

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"
    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"
            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
```

```

        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">

</TextView>
<RelativeLayout
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@id/team1"
    android:layout_marginTop="20dp">
    <ImageButton
        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">

            </TextView>
            <ImageButton
                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">

</TextView>
<RelativeLayout
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@id/team2"
    android:layout_marginTop="20dp">
    <ImageButton
        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">

    </TextView>
    <ImageButton
        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>
```

lc_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

```
<?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/night_mode"
        android:title="@string/night_mode"
        app:showAsAction="ifRoom" />
</menu>
```

Main_activity.java

```
package com.example.drawables;

import androidx.annotation.NonNull;
import androidx.appcompat.app.AppCompatActivity;
import androidx.appcompat.app.AppCompatActivity;
import androidx.appcompat.app.AppCompatActivity;

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= AppCompatActivity.getDefaultNightMode();
        if (nightMode==AppCompatActivity.MODE_NIGHT_YES) {

AppCompatActivity.setDefaultNightMode(AppCompatActivity.MODE_NIGHT_NO);
        }
        else {

AppCompatActivity.setDefaultNightMode(AppCompatActivity.MODE_NIGHT_YES);
        }
        return true;
    }
    @Override
    public boolean onCreateOptionsMenu(Menu menu) {
        getMenuInflater().inflate(R.menu.menu, menu);
        int nightMode= AppCompatActivity.getDefaultNightMode();
        if (nightMode==AppCompatActivity.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));
                break;
            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



Team 2



Team 2

