**package** tdc.edu.vn.qlsinhvien;  
  
**import** android.content.Context;  
**import** android.view.LayoutInflater;  
**import** android.view.View;  
**import** android.view.ViewGroup;  
**import** android.widget.ArrayAdapter;  
**import** android.widget.ImageView;  
**import** android.widget.TextView;  
**import** android.widget.Toast;  
  
**import** java.util.ArrayList;  
**import** java.util.Locale;  
  
**public class** CustomApdapter **extends** ArrayAdapter {  
 Context **context**;  
 **int resource**;  
 ArrayList<SinhVien> **data**;  
 ArrayList<SinhVien> **data\_DS**;  
  
 **public** CustomApdapter(Context context, **int** resource, ArrayList<SinhVien> data) {  
 **super**(context, resource);  
 **this**.**context** = context;  
 **this**.**resource** = resource;  
 **this**.**data** = data;  
 **this**.**data\_DS** = **new** ArrayList<SinhVien>();  
 **this**.**data\_DS**.addAll(data);  
 }  
  
 @Override  
 **public int** getCount() {  
 **return data**.size();  
 }  
  
 **private static class** Holder {  
 ImageView **imgGT**;  
 ImageView **imgDelete**;  
 TextView **tvHoTen**;  
 TextView **tvKhoa**;  
 }  
  
 @Override  
 **public** View getView(**int** position, View convertView, ViewGroup parent) {  
 View view =convertView;  
 Holder holder = **null**;  
 **if**(view == **null**) {  
 holder = **new** Holder();  
 view = LayoutInflater.*from*(**context**).inflate(**resource**, **null**);  
 holder.**imgGT** = view.findViewById(R.id.***imgGT***);  
 holder.**imgDelete** = view.findViewById(R.id.***imgDelete***);  
 holder.**tvHoTen** = view.findViewById(R.id.***tvHoten***);  
 holder.**tvKhoa** = view.findViewById(R.id.***tvKhoa***);  
 view.setTag(holder);  
 }  
 **else** holder=(Holder)view.getTag();  
  
 **final** SinhVien sinhVien = **data**.get(position);  
 **if** (sinhVien.isGioiTinh())  
 holder.**imgGT**.setImageResource(R.drawable.***ic\_accessibility\_black\_24dp***);  
 **else** holder.**imgGT**.setImageResource(R.drawable.***ic\_pregnant\_woman\_black\_24dp***);  
 holder.**tvHoTen**.setText(sinhVien.getHoTen());  
 holder.**tvKhoa**.setText(sinhVien.getKhoa());  
 holder.**imgDelete**.setOnClickListener(**new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View v) {  
 DBSinhVien dbSinhVien = **new** DBSinhVien(**context**);  
 dbSinhVien.Xoa(sinhVien);  
  
 DanhSach danhSach = (DanhSach)**context**;  
 danhSach.CapnhapDL();  
  
 }  
 });  
  
  
 **return** view;  
 }  
  
 *//filter* **public void** filter(String charText){  
 charText = charText.toLowerCase(Locale.*getDefault*());  
 **data**.clear();  
 **if** (charText.length()==0){  
 **data**.addAll(**data\_DS**);  
 }  
 **else** {  
 **for** (SinhVien model : **data\_DS**){  
 **if** (model.getHoTen().toLowerCase(Locale.*getDefault*())  
 .contains(charText) || model.getKhoa().toLowerCase(Locale.*getDefault*())  
 .contains(charText) ){  
 **data**.add(model);  
 }  
 }  
 }  
 notifyDataSetChanged();  
 }  
  
}

**package** tdc.edu.vn.qlsinhvien;  
  
**import** android.support.v7.app.ActionBar;  
**import** android.support.v7.app.AppCompatActivity;  
**import** android.os.Bundle;  
**import** android.support.v7.widget.SearchView;  
**import** android.text.TextUtils;  
**import** android.view.ContextMenu;  
**import** android.view.Menu;  
**import** android.view.MenuInflater;  
**import** android.view.MenuItem;  
**import** android.view.View;  
**import** android.widget.AdapterView;  
**import** android.widget.ListView;  
**import** android.widget.Toast;  
  
**import** java.util.ArrayList;  
  
**public class** DanhSach **extends** AppCompatActivity {  
 ListView **lvDanhsach**;  
 ArrayList<SinhVien> **data\_SV** = **new** ArrayList<>();  
 CustomApdapter **adapter\_sv**;  
  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_danh\_sach***);  
 ActionBar actionBar = getSupportActionBar();  
 actionBar.setDisplayHomeAsUpEnabled(**true**);  
 setControl();  
 setEvent();  
 }  
  
