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1 package com.example.game;
2
3 import android.app.Activity;
4 import android.content.Intent;
5 import android.graphics.Color;
6 import android.os.Bundle;
7 import android.view.View;
8 import android.widget.CompoundButton;
9 import android.widget.ImageButton;
10 import android.widget.ImageView;
11 import android.widget.LinearLayout;
12 import android.widget.RadioButton;
13 import android.widget.TextView;
14
15 import androidx.activity.result.ActivityResultLauncher;
16 import androidx.activity.result.contract.ActivityResultContracts;
17 import androidx.appcompat.app.AppCompatActivity;
18
19 import java.lang.reflect.Array;
20 import java.util.Arrays;
21 import java.util.HashMap;
22 import java.util.List;
23 import java.util.Map;
24
25 enum Type {
26     CIRCLE, SQUARE
27 }
28
29 public class MainActivity extends AppCompatActivity {
30     private RadioButton circleRadioButton;
31     private RadioButton squareRadioButton;
32     private Type type;
33     private ActivityResultLauncher<Intent> activityResultLauncher;
34
35     @Override
36     protected void onCreate(Bundle savedInstanceState) {
37         super.onCreate(savedInstanceState);
38         setContentView(R.layout.activity_main);
39
40         circleRadioButton = findViewById(R.id.circle);
41         squareRadioButton = findViewById(R.id.square);
42
43         circleRadioButton.setOnCheckedChangeListener(new
CompoundButton.OnCheckedChangeListener() {
44             @Override
45             public void onCheckedChanged(CompoundButton buttonView, boolean
isChecked) {
46                 if (isChecked) {
47                     type = Type.CIRCLE;
48                     squareRadioButton.setChecked(false);
49                 }
50             }
51         });
52

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53         squareRadioButton.setOnCheckedChangeListener(new
CompoundButton.OnCheckedChangeListener() {
54             @Override
55             public void onCheckedChanged(CompoundButton buttonView, boolean
isChecked) {
56                 if (isChecked) {
57                     type = Type.SQUARE;
58                     circleRadioButton.setChecked(false);
59                 }
60             }
61         });
62
63         ImageButton imageButton = findViewById(R.id.startBtn);
64         imageButton.setOnClickListener(new View.OnClickListener() {
65             @Override
66             public void onClick(View v) {
67                 Intent intent = new Intent(MainActivity.this, Sub.class);
68                 intent.putExtra("type", type.name());
69                 activityResultLauncher.launch(intent);
70             }
71         });
72
73         Map<String, Integer> mapper = new HashMap<>();
74         mapper.put("circle1", R.drawable.shape01);
75         mapper.put("circle2", R.drawable.shape02);
76         mapper.put("square1", R.drawable.shape03);
77         mapper.put("square2", R.drawable.shape04);
78         mapper.put("triangle2", R.drawable.shape05);
79         mapper.put("triangle1", R.drawable.shape06);
80         activityResultLauncher = registerForActivityResult(new
ActivityResultContracts.StartActivityForResult(), result -> {
81             if (result.getResultCode() == Activity.RESULT_OK) {
82                 Intent data = result.getData();
83                 assert data != null;
84                 String clicked1 = data.getStringExtra("clicked1");
85                 String clicked2 = data.getStringExtra("clicked2");
86                 LinearLayout layout = findViewById(R.id.selectedResult);
87                 layout.setBackgroundColor(Color.BLUE);
88                 layout.removeAllViews(); // 기존의 이미지뷰 제거
89
90                 if (!clicked1.isEmpty()) {
91                     ImageView imageView1 = new ImageView(this);
92                     imageView1.setLayoutParams(new
LinearLayout.LayoutParams(LinearLayout.LayoutParams.WRAP_CONTENT,
LinearLayout.LayoutParams.WRAP_CONTENT, 1.0f));
93                     imageView1.setImageResource(mapper.get(clicked1));
94                     layout.addView(imageView1);
95                 }
96
97                 if (!clicked2.isEmpty()) {
98                     ImageView imageView2 = new ImageView(this);
99                     imageView2.setLayoutParams(new
LinearLayout.LayoutParams(LinearLayout.LayoutParams.WRAP_CONTENT,
LinearLayout.LayoutParams.WRAP_CONTENT, 1.0f));
100                     imageView2.setImageResource(mapper.get(clicked2));
101                     layout.addView(imageView2);

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102         }
103
104         TextView textView = findViewById(R.id.resultText);
105         int c1 = getResources().getIdentifier(clicked1, "id",
getPackageName());
106         int c2 = getResources().getIdentifier(clicked2, "id",
getPackageName());
107         textView.setText(check(c1, c2) ? "맞았습니다" : "틀렸습니다");
108     }
109 });
110 }
111
112 public boolean check(int c1, int c2) {
113
114     List<Integer> circles = Arrays.asList(R.id.circle1, R.id.circle2);
115     List<Integer> squares = Arrays.asList(R.id.square1, R.id.square2);
116     if (type == Type.CIRCLE && circles.contains(c1) &&
circles.contains(c2)) {
117         return true;
118     }
119     if (type == Type.SQUARE && squares.contains(c1) &&
squares.contains(c2)) {
120         return true;
121     }
122     return false;
123 }
124 }

```

