Main

package com.example.sqlite;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
import android.view.View;  
import android.widget.AdapterView;  
import android.widget.ArrayAdapter;  
import android.widget.AutoCompleteTextView;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.ListView;  
import android.widget.RadioButton;  
import android.widget.TextView;  
import android.widget.Toast;  
  
import java.util.List;  
  
public class MainActivity extends AppCompatActivity {  
 String[]item={"Số 1","Số 2","Số 3"};  
 AutoCompleteTextView autoCompleteTextView;  
 ArrayAdapter<String> adapter;  
 private TextView tvid;  
 private EditText edtname;  
 private EditText edtnumber;  
 private EditText edtaddress;  
 private Button btnthem;  
 private Button btncapnhap;  
 private Button btnxoa1;  
 private ListView lv;  
 private CustomAdapter customAdapter;  
 private DB db;  
 private List<Sinhvien> sinhvienList;  
 private RadioButton radionam,radionu;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 anhxa();  
 adapter= new ArrayAdapter<String>(this,R.layout.*list\_item*,item);  
 autoCompleteTextView.setAdapter(adapter);  
 autoCompleteTextView.setOnItemClickListener(new AdapterView.OnItemClickListener() {  
 @Override  
 public void onItemClick(AdapterView<?> adapterView, View view, int i, long l) {  
 String data=adapterView.getItemAtPosition(i).toString();  
 Toast.*makeText*(MainActivity.this, data, Toast.*LENGTH\_SHORT*).show();  
 }  
 });  
 db= new DB(this);  
 sinhvienList=db.laytatca();  
 setAdapter();  
 btnthem. setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 String name=edtname.getText().toString();  
 String number=edtnumber.getText().toString();  
 String andress= edtaddress.getText().toString();  
 String gender;  
 if (radionam.isChecked()){  
 gender=radionam.getText().toString();  
 }  
 else{  
 gender=radionu.getText().toString();  
 }  
 Sinhvien sinhvien= new Sinhvien(name,number,andress,gender);  
 Toast.*makeText*(MainActivity.this, "Thêm thành công", Toast.*LENGTH\_SHORT*).show();  
 db.themsinhvien(sinhvien);  
 updateListSinhvien();  
 setAdapter();  
 }  
 });  
 lv.setOnItemClickListener(new AdapterView.OnItemClickListener() {  
 @Override  
 public void onItemClick(AdapterView<?> adapterView, View view, int i, long l) {  
 Sinhvien sinhvien= sinhvienList.get(i);  
 tvid.setText(String.*valueOf*(sinhvien.getId()));  
 edtnumber.setText(sinhvien.getNumber());  
 edtname.setText(sinhvien.getName());  
 edtaddress.setText(sinhvien.getAndress());  
 btnthem.setEnabled(false);  
 btncapnhap.setEnabled(true);  
 }  
 });  
 btnxoa1.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 int rs=Integer.*parseInt*(tvid.getText().toString());  
 db.Deletesinhvien(rs);  
 updateListSinhvien();  
 Toast.*makeText*(MainActivity.this, "Xóa thành công", Toast.*LENGTH\_SHORT*).show();  
 setAdapter();  
 }  
 });  
 btncapnhap. setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
  
 Sinhvien sinhvien= new Sinhvien();  
 sinhvien.setId(Integer.*parseInt*(tvid.getText().toString()));  
 sinhvien.setName(edtname.getText().toString());  
 sinhvien.setNumber(edtnumber.getText().toString());  
 sinhvien.setAndress(edtaddress.getText().toString());  
 db.Updatesinhvien(sinhvien);  
 updateListSinhvien();  
 setAdapter();  
 }  
 });  
 }  
 public void anhxa(){  
 tvid=(TextView) findViewById(R.id.*tvId*);  
 edtname=(EditText) findViewById(R.id.*tvName*);  
 edtnumber=(EditText) findViewById(R.id.*tvNumber*);  
 edtaddress=(EditText) findViewById(R.id.*tvAddress*);  
 btnthem=(Button) findViewById(R.id.*btnsave*);  
 btncapnhap=(Button) findViewById(R.id.*btnupdate*);  
 btnxoa1=(Button) findViewById(R.id.*btnxoa*);  
 lv=(ListView) findViewById(R.id.*lvsinhvien*);  
 radionam=(RadioButton) findViewById(R.id.*rbnam*);  
 radionu=(RadioButton) findViewById(R.id.*rbnu*);  
 autoCompleteTextView=findViewById(R.id.*auto\_txt*);  
 }  
 private void setAdapter() {  
 if (customAdapter == null){  
 customAdapter = new CustomAdapter(this,R.layout.*list\_view\_custom*,sinhvienList);  
 lv.setAdapter(customAdapter);  
 }else{  
 customAdapter.notifyDataSetChanged();  
 lv.setSelection(customAdapter.getCount()-1);  
 }  
 }  
  