 **private void** setEvent() {  
 DBSinhVien dbSinhVien = **new** DBSinhVien(**this**);  
 **data\_SV** = dbSinhVien.LayDL();  
  
 CapnhapDL();  
 }  
  
 **private void** setControl() {  
 **lvDanhsach** = findViewById(R.id.***lvDanhSach***);  
 }  
  
 **public void** CapnhapDL()  
 {  
 **try** {  
 DBSinhVien db = **new** DBSinhVien(**this**);  
 **adapter\_sv** = **new** CustomApdapter(**this**, R.layout.***listview\_item***, db.LayDL());  
 **lvDanhsach**.setAdapter(**adapter\_sv**);  
 }  
 **catch** (Exception ex)  
 {  
 **lvDanhsach**.setVisibility(View.***GONE***);  
 Toast.*makeText*(**this**, **"Không có dữ liệu"**, Toast.***LENGTH\_SHORT***).show();  
 }  
  
 }  
  
  
  
 @Override  
 **public boolean** onCreateOptionsMenu(Menu menu) {  
 getMenuInflater().inflate(R.menu.***menu\_search***, menu);  
  
 MenuItem myActionMenuItem = menu.findItem(R.id.***action\_search***);  
 SearchView searchView = (SearchView)myActionMenuItem.getActionView();  
 searchView.setOnQueryTextListener(**new** SearchView.OnQueryTextListener() {  
 @Override  
 **public boolean** onQueryTextSubmit(String s) {  
 **return false**;  
 }  
  
 @Override  
 **public boolean** onQueryTextChange(String s) {  
 **if** (TextUtils.*isEmpty*(s)){  
 **adapter\_sv**.filter(**""**);  
 **lvDanhsach**.clearTextFilter();  
 }  
 **else** {  
 **adapter\_sv**.filter(s);  
 }  
 **return true**;  
 }  
 });  
 **return true**;  
 }  
  
  
 @Override  
 **public boolean** onOptionsItemSelected(MenuItem item) {  
 **switch** (item.getItemId()) {  
  
 **case** android.R.id.***home***:  
 onBackPressed();  
 **return true**;  
 }  
 **return super**.onOptionsItemSelected(item);  
 }  
  
 @Override  
 **public void** onCreateContextMenu(ContextMenu menu, View v, ContextMenu.ContextMenuInfo menuInfo) {  
 **super**.onCreateContextMenu(menu, v, menuInfo);  
 MenuInflater inflater = getMenuInflater();  
 inflater.inflate(R.menu.***context\_menu***, menu);  
 }  
  
  
 @Override  
 **public boolean** onContextItemSelected(MenuItem item) {  
 AdapterView.AdapterContextMenuInfo info = (AdapterView.AdapterContextMenuInfo) item.getMenuInfo();  
 **switch** (item.getItemId()) {  
 **case** R.id.***mn\_update***:  
 Toast.*makeText*(**this**, **"Update"**, Toast.***LENGTH\_SHORT***).show();  
 **break**;  
 **case** R.id.***mn\_delete***:  
 Toast.*makeText*(**this**, **"Delete"**, Toast.***LENGTH\_SHORT***).show();  
 **break**;  
 }  
 **return super**.onContextItemSelected(item);  
  
 }  
}

**package** tdc.edu.vn.qlsinhvien;  
  
**import** android.content.Context;  
**import** android.database.sqlite.SQLiteDatabase;  
**import** android.database.sqlite.SQLiteOpenHelper;  
  
**public class** DBHelper **extends** SQLiteOpenHelper {  
  
 **public** DBHelper( Context context) {  
 **super**(context, **"QLSinhVien"**, **null**, 1);  
 }  
  
 @Override  
 **public void** onCreate(SQLiteDatabase db) {  
 String sql=**"create table SinhVien(hoten text, gioitinh Text , khoa text )"**;  
 db.execSQL(sql);  
 }  
  
 @Override  
 **public void** onUpgrade(SQLiteDatabase db, **int** oldVersion, **int** newVersion) {  
  
 }  
}

**package** tdc.edu.vn.qlsinhvien;  
  
**import** android.content.ContentValues;  
**import** android.content.Context;  
**import** android.database.Cursor;  
**import** android.database.sqlite.SQLiteDatabase;  
  
**import** java.util.ArrayList;  
  
**public class** DBSinhVien {  
 DBHelper **dbHelper**;  
  
 **public** DBSinhVien(Context context) {  
 **dbHelper**= **new** DBHelper(context);  
 }  
  
 **public void** Them(SinhVien sinhVien)  
 {  
 SQLiteDatabase db = **dbHelper**.getWritableDatabase();  
 ContentValues values = **new** ContentValues();  
 values.put(**"hoten"**,sinhVien.getHoTen());  
 **if**(sinhVien.isGioiTinh())  
 values.put(**"gioitinh"**,**"Nam"**);  
 **else** values.put(**"gioitinh"**,**"Nữ"**);  
 values.put(**"Khoa"**,sinhVien.getKhoa());  
 db.insert(**"SinhVien"**,**null**,values);  
 }  
  