```

1 package com.example.game;
2
3 import android.annotation.SuppressLint;
4 import android.content.Intent;
5 import android.graphics.drawable.Drawable;
6 import android.os.Bundle;
7 import android.view.View;
8 import android.widget.ImageButton;
9 import android.widget.ImageView;
10
11 import androidx.appcompat.app.AppCompatActivity;
12
13 public class Sub extends AppCompatActivity {
14     private String type;
15     private ImageView[] imageViews;
16     private int clicked1 = 0;
17     private int clicked2 = 0;
18
19     @Override
20     protected void onCreate(Bundle savedInstanceState) {
21         super.onCreate(savedInstanceState);
22         setContentView(R.layout.activity_sub);
23
24         ImageView imageView = findViewById(R.id.target);
25         Intent intent = getIntent();
26         if (intent != null) {
27             type = intent.getStringExtra("type");

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28         if (type != null) {
29             switch (Type.valueOf(type)) {
30                 case CIRCLE:
31                     imageView.setImageResource(R.drawable.circle);
32                     break;
33                 case SQUARE:
34                     imageView.setImageResource(R.drawable.square);
35                     break;
36             }
37         }
38     }
39
40     imageViews = new ImageView[6];
41     imageViews[0] = findViewById(R.id.square1);
42     imageViews[1] = findViewById(R.id.square2);
43     imageViews[2] = findViewById(R.id.circle1);
44     imageViews[3] = findViewById(R.id.circle2);
45     imageViews[4] = findViewById(R.id.triangle1);
46     imageViews[5] = findViewById(R.id.triangle2);
47
48     for (final ImageView target : imageViews) {
49         target.setOnClickListener(new View.OnClickListener() {
50             @SuppressWarnings("UseCompatLoadingForDrawables")
51             @Override
52             public void onClick(View v) {
53                 ImageView clickedImageView = (ImageView) v;
54                 Drawable checkDrawable =
55 getResources().getDrawable(R.drawable.ok_check);
56                 clickedImageView.setForeground(checkDrawable);
57                 if (clicked1 == 0) {
58                     clicked1 = v.getId();
59                 } else if (clicked2 == 0) {
60                     clicked2 = v.getId();
61                 }
62             }
63         });
64
65         ImageButton resultBtn = findViewById(R.id.resultBtn);
66         resultBtn.setOnClickListener(new View.OnClickListener() {
67             @Override
68             public void onClick(View v) {
69                 Intent resultIntent = new Intent();
70                 resultIntent.putExtra("clicked1", clicked1 != 0 ?
71 getResources().getResourceEntryName(clicked1) : "");
72                 resultIntent.putExtra("clicked2", clicked2 != 0 ?
73 getResources().getResourceEntryName(clicked2) : "");
74                 setResult(RESULT_OK, resultIntent);
75                 finish();
76             }
77         });
78     }

