSize"  
 android:background="?attr/colorPrimary"  
 app:popupTheme="@style/Theme.Student\_database.PopupOverlay" />  
  
 </com.google.android.material.appbar.AppBarLayout>  
  
 <include layout="@layout/content\_main" />  
  
 <com.google.android.material.floatingactionbutton.FloatingActionButton  
 android:id="@+id/fab"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="bottom|end"  
 android:layout\_marginEnd="@dimen/fab\_margin"  
 android:layout\_marginBottom="16dp"  
 app:srcCompat="@android:drawable/ic\_dialog\_email" />  
  
</androidx.coordinatorlayout.widget.CoordinatorLayout>

Insert.java

package com.example.student\_database;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.Toast;  
  
public class insert extends AppCompatActivity {  
  
 EditText id,name,cse;  
 Button b1;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_insert*);  
 id=(EditText)findViewById(R.id.*sid*);  
 name=(EditText) findViewById(R.id.*sname*);  
 cse=(EditText) findViewById(R.id.*course*);  
 b1=(Button) findViewById(R.id.*b1*);  
 dbconnect db=new dbconnect(this);  
 b1.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 String n1=id.getText().toString();  
 String s1=name.getText().toString();  
 String s2=cse.getText().toString();  
 if(n1.equals("")||s1.equals("")||s2.equals(""))  
 {  
 Toast.*makeText*(getApplicationContext(),"Fields empty",Toast.*LENGTH\_SHORT*).show();  
 }  
 else  
 {  
 boolean b=db.Insert(n1,s1,s2);  
 if(b==true){  
 Toast.*makeText*(getApplicationContext(),"Successfully Inserted",Toast.*LENGTH\_SHORT*).show();  
 }  
 else  
 {  
 Toast.*makeText*(getApplicationContext(),"Not Inserted",Toast.*LENGTH\_SHORT*).show();  
 }  
 }  
 }  
 });  
  
 }  
}

insert.xml

<?xml version="1.0" encoding="utf-8"?>  
<androidx.constraintlayout.widget.ConstraintLayout 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">  
  
 <TextView  
 android:id="@+id/textView"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="68dp"  
 android:layout\_marginTop="200dp"  
 android:text="ID"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <EditText  
 android:id="@+id/sid"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="36dp"  
 android:layout\_marginTop="200dp"  
 android:ems="10"  
 android:inputType="textPersonName"  
 app:layout\_constraintStart\_toEndOf="@+id/textView"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <TextView  
 android:id="@+id/textView2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="52dp"  
 android:layout\_marginTop="108dp"  
 android:text="NAME"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView" />  
  
 <EditText  
 android:id="@+id/sname"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="28dp"  
 android:layout\_marginTop="80dp"  
 android:ems="10"  
 android:inputType="textPersonName"  
 app:layout\_constraintStart\_toEndOf="@+id/textView2"  
 app:layout\_constraintTop\_toBottomOf="@+id/sid" />  
  
 <TextView  
 android:id="@+id/textView3"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="52dp"  
 android:layout\_marginTop="92dp"  
 android:text="COURSE"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView2" />  
  
 <EditText  
 android:id="@+id/course"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="12dp"  
 android:layout\_marginTop="64dp"  
 android:ems="10"  
 android:inputType="textPersonName"  
 app:layout\_constraintStart\_toEndOf="@+id/textView3"  
 app:layout\_constraintTop\_toBottomOf="@+id/sname" />  
  
 <Button  
 android:id="@+id/b1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="80dp"  
 android:text="SUBMIT"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.47"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/course" />  
</androidx.constraintlayout.widget.ConstraintLayout>

Select.java

package com.example.student\_database;  
  
import androidx.appcompat.app.AlertDialog;  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.database.Cursor;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.Toast;  
  
public class select extends AppCompatActivity {  
Button b2;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_select*);  
 dbconnect db=new dbconnect(this);  
 b2=(Button) findViewById(R.id.*b2*);  
 b2.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 Cursor c=db.Select();  
  
 if(c.getCount()==0){  
 Toast.*makeText*(getApplicationContext(),"No Data found",Toast.*LENGTH\_SHORT*).show();  
 }  
 StringBuffer buffer=new StringBuffer();  
 while(c.moveToNext())  
 {  
 buffer.append("SID : "+ c.getString(0)+"\n");  
 buffer.append("NAME : "+ c.getString(1)+"\n");  
 buffer.append("COURSE : "+ c.getString(2)+"\n\n");  
  