 **public void** Sua(SinhVien sinhVien)  
 {  
  
 SQLiteDatabase db = **dbHelper**.getWritableDatabase();  
 ContentValues values = **new** ContentValues();  
 values.put(**"hoten"**,sinhVien.getHoTen());  
 **if**(sinhVien.isGioiTinh())  
 values.put(**"gioitinh"**,**"Nam"**);  
 **else** values.put(**"gioitinh"**,**"Nữ"**);  
 values.put(**"Khoa"**,sinhVien.getKhoa());  
 db.update(**"SinhVien"**,values,**"hoten ='"**+sinhVien.getHoTen() +**"'"**,**null**);  
 }  
  
  
 **public void** Xoa(SinhVien sinhVien)  
 {  
  
 SQLiteDatabase db = **dbHelper**.getWritableDatabase();  
 String sql =**"Delete from SinhVien where hoten= '"**+sinhVien.getHoTen()+**"'"**;  
 db.execSQL(sql);  
  
 }  
  
 **public** ArrayList<SinhVien> LayDL()  
 {  
 ArrayList<SinhVien> data = **new** ArrayList<>();  
 String sql=**"select \* from SinhVien"**;  
 SQLiteDatabase db= **dbHelper**.getReadableDatabase();  
 Cursor cursor = db.rawQuery(sql,**null**);  
 cursor.moveToFirst();  
 **do** {  
 SinhVien sinhVien = **new** SinhVien();  
 sinhVien.setHoTen(cursor.getString(0));  
 **if**(cursor.getString(1).toString().equals(**"Nam"**))  
 sinhVien.setGioiTinh(**true**);  
 **else** sinhVien.setGioiTinh(**false**);  
  
 sinhVien.setKhoa(cursor.getString(2));  
 data.add(sinhVien);  
 }  
 **while** (cursor.moveToNext());  
  
 **return** data;  
 }  
}

**package** tdc.edu.vn.qlsinhvien;  
  
**import** android.content.Intent;  
**import** android.support.v7.app.ActionBar;  
**import** android.support.v7.app.AppCompatActivity;  
**import** android.os.Bundle;  
**import** android.util.Log;  
**import** android.view.Menu;  
**import** android.view.MenuItem;  
**import** android.view.View;  
**import** android.widget.AdapterView;  
**import** android.widget.ArrayAdapter;  
**import** android.widget.Button;  
**import** android.widget.EditText;  
**import** android.widget.ListView;  
**import** android.widget.RadioButton;  
**import** android.widget.Spinner;  
**import** android.widget.Toast;  
  
**import** java.util.ArrayList;  
  
**public class** MainActivity **extends** AppCompatActivity {  
 EditText **txtHoTen**;  
 RadioButton **radNam**, **radNu**;  
 Spinner **spKhoa**;  
 Button **btnThem**, **btnXoa**, **btnSua**, **btnClear**;  
 ArrayList<String> **data\_khoa** = **new** ArrayList<>();  
 ArrayAdapter **adapter\_khoa**;  
  
  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_main***);  
 setControl();  
 setEvent();  
 }  
  
 **private void** setEvent() {  
 **data\_khoa**.add(**"CNTT"**);  
 **data\_khoa**.add(**"KT"**);  
 **data\_khoa**.add(**"cơ khí"**);  
 **adapter\_khoa** = **new** ArrayAdapter(**this**, android.R.layout.***simple\_spinner\_item***, **data\_khoa**);  
 **spKhoa**.setAdapter(**adapter\_khoa**);  
  
  
 **btnThem**.setOnClickListener(**new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View v) {  
 DBSinhVien dbSinhVien = **new** DBSinhVien(getApplicationContext());  
 SinhVien sinhVien = getSinhVien();  
 dbSinhVien.Them(sinhVien);  
  
 }  
 });  
  
  
 **btnXoa**.setOnClickListener(**new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View v) {  
  
 DBSinhVien dbSinhVien = **new** DBSinhVien(getApplicationContext());  
 SinhVien sinhVien = getSinhVien();  
 dbSinhVien.Xoa(sinhVien);  
 }  
 });  
  
 **btnSua**.setOnClickListener(**new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View v) {  
 DBSinhVien dbSinhVien = **new** DBSinhVien(getApplicationContext());  
 SinhVien sinhVien = getSinhVien();  
 dbSinhVien.Sua(sinhVien);  
 }  
 });  
  
