**MainActivity.java**:

package com.bigfortune.goldseven;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

import android.util.Log;

import android.view.View;

import android.widget.Button;

import android.widget.ImageView;

import android.widget.TextView;

import java.util.Random;

import java.util.Timer;

import java.util.TimerTask;

public class MainActivity extends AppCompatActivity {

private TextView infoTextView;

private ImageView[] topImages;

private ImageView[] midImages;

private ImageView[] bottomImages;

private Wheel wheel1, wheel2, wheel3;

private Button button;

private boolean isStarted;

public static final Random RANDOM = new Random();

public static long randomLong(long lower, long upper) {

return lower + (long) (RANDOM.nextDouble() \* (upper - lower));

}

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

topImages = new ImageView[3];

midImages = new ImageView[3];

bottomImages = new ImageView[3];

topImages[0] = findViewById(R.id.image1Top);

topImages[1] = findViewById(R.id.image2Top);

topImages[2] = findViewById(R.id.image3Top);

midImages[0] = findViewById(R.id.image1Mid);

midImages[1] = findViewById(R.id.image2Mid);

midImages[2] = findViewById(R.id.image3Mid);

bottomImages[0] = findViewById(R.id.image1Bottom);

bottomImages[1] = findViewById(R.id.image2Bottom);

bottomImages[2] = findViewById(R.id.image3Bottom);

button = findViewById(R.id.button);

infoTextView = findViewById(R.id.textView);

button.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

if (isStarted) {

wheel1.stopWheel();

wheelTimeDelay(0);

} else {

final int frameDurationMin = 20;

final int frameDurationMax = 70;

wheel1 = new Wheel(new Wheel.WheelListener() {

@Override

public void newImage(int imgTop, int imgCenter, int imgBottom) {

runOnUiThread(() -> {

topImages[0].setImageResource(imgTop);

midImages[0].setImageResource(imgCenter);

bottomImages[0].setImageResource(imgBottom);

});

}

}, RANDOM.nextInt(frameDurationMax-frameDurationMin)+frameDurationMin, randomLong(0, 200));

wheel1.start();

wheel2 = new Wheel(new Wheel.WheelListener() {

@Override

public void newImage(int imgTop, int imgCenter, int imgBottom) {

runOnUiThread(() -> {

console(imgTop + " " + imgCenter + " " + imgBottom);

topImages[1].setImageResource(imgTop);

midImages[1].setImageResource(imgCenter);

bottomImages[1].setImageResource(imgBottom);

});

}

}, RANDOM.nextInt(frameDurationMax-frameDurationMin)+frameDurationMin, randomLong(150, 400));

wheel2.start();

wheel3 = new Wheel(new Wheel.WheelListener() {

@Override

public void newImage(int imgTop, int imgCenter, int imgBottom) {

runOnUiThread(() -> {

topImages[2].setImageResource(imgTop);

midImages[2].setImageResource(imgCenter);

bottomImages[2].setImageResource(imgBottom);

});

}

}, RANDOM.nextInt(frameDurationMax-frameDurationMin)+frameDurationMin, randomLong(150, 400));

wheel3.start();

button.setText("Stop");

infoTextView.setText("");

isStarted = true;

}

}

});

}

private void wheelTimeDelay(int wheelId) {

button.setClickable(false);

new Timer().schedule(new TimerTask() {

@Override

public void run() {

runOnUiThread(() -> {

switch (wheelId) {

case 0:

wheel2.stopWheel();

wheelTimeDelay(1);

break;

case 1:

wheel3.stopWheel();

gameEnd();

break;

}

});

}

}, RANDOM.nextInt(1000) + 200);

}

private void gameEnd() {

if (wheel1.currentIndex == wheel2.currentIndex && wheel2.currentIndex == wheel3.currentIndex) {

infoTextView.setText("You win the big prize");

} else if (wheel1.currentIndex == wheel2.currentIndex || wheel2.currentIndex == wheel3.currentIndex

|| wheel1.currentIndex == wheel3.currentIndex) {

infoTextView.setText("Little Prize");

} else {

infoTextView.setText("You lose");

}

button.setText("Start");

isStarted = false;

button.setClickable(true);

}

public void console(String log){

Log.d("Loger", log);