 }  
 AlertDialog.Builder builder=new AlertDialog.Builder(select.this);  
 builder.setCancelable(true);  
 builder.setTitle("Students Data");  
 builder.setMessage(buffer.toString());  
 builder.show();  
 }  
 });  
 }  
}

select.xml

<?xml version="1.0" encoding="utf-8"?>  
<androidx.constraintlayout.widget.ConstraintLayout 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=".select">  
  
 <Button  
 android:id="@+id/b2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="VIEW TABLE"  
 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" />  
</androidx.constraintlayout.widget.ConstraintLayout>

Update.java

package com.example.student\_database;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.Toast;  
  
public class update extends AppCompatActivity {  
 EditText id,name,cse;  
 Button b4;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_update*);  
 id=(EditText)findViewById(R.id.*s1*);  
 name=(EditText) findViewById(R.id.*t3*);  
 cse=(EditText) findViewById(R.id.*s3*);  
 b4=(Button) findViewById(R.id.*b4*);  
 dbconnect db=new dbconnect(this);  
 b4.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 String n1=id.getText().toString();  
 String s1=name.getText().toString();  
 String s2=cse.getText().toString();  
 boolean b=db.Update(n1,s1,s2);  
 if(b==true){  
 Toast.*makeText*(getApplicationContext(),"Successfully Updated",Toast.*LENGTH\_SHORT*).show();  
 }  
 else  
 {  
 Toast.*makeText*(getApplicationContext(),"Not Updated!!Enter valid id",Toast.*LENGTH\_SHORT*).show();  
 }  
 }  
 });  
 }  
}

update.xml

<?xml version="1.0" encoding="utf-8"?>  
<androidx.constraintlayout.widget.ConstraintLayout 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:id="@+id/s2"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".update">  
  
 <TextView  
 android:id="@+id/textView4"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="52dp"  
 android:layout\_marginTop="116dp"  
 android:text="Enter id"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <EditText  
 android:id="@+id/s1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="60dp"  
 android:layout\_marginTop="108dp"  
 android:ems="10"  
 android:inputType="textPersonName"  
 app:layout\_constraintStart\_toEndOf="@+id/textView4"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <TextView  
 android:id="@+id/textView5"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="40dp"  
 android:layout\_marginTop="120dp"  
 android:text="New Name"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView4" />  
  
 <EditText  
 android:id="@+id/t3"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="48dp"  
 android:layout\_marginTop="92dp"  
 android:ems="10"  
 android:inputType="textPersonName"  
 app:layout\_constraintStart\_toEndOf="@+id/textView5"  
 app:layout\_constraintTop\_toBottomOf="@+id/s1" />  
  
 <TextView  
 android:id="@+id/textView6"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="40dp"  
 android:layout\_marginTop="92dp"  
 android:text="New Course"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView5" />  
  
 <EditText  
 android:id="@+id/s3"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="40dp"  
 android:layout\_marginTop="68dp"  
 android:ems="10"  
 android:inputType="textPersonName"  
 app:layout\_constraintStart\_toEndOf="@+id/textView6"  
 app:layout\_constraintTop\_toBottomOf="@+id/t3" />  
  
 <Button  
 android:id="@+id/b4"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="128dp"  
 android:text="Update"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.489"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/s3" />  
</androidx.constraintlayout.widget.ConstraintLayou

Delete.java

package com.example.student\_database;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.Toast;  
  
public class delete extends AppCompatActivity {  
 EditText t1;  
 Button b3;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_delete*);  
 t1=(EditText)findViewById(R.id.*t1*);  
 b3=(Button) findViewById(R.id.*b3*);  
 dbconnect db=new dbconnect(this);  
 b3.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 int s=Integer.*parseInt*(t1.getText().toString());  
 boolean b=db.delete(s);  
 if(b==true){  
 Toast.*makeText*(getApplicationContext(),"Successfully Deleted",Toast.*LENGTH\_SHORT*).show();  
 }  
 else  
 {  
 Toast.*makeText*(getApplicationContext(),"Not Deleted!!Enter valid id",Toast.*LENGTH\_SHORT*).show();  
 }  
 }  
 });  
 }  
}

delete.xml

<?xml version="1.0" encoding="utf-8"?>  
<androidx.constraintlayout.widget.ConstraintLayout 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=".delete">  
  
 <TextView  
 android:id="@+id/textView4"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="60dp"  
 android:layout\_marginTop="256dp"  
 android:text="Enter id"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <EditText  
 android:id="@+id/t1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginStart="60dp"  
 android:layout\_marginTop="240dp"  
 android:ems="10"  
 android:inputType="textPersonName"  
 app:layout\_constraintStart\_toEndOf="@+id/textView4"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <Button  
 android:id="@+id/b3"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="168dp"  
 android:text="DELETE"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.529"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/t1" />  
</androidx.constraintlayout.widget.ConstraintLayout>