  
 **btnClear**.setOnClickListener(**new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View v) {  
 **txtHoTen**.setText(**""**);  
 **radNam**.setChecked(**true**);  
 **spKhoa**.setSelection(0);  
 }  
 });  
 }  
  
 **private** SinhVien getSinhVien() {  
 SinhVien sinhVien = **new** SinhVien();  
 sinhVien.setHoTen(**txtHoTen**.getText().toString());  
 sinhVien.setGioiTinh(**radNam**.isChecked());  
 sinhVien.setKhoa(**spKhoa**.getSelectedItem().toString());  
 **return** sinhVien;  
 }  
  
  
 **private void** setControl() {  
 **txtHoTen** = findViewById(R.id.***txtHoTen***);  
 **radNam** = findViewById(R.id.***radNam***);  
 **radNu** = findViewById(R.id.***radNu***);  
 **spKhoa** = findViewById(R.id.***spKhoa***);  
 **btnThem** = findViewById(R.id.***btnThem***);  
 **btnXoa** = findViewById(R.id.***btnXoa***);  
 **btnSua** = findViewById(R.id.***btnSua***);  
 **btnClear** = findViewById(R.id.***btnClear***);  
 *//lvDanhsach = findViewById(R.id.lvDanhSach);* }  
  
 @Override  
 **public boolean** onCreateOptionsMenu(Menu menu) {  
 getMenuInflater().inflate(R.menu.***menu\_actionbar***, menu);  
 **return super**.onCreateOptionsMenu(menu);  
 }  
  
 @Override  
 **public boolean** onOptionsItemSelected(MenuItem item) {  
 **switch** (item.getItemId()) {  
 **case** R.id.***mnSave***:  
 Log.*d*(**"test"**, **"Save"**);  
 **break**;  
  
 **case** R.id.***mnopen***:  
 Log.*d*(**"test"**, **"Open"**);  
 Intent intent = **new** Intent(**this**, DanhSach.**class**);  
 startActivity(intent);  
 **break**;  
  
 **case** R.id.***mnThoat***:  
 Log.*d*(**"test"**, **"Thoat"**);  
 finish();  
 **break**;  
 }  
  
 **return super**.onOptionsItemSelected(item);  
 }  
}

**package** tdc.edu.vn.qlsinhvien;  
  
**public class** SinhVien {  
 String **hoTen**;  
 **boolean gioiTinh**;  
 String **khoa**;  
  
 **public** String getHoTen() {  
 **return hoTen**;  
 }  
  
 **public void** setHoTen(String hoTen) {  
 **this**.**hoTen** = hoTen;  
 }  
  
 **public boolean** isGioiTinh() {  
 **return gioiTinh**;  
 }  
  
 **public void** setGioiTinh(**boolean** gioiTinh) {  
 **this**.**gioiTinh** = gioiTinh;  
 }  
  
 **public** String getKhoa() {  
 **return khoa**;  
 }  
  
 **public void** setKhoa(String khoa) {  
 **this**.**khoa** = khoa;  
 }  
  
 @Override  
 **public** String toString() {  
 **return "SinhVien{"** +  
 **"hoTen='"** + **hoTen** + **'\''** +  
 **", gioiTinh="** + **gioiTinh** +  
 **", khoa='"** + **khoa** + **'\''** +  
 **'}'**;  
 }  
}

*<?***xml version="1.0" encoding="utf-8"***?>*<**menu xmlns:android="http://schemas.android.com/apk/res/android"**>  
 <**item android:id="@+id/mn\_delete"  
 android:title="Delete"**/>  
 <**item android:id="@+id/mn\_update"  
 android:title="Update"**/>  
  
</**menu**>

*<?***xml version="1.0" encoding="utf-8"***?>*<**menu xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"**>  
 <**item  
 android:id="@+id/mnSave"  
 android:icon="@drawable/ic\_save\_black\_24dp"  
 android:title="Lưu"  
 app:showAsAction="ifRoom"** />  
  
 <**item  
 android:id="@+id/mnopen"  
 android:icon="@drawable/ic\_folder\_special\_black\_24dp"  
 android:title="Lưu"  
 app:showAsAction="ifRoom"** />  
 <**item  
  
 android:id="@+id/mnThoat"  
 android:icon="@drawable/ic\_exit\_to\_app\_black\_24dp"  
 android:title="Thoát"  
 app:showAsAction="always|withText"** />  
  
</**menu**>

*<?***xml version="1.0" encoding="utf-8"***?>*<**menu xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"**>  
 <**item android:id="@+id/action\_search"  
 android:title="Search"  
 android:icon="@android:drawable/ic\_menu\_search"  
 app:showAsAction="always"  
 app:actionViewClass="android.support.v7.widget.SearchView"** />  
</**menu**>