}

}

**Wheel.java:**

package com.bigfortune.goldseven;

public class Wheel extends Thread {

interface WheelListener {

//void newImage(int img);

void newImage(int imgTop, int imgCenter, int imgBottom);

}

private static int[] drawables = {R.drawable.img1, R.drawable.img2, R.drawable.img3,

R.drawable.img4};

public int currentIndex;

private WheelListener wheelListener;

private long frameDuration;

private long startIn;

private boolean isStarted;

public Wheel(WheelListener wheelListener, long frameDuration, long startIn) {

this.wheelListener = wheelListener;

this.frameDuration = frameDuration;

this.startIn = startIn;

currentIndex = 0;

isStarted = true;

}

public int prevImg() {

int localCurrentIndex = currentIndex;

localCurrentIndex--;

if (localCurrentIndex < 0) {

localCurrentIndex = drawables.length - 1;

}

return localCurrentIndex;

}

public int nextImg() {

currentIndex++;

if (currentIndex == drawables.length) {

currentIndex = 0;

}

return currentIndex;

}

public int currImg() {

int localCurrentIndex = currentIndex;

localCurrentIndex--;

if (localCurrentIndex < 0) {

localCurrentIndex = drawables.length - 1;

}

return localCurrentIndex;

}

@Override

public void run() {

try {

Thread.sleep(startIn);

} catch (InterruptedException e) {

}

while (isStarted) {

try {

Thread.sleep(frameDuration);

} catch (InterruptedException e) {

}

int prevIndex = prevImg();

int nextIndex = nextImg();

int currIndex = currImg();

if (wheelListener != null) {

wheelListener.newImage(drawables[prevIndex],

drawables[nextIndex],

drawables[currIndex]);

}

}

}

public void stopWheel() {

isStarted = false;

}

}

**activity\_main.xml:**

<?xml version="1.0" encoding="utf-8"?>

<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"

xmlns:tools="http://schemas.android.com/tools"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:background="#FFFFFF"

android:gravity="center\_horizontal"

android:orientation="vertical"

tools:context=".MainActivity">

<LinearLayout

android:id="@+id/linearTop"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginTop="20dp"

android:gravity="center\_horizontal"

android:orientation="horizontal">

<ImageView

android:id="@+id/image1Top"

android:layout\_width="100dp"

android:layout\_height="100dp"

android:src="@drawable/img1" />

<ImageView

android:id="@+id/image2Top"

android:layout\_width="100dp"

android:layout\_height="100dp"

android:layout\_marginLeft="15dp"

android:layout\_marginRight="15dp"

android:src="@drawable/img1" />

<ImageView

android:id="@+id/image3Top"

android:layout\_width="100dp"

android:layout\_height="100dp"

android:src="@drawable/img1" />

</LinearLayout>

<LinearLayout

android:id="@+id/linearMid"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginTop="-20dp"

android:gravity="center\_horizontal"

android:orientation="horizontal">

<ImageView

android:id="@+id/image1Mid"

android:layout\_width="100dp"

android:layout\_height="100dp"

android:src="@drawable/img1" />

<ImageView

android:id="@+id/image2Mid"

android:layout\_width="100dp"

android:layout\_height="100dp"

android:layout\_marginLeft="15dp"

android:layout\_marginRight="15dp"

android:src="@drawable/img1" />

<ImageView

android:id="@+id/image3Mid"

android:layout\_width="100dp"

android:layout\_height="100dp"

android:src="@drawable/img1" />

</LinearLayout>

<LinearLayout

android:id="@+id/linearBottom"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginTop="-20dp"

android:gravity="center\_horizontal"

android:orientation="horizontal">

<ImageView

android:id="@+id/image1Bottom"

android:layout\_width="100dp"

android:layout\_height="100dp"

android:src="@drawable/img1" />

<ImageView

android:id="@+id/image2Bottom"

android:layout\_width="100dp"

android:layout\_height="100dp"

android:layout\_marginLeft="15dp"

android:layout\_marginRight="15dp"

android:src="@drawable/img1" />

<ImageView

android:id="@+id/image3Bottom"

android:layout\_width="100dp"

android:layout\_height="100dp"

android:src="@drawable/img1" />

</LinearLayout>

<TextView

android:id="@+id/textView"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginTop="50dp" />

<Button

android:id="@+id/button"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginTop="50dp"

android:text="Start" />

</LinearLayout>



