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package com.example.listviewdemo;
import androidx.appcompat.app.AppCompatActivity;
import android.app.Activity;
import android.os.Bundle;
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.Spinner;
import android.widget.Toast;
import java.util.ArrayList;
public class MainActivity extends AppCompatActivity {
   ArrayList<String> courses;
   ArrayAdapter theAdapter;
   int lastClickedItemIndex=-1;
   ArrayList<String> countries;
   @Override
   protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity main);
        courses=generateCourses();
        theAdapter=new ArrayAdapter(this, android.R.layout.simple_list_item_1,
        ListView theCourseLV = findViewById(R.id.courseLV);
        theCourseLV.setAdapter(theAdapter);
        theCourseLV.setOnItemClickListener(new AdapterView.OnItemClickListener() {
            public void onItemClick(AdapterView<?> adapterView, View view, int i, long l) {
                String theClickedText = courses.get(i);
                Toast.makeText(MainActivity.this, "Click: "+theClickedText,
                        Toast. LENGTH SHORT) . show();
                EditText theInputET = findViewById(R.id.inputTextET);
                theInputET.setText(theClickedText);
                lastClickedItemIndex=i;
        });
        theCourseLV.setOnItemLongClickListener(new AdapterView.OnItemLongClickListener() {
            public boolean onItemLongClick(AdapterView<?> adapterView, View view, int i, long 1)
                String theCourse= courses.get(i);
                courses.remove(i);
                theAdapter.notifyDataSetChanged();
                Toast.makeText(MainActivity.this, "Removed: "+theCourse, Toast.LENGTH SHORT)
                return true:
        });
        final EditText theInputET = findViewById(R.id.inputTextET);
        Button addButton = findViewById(R.id.addButton);
        addButton.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                String theText = theInputET.getText().toString();
                courses.add(theText);
                theAdapter.notifyDataSetChanged();
            }
        });
        Button updateButton = findViewById(R.id.updateButton);
        updateButton.setOnClickListener(new View.OnClickListener() {
```

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@Override
        public void onClick(View view) {
            EditText theInputET = findViewById(R.id.inputTextET);
            courses.set(lastClickedItemIndex, theInputET.getText().toString());
            theAdapter.notifyDataSetChanged();
    });
    countries = getCountries();
    Spinner countrySpinner = findViewById(R.id.countrySpinner);
    ArrayAdapter countryAdapter= new ArrayAdapter(this,
            android.R.layout. simple spinner item, countries);
    countrySpinner.setAdapter(countryAdapter);
    countrySpinner.setOnItemSelectedListener(new AdapterView.OnItemSelectedListener() {
        @Override
        public void onItemSelected(AdapterView<?> adapterView, View view, int i, long 1) {
            String selectedCountry = countries.get(i);
            courses.add(selectedCountry);
            theAdapter.notifyDataSetChanged();
        }
        @Override
        public void onNothingSelected(AdapterView<?> adapterView) {
    });
}
private ArrayList<String> getCountries() {
    ArrayList<String> theCountries=new ArrayList<>();
    theCountries.add("UAE");
    theCountries.add("Viet Nam");
    theCountries.add("Thailand");
    theCountries.add("Malaysia");
    theCountries.add("Indonesia");
    return theCountries;
}
private ArrayList<String> generateCourses() {
    ArrayList<String> theCourses=new ArrayList<>();
    theCourses.add("Mathematics");
    theCourses.add("Web Development");
    theCourses.add("Mobile Development");
    theCourses.add("Operating Systems");
    theCourses.add("Computer Architecture");
    theCourses.add("Mathematics 2");
    theCourses.add("Web Development 2");
    return theCourses;
```