Mobile Application Development

Practical 9: Seek bar, drawable

CODE:

Andriod_manifest.xml

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"</pre>
   package="com.example.drawables">
    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic launcher"
        android:label="@string/app name"
        android:roundIcon="@mipmap/ic launcher round"
        android: supportsRtl="true"
        android: theme="@style/Theme.Drawables">
        <activity android:name=".MainActivity"</pre>
            android:exported="true">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />
                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
    </application>
</manifest>
```

Activity_main.xml

```
<?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"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity"
    android:orientation="vertical">
    <RelativeLayout
        android:layout_width="match_parent"
        android:layout_height="0dp"
        android:layout_weight="1">
        <TextView</pre>
```

```
android:id="@+id/team1"
            android:layout width="wrap content"
            android:layout height="wrap content"
            android:layout centerHorizontal="true"
            android:text="Team 1"
            android: textAppearance="@style/TextAppearance.AppCompat.Headline"
            android:layout marginTop="10dp">
        </re></re>
        <RelativeLayout
            android:layout_width="wrap_content"
            android:layout height="wrap content"
            android:layout below="@id/team1"
            android:layout marginTop="20dp">
            <ImageButton</pre>
                android:id="@+id/minus1"
                android:layout width="70dp"
                android:layout height="70dp"
                android:layout marginLeft="20dp"
                android:contentDescription="Minus Button"
                android:src="@drawable/ic minus"
                android:background="@drawable/buttonbackground"
                android:onClick="decreaseScore">
            </ImageButton>
            <TextView
                android:id="@+id/score1"
                android:layout width="wrap content"
                android:layout height="wrap content"
                android:layout centerVertical="true"
                android:layout_gravity="center"
                android:layout marginLeft="105dp"
                android:layout toRightOf="@+id/minus1"
                android: text="0"
android:textAppearance="@style/TextAppearance.AppCompat.Headline">
            </re></re>
            <ImageButton</pre>
                android:id="@+id/plus1"
                android:layout width="70dp"
                android:layout height="70dp"
                android:layout marginLeft="105dp"
                android:layout marginRight="20dp"
                android:layout_toRightOf="@+id/score1"
                android:contentDescription="Plus Button"
                android:src="@drawable/ic plus"
                android:background="@drawable/buttonbackground"
                android:onClick="increaseScore">
            </ImageButton>
        </RelativeLayout>
    </RelativeLayout>
    <RelativeLayout
        android:layout width="match parent"
        android:layout height="0dp"
        android:layout weight="1">
```

```
<TextView
            android:id="@+id/team2"
            android:layout width="wrap content"
            android:layout height="wrap content"
            android:layout centerHorizontal="true"
            android:text="Team 2"
android:textAppearance="@style/TextAppearance.AppCompat.Headline">
        </re></re>
        <RelativeLayout
            android:layout width="wrap content"
            android:layout height="wrap content"
            android:layout below="@id/team2"
            android:layout marginTop="20dp">
            <ImageButton</pre>
                android:id="@+id/minus2"
                android:layout width="70dp"
                android:layout_height="70dp"
                android:layout marginLeft="20dp"
                android:contentDescription="Minus Button"
                android:src="@drawable/ic minus"
                android:background="@drawable/buttonbackground"
                android:onClick="decreaseScore">
            </ImageButton>
            <TextView
                android:id="@+id/score2"
                android:layout width="wrap content"
                android:layout height="wrap content"
                android:layout centerVertical="true"
                android:layout gravity="center"
                android:layout marginLeft="105dp"
                android:layout toRightOf="@+id/minus2"
                android: text="0"
android: textAppearance="@style/TextAppearance.AppCompat.Headline">
            </re></re>
            <ImageButton</pre>
                android:id="@+id/plus2"
                android:layout width="70dp"
                android:layout height="70dp"
                android:layout marginLeft="105dp"
                android:layout marginRight="20dp"
                android:layout toRightOf="@+id/score2"
                android:contentDescription="Plus Button"
                android:src="@drawable/ic plus"
                android:background="@drawable/buttonbackground"
                android:onClick="increaseScore">
            </ImageButton>
        </RelativeLayout>
    </RelativeLayout>
</LinearLayout>
```

Buttonbackground.xml

