#### **Animations**

#### Main activity.xml

```
<RelativeLayout
    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"
     tools:context=".MainActivity">
    <TextView
        android:layout width="wrap content"
        android:layout_height="wrap_content"
        android:text="BMSCE"
        android:id="@+id/textView"
        android:textSize="35dp"
        android:layout_alignParentTop="true"
        android:layout_centerHorizontal="true" />
    <TextView
        android:layout width="wrap content"
        android:layout height="wrap content"
        android:text="Animations"
        android:id="@+id/textView2"
        android:textColor="#ff3eff0f"
        android:textSize="35dp"
        android:layout below="@+id/textView"
        android:layout centerHorizontal="true" />
    <ImageView</pre>
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/imageView"
        android:src="@drawable/ic_launcher_background"
        android:layout_below="@+id/textView2"
        android:layout_alignRight="@+id/textView2"
        android:layout_alignEnd="@+id/textView2"
        android:layout_alignLeft="@+id/textView"
        android:layout_alignStart="@+id/textView"/>
    <Button
        android:layout width="wrap content"
        android:layout height="wrap content"
        android:text="zoom"
        android:id="@+id/button"
        android:layout below="@+id/imageView"
        android:layout_alignParentLeft="true"
        android:layout_alignParentStart="true"
        android:layout_marginTop="40dp"
        android:onClick="clockwise"/>
```

```
<Button
        android:layout width="wrap content"
        android:layout_height="wrap_content"
        android:text="clockwise"
        android:id="@+id/button2"
        android:layout_alignTop="@+id/button"
        android:layout_centerHorizontal="true"
        android:onClick="zoom"/>
    <Button
        android:layout width="wrap content"
        android:layout_height="wrap_content"
        android:text="fade"
        android:id="@+id/button3"
        android:layout_alignTop="@+id/button2"
        android:layout_alignParentRight="true"
        android:layout_alignParentEnd="true"
        android:onClick="fade"/>
    <Button
        android:layout width="wrap content"
        android:layout_height="wrap_content"
        android:text="blink"
        android:onClick="blink"
        android:id="@+id/button4"
        android:layout_below="@+id/button"
        android:layout_alignParentLeft="true"
        android:layout_alignParentStart="true" />
    <Button
        android:layout width="wrap content"
        android:layout height="wrap content"
        android:text="move"
        android:onClick="move"
        android:id="@+id/button5"
        android:layout below="@+id/button2"
        android:layout_alignRight="@+id/button2"
        android:layout_alignEnd="@+id/button2"
        android:layout_alignLeft="@+id/button2"
        android:layout alignStart="@+id/button2" />
    <Button
        android:layout width="wrap content"
        android:layout height="wrap content"
        android:text="slide"
        android:onClick="slide"
        android:id="@+id/button6"
        android:layout_below="@+id/button3"
        android:layout_toRightOf="@+id/textView"
        android:layout_toEndOf="@+id/textView" />
</RelativeLayout>
```

### Mainactivity.java

```
package com.example.animation2;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.app.Activity;
import android.os.Bundle;
import android.view.View;
import android.view.animation.Animation;
import android.view.animation.AnimationUtils;
import android.widget.ImageView;
import android.widget.Toast;
public class MainActivity extends Activity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }
    public void clockwise(View view){
        ImageView image = (ImageView)findViewById(R.id.imageView);
        Animation animation =
AnimationUtils.LoadAnimation(getApplicationContext(),
                R.anim.myanimation);
        image.startAnimation(animation);
    }
    public void zoom(View view){
        ImageView image = (ImageView)findViewById(R.id.imageView);
        Animation animation1 =
AnimationUtils.LoadAnimation(getApplicationContext(),
                R.anim.clockwise);
        image.startAnimation(animation1);
    }
    public void fade(View view){
        ImageView image = (ImageView)findViewById(R.id.imageView);
        Animation animation1 =
                AnimationUtils.LoadAnimation(getApplicationContext(