 private Sinhvien taoSinhvien(){  
 String name=edtname.getText().toString();  
 String number=edtnumber.getText().toString();  
 String andress= edtaddress.getText().toString();  
 String gender;  
 if (radionam.isChecked()){  
 gender=radionam.getText().toString();  
 }  
 else{  
 gender=radionu.getText().toString();  
 }  
 Sinhvien sinhvien= new Sinhvien(name,number,andress,gender);  
 return sinhvien;  
 }  
 public void updateListSinhvien(){  
 sinhvienList.clear();  
 sinhvienList.addAll(db.laytatca());  
 if(customAdapter != null){  
 customAdapter.notifyDataSetChanged();  
 }  
 }  
  
  
  
}

Custom

package com.example.sqlite;  
  
import android.content.Context;  
import android.view.LayoutInflater;  
import android.view.View;  
import android.view.ViewGroup;  
import android.widget.ArrayAdapter;  
import android.widget.TextView;  
  
import androidx.annotation.LayoutRes;  
import androidx.annotation.NonNull;  
import androidx.annotation.Nullable;  
import androidx.recyclerview.widget.RecyclerView;  
  
import java.util.List;  
  
  
public class CustomAdapter extends ArrayAdapter {  
 private Context context;  
 private int resoure;  
 private List<Sinhvien>sinhvienList;  
 public CustomAdapter(@NonNull Context context, int resoure, List<Sinhvien> objects) {  
 super(context, resoure, objects);  
 this.context = context;  
 this.resoure = resoure;  
 this.sinhvienList = objects;  
 }  
  
 @NonNull  
 @Override  
 public View getView(int position, @Nullable View convertView, @NonNull ViewGroup parent) {  
 ViewHolder viewHolder;  
 if (convertView==null){  
 convertView=LayoutInflater.*from*(context).inflate(R.layout.*list\_view\_custom*,parent,false);  
 viewHolder= new ViewHolder();  
 viewHolder.tv\_id=(TextView) convertView.findViewById(R.id.*tv\_id*);  
 viewHolder.tv\_name=(TextView) convertView.findViewById(R.id.*tv\_name*);  
 viewHolder.tv\_address=(TextView) convertView.findViewById(R.id.*tv\_address*);  
 viewHolder.tv\_number=(TextView) convertView.findViewById(R.id.*tv\_number*);  
 viewHolder.tv\_gender=(TextView) convertView.findViewById(R.id.*tv\_gioitinh*);  
 convertView.setTag(viewHolder);  
 }  
 else {  
 viewHolder=(ViewHolder) convertView.getTag();  
 }  
 Sinhvien sinhvien=sinhvienList.get(position);  
 viewHolder.tv\_id.setText(String.*valueOf*(sinhvien.getId()));  
 viewHolder.tv\_name.setText(sinhvien.getName());  
 viewHolder.tv\_address.setText(sinhvien.getAndress());  
 viewHolder.tv\_number.setText(sinhvien.getNumber());  
 String data=sinhvien.getGioitinh();  
 if (data.equals("Nam")){  
 viewHolder.tv\_gender.setText("Nam");  
 }  
 else {  
 viewHolder.tv\_gender.setText("Nữ");  
 }  
  
 return convertView;  
 }  
  
 private class ViewHolder {  
 private TextView tv\_id;  
 private TextView tv\_name;  
 private TextView tv\_number;  
 private TextView tv\_address;  
 private TextView tv\_gender;  
 }  
}

Db

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;  
  
import java.util.ArrayList;  
import java.util.List;  
  
public class DB extends SQLiteOpenHelper {  
  
 public DB(@Nullable Context context) {  
 super(context, "QLSV", null, 1);  
 }  
  
 @Override  
 public void onCreate(SQLiteDatabase sqLiteDatabase) {  
 String query="CREATE TABLE Sinhvien( id integer primary key autoincrement, " +  
 "hoten text , sdt text , diachi text , gioitinh text) ";  
 sqLiteDatabase.execSQL(query);  
 }  
  
 @Override  
 public void onUpgrade(SQLiteDatabase sqLiteDatabase, int i, int i1) {  
  
 }  
 public void themsinhvien(Sinhvien sinhvien){  
 SQLiteDatabase db= this.getReadableDatabase();  
 ContentValues values= new ContentValues();  
 values.put("hoten",sinhvien.getName());  
 values.put("sdt",sinhvien.getNumber());  
 values.put("diachi",sinhvien.getAndress());  
 values.put("gioitinh",sinhvien.getGioitinh());  
 db.insert("Sinhvien",null,values);  
 db.close();  
 }  
 public List<Sinhvien> laytatca(){  
 SQLiteDatabase db= this.getWritableDatabase();  
 String query="SELECT \* FROM Sinhvien";  
 List<Sinhvien> sinhvienList= new ArrayList<>();  
 Cursor cursor= db.rawQuery(query,null);  
 if (cursor.moveToFirst()){  
 do {  
 Sinhvien sinhvien= new Sinhvien();  
 sinhvien.setId(cursor.getInt(0));  
 sinhvien.setName(cursor.getString(1));  
 sinhvien.setNumber(cursor.getString(2));  
 sinhvien.setAndress(cursor.getString(3));  
 sinhvien.setGioitinh(cursor.getString(4));  
 sinhvienList.add(sinhvien);  
 }while (cursor.moveToNext());  
 }  
 cursor.close();;  
 db.close();  
 return sinhvienList;  
 }  
 public int Updatesinhvien(Sinhvien sinhvien){  
 SQLiteDatabase db= this.getWritableDatabase();  
 ContentValues contentValues= new ContentValues();  
 contentValues.put("hoten",sinhvien.getName());  
 contentValues.put("sdt",sinhvien.getNumber());  
 contentValues.put("diachi",sinhvien.getAndress());  
 contentValues.put("gioitinh",sinhvien.getGioitinh());  
 int kq=db.update("Sinhvien",contentValues,"id=?",new String[]{String.*valueOf*(sinhvien.getId())});  
 return kq;  
 }  
 public int Deletesinhvien(int id){  
 SQLiteDatabase db= this.getWritableDatabase();  
 int kq=db.delete("Sinhvien","id=?", new String[]{String.*valueOf*(id)});  
 return kq;  
 }  
}

Sinhvien

package com.example.sqlite;  
  
public class Sinhvien {  
int id;  
String name;  
String number;  
String andress;  
String gioitinh;  
 public Sinhvien(String name, String number, String andress,String gioitinh) {  
 this.name = name;  
 this.number = number;  
 this.andress = andress;  
 this.gioitinh=gioitinh;  
 }  
 public Sinhvien(){}  
  
 public int getId() {  
 return id;  
 }  
  
 public void setId(int id) {  
 this.id = id;  
 }  
  
 public String getName() {  
 return name;  
 }  
  
 public void setName(String name) {  
 this.name = name;  
 }  
  
 public String getNumber() {  
 return number;  
 }  
  
 public void setNumber(String number) {  
 this.number = number;  
 }  
  
 public String getAndress() {  
 return andress;  
 }  
  
 public void setAndress(String andress) {  
 this.andress = andress;  
 }  
 public String getGioitinh() {  
 return gioitinh;  
 }  
  
 public void setGioitinh(String gioitinh) {  
 this.gioitinh = gioitinh;  
 }  
}

listview custom

<?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"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:orientation="horizontal">  
  
 <TextView  
 android:id="@+id/tv\_id"  
 android:layout\_width="70dp"  
 android:layout\_height="match\_parent"  
 android:background="@color/design\_default\_color\_primary"  
 android:gravity="center"  
 android:text="1"  
 android:textColor="#fff"  
 android:textStyle="bold"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"></TextView>  
 <LinearLayout  
 android:padding="8dp"  
 android:orientation="vertical"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent">  
 <TextView  
 android:layout\_width="wrap\_content"  
 android:id="@+id/tv\_name"  
 android:textStyle="bold"  
 android:textSize="20sp"  
 android:layout\_height="wrap\_content"></TextView>  
 <TextView  
 android:layout\_width="wrap\_content"  
 android:id="@+id/tv\_number"  
 android:textStyle="bold"  
 android:textSize="20sp"  
 android:layout\_height="wrap\_content"></TextView>  
 <TextView  
 android:layout\_width="wrap\_content"  
 android:id="@+id/tv\_address"  
 android:textStyle="bold"  
 android:textSize="20sp"  
 android:layout\_height="wrap\_content"></TextView>  
 <TextView  
 android:layout\_width="wrap\_content"  
 android:id="@+id/tv\_gioitinh"  
 android:textSize="20sp"  
 android:textStyle="bold"  
 android:layout\_height="wrap\_content"></TextView>  
 </LinearLayout>  
</LinearLayout>