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```
2 <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
3   xmlns:app="http://schemas.android.com/apk/res-auto"
4   xmlns:tools="http://schemas.android.com/tools"
5   android:id="@+id/main"
6   android:layout_width="match_parent"
7   android:layout_height="match_parent"
8   android:orientation="vertical"
9   tools:context=".MainActivity">
10
11   <TextView
12     android:layout_width="match_parent"
13     android:layout_height="wrap_content"
14     android:gravity="center"
15     android:padding="50dp"
16     android:text="같은 모양 찾기 게임"
17     android:textColor="@color/green"
18     android:textSize="30dp"
19     android:layout_weight="1"/>
20
21   <TextView
22     android:layout_width="match_parent"
23     android:layout_height="wrap_content"
24     android:gravity="center"
25     android:padding="50dp"
26     android:text="모양을 선택하세요"
27     android:textColor="@color/pink"
28     android:textSize="20dp"
29     android:layout_weight="1"
30     android:textStyle="italic"/>
31
32   <LinearLayout
33     android:layout_width="match_parent"
34     android:layout_height="wrap_content"
35     android:orientation="horizontal"
36     android:layout_weight="2">
37
38     <LinearLayout
39       android:layout_width="0dp"
40       android:layout_height="wrap_content"
41       android:layout_weight="1"
42       android:gravity="center"
43       android:orientation="vertical">
44
45         <ImageView
46           android:layout_width="wrap_content"
47           android:layout_height="wrap_content"
48           android:src="@drawable/circle" />
49
50         <RadioButton
51           android:id="@+id/circle"
52           android:layout_width="wrap_content"
53           android:layout_height="wrap_content"
54           android:text="circle"
55           android:textColor="@color/blue"
56           android:textSize="30dp"
57           android:textStyle="bold"/>
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58
59     </LinearLayout>
60
61     <LinearLayout
62         android:layout_width="0dp"
63         android:layout_height="wrap_content"
64         android:layout_weight="1"
65         android:gravity="center"
66         android:orientation="vertical">
67
68         <ImageView
69             android:layout_width="wrap_content"
70             android:layout_height="wrap_content"
71             android:src="@drawable/square" />
72
73         <RadioButton
74             android:id="@+id/square"
75             android:layout_width="wrap_content"
76             android:layout_height="wrap_content"
77             android:text="square"
78             android:textColor="@color/red"
79             android:textSize="30dp"
80             android:textStyle="bold"/>
81     </LinearLayout>
82
83 </LinearLayout>
84
85 <LinearLayout
86     android:id="@+id/selectedResult"
87     android:layout_width="match_parent"
88     android:layout_height="wrap_content"
89     android:layout_weight="1"
90     android:orientation="horizontal"
91     android:backgroundTint="@color/blue"/>
92     <TextView
93         android:id="@+id/resultText"
94         android:layout_width="match_parent"
95         android:layout_height="wrap_content"
96         android:text="결과"
97         android:textColor="@color/red"
98         android:gravity="center" />
99     <ImageButton
100         android:id="@+id/startBtn"
101         android:layout_width="match_parent"
102         android:layout_height="wrap_content"
103         android:src="@drawable/button" />
104
105 </LinearLayout>

```

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1 <?xml version="1.0" encoding="utf-8"?>
2 <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
3     xmlns:app="http://schemas.android.com/apk/res-auto"
4     xmlns:tools="http://schemas.android.com/tools"
5     android:id="@+id/main"
6     android:layout_width="match_parent"

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7     android:layout_height="match_parent"
8     android:orientation="vertical"
9     tools:context=".Sub">
10
11     <TextView
12         android:layout_width="match_parent"
13         android:layout_height="0dp"
14         android:layout_weight="1"
15         android:gravity="right"
16         android:text="Matching Shape?"
17         android:textColor="@color/green"
18         android:textSize="30dp"
19         android:textStyle="bold|italic" />
20
21     <ImageView
22         android:id="@+id/target"
23         android:layout_width="match_parent"
24         android:layout_height="0dp"
25         android:layout_weight="2"
26         android:src="@drawable/ic_launcher_background" />
27
28     <GridLayout
29         android:layout_width="match_parent"
30         android:layout_height="0dp"
31         android:layout_weight="3"
32         android:columnCount="3"
33         android:rowCount="2">
34
35         <ImageView
36             android:id="@+id/triangle1"
37             android:layout_width="0dp"
38             android:layout_height="0dp"
39             android:layout_rowweight="1"
40             android:layout_columnweight="1"
41             android:scaleType="centerCrop"
42             android:src="@drawable/shape06" />
43
44
45         <ImageView
46             android:id="@+id/square1"
47             android:layout_width="0dp"
48             android:layout_height="0dp"
49             android:layout_rowweight="1"
50             android:layout_columnweight="1"
51             android:scaleType="centerCrop"
52             android:src="@drawable/shape03" />
53
54         <ImageView
55             android:id="@+id/circle1"
56             android:layout_width="0dp"
57             android:layout_height="0dp"
58             android:layout_rowweight="1"
59             android:layout_columnweight="1"
60             android:scaleType="centerCrop"
61             android:src="@drawable/shape01" />
62

```

```
63     <ImageView
64         android:id="@+id/square2"
65         android:layout_width="0dp"
66         android:layout_height="0dp"
67         android:layout_rowWeight="1"
68         android:layout_columnWeight="1"
69         android:scaleType="centerCrop"
70         android:src="@drawable/shape04" />
71
72     <ImageView
73         android:id="@+id/circle2"
74         android:layout_width="0dp"
75         android:layout_height="0dp"
76         android:layout_rowWeight="1"
77         android:layout_columnWeight="1"
78         android:scaleType="centerCrop"
79         android:src="@drawable/shape02" />
80
81     <ImageView
82         android:id="@+id/triangle2"
83         android:layout_width="0dp"
84         android:layout_height="0dp"
85         android:layout_rowWeight="1"
86         android:layout_columnWeight="1"
87         android:scaleType="centerCrop"
88         android:src="@drawable/shape05" />
89
90
91 </GridLayout>
92
93 <ImageButton
94     android:id="@+id/resultBtn"
95     android:layout_width="match_parent"
96     android:layout_height="wrap_content"
97     android:src="@drawable/button2" />
98
99 </LinearLayout>
100
```