```
<?xml version="1.0" encoding="utf-8"?>
<shape
    xmlns:android="http://schemas.android.com/apk/res/android"
    android:shape="oval">
    <stroke
        android:width="2dp"
        android:color="@color/design_default_color_primary"/>
</shape>
```

lc_minus.xml

```
<vector android:height="40dp" android:tint="?attr/colorControlNormal"
    android:viewportHeight="24" android:viewportWidth="24"
    android:width="40dp"
    xmlns:android="http://schemas.android.com/apk/res/android">
<path android:fillColor="@android:color/white"
    android:fillType="evenOdd" android:pathData="M4,11h16v2h-16z"/>
</vector>
```

Ic_Plus.xml

```
<vector android:height="40dp" android:tint="?attr/colorControlNormal"
    android:viewportHeight="24" android:viewportWidth="24"
    android:width="40dp"
    xmlns:android="http://schemas.android.com/apk/res/android">
<path android:fillColor="@android:color/white"
    android:pathData="M19,13h-6v6h-2v-6H5v-2h6V5h2v6h6v2z"/>
</vector>
```

Menu.xml

Main_activity.java

```
package com.example.drawables;
import androidx.annotation.NonNull;
import androidx.appcompat.app.AppCompatActivity;
import androidx.appcompat.app.AppCompatDelegate;
import android.os.Bundle;
import android.view.Menu;
import android.view.MenuItem;
import android.view.View;
import android.widget.ImageButton;
import android.widget.TextView;
public class MainActivity extends AppCompatActivity {
    TextView score1, score2;
    int mscore1, mscore2;
    ImageButton minus1, minus2, add1, add2;
    @Override
   public boolean onOptionsItemSelected(@NonNull MenuItem item) {
        int nightMode= AppCompatDelegate.getDefaultNightMode();
        if(nightMode==AppCompatDelegate.MODE NIGHT YES) {
AppCompatDelegate.setDefaultNightMode(AppCompatDelegate.MODE NIGHT NO);
        else {
AppCompatDelegate.setDefaultNightMode(AppCompatDelegate.MODE NIGHT YES);
        return true;
    @Override
    public boolean onCreateOptionsMenu(Menu menu) {
        getMenuInflater().inflate(R.menu.menu, menu);
        int nightMode= AppCompatDelegate.getDefaultNightMode();
        if (nightMode==AppCompatDelegate.MODE NIGHT YES) {
            menu.findItem(R.id.night mode).setTitle(R.string.day mode);
        else {
            menu.findItem(R.id.night mode) .setTitle(R.string.night mode);
        return true;
    @Override
   protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity main);
```

}

```
score1=findViewById(R.id.score1);
    score2=findViewById(R.id.score2);
    minus1=findViewById(R.id.minus1);
    minus2=findViewById(R.id.minus2);
    add1=findViewById(R.id.plus1);
    add2=findViewById(R.id.plus2);
    mscore1= Integer.parseInt(score1.getText().toString());
    mscore2=Integer.parseInt(score2.getText().toString());
public void decreaseScore(View view) {
    int viewID=view.getId();
    switch (viewID) {
        case R.id.minus1:
            mscore1--;
            score1.setText(String.valueOf(mscore1));
        case R.id.minus2:
            mscore2--;
            score2.setText(String.valueOf(mscore2));
public void increaseScore(View view) {
    int viewID=view.getId();
    switch (viewID) {
        case R.id.plus1:
            mscore1++;
            score1.setText(String.valueOf(mscore1));
            break:
        case R.id.plus2:
            mscore2++;
            score2.setText(String.valueOf(mscore2));
@Override
protected void onSaveInstanceState(Bundle outState) {
    super.onSaveInstanceState(outState);
    outState.putInt("STATE SCORE 1", mscore1);
    outState.putInt("STATE SCORE 2", mscore2);
@Override
protected void onRestoreInstanceState(@NonNull Bundle
                                               savedInstanceState) {
    super.onRestoreInstanceState(savedInstanceState);
    mscore1=savedInstanceState.getInt("STATE SCORE 1");
    mscore2=savedInstanceState.getInt("STATE SCORE 2");
    score1.setText(String.valueOf(mscore1));
    score2.setText(String.valueOf(mscore2));
```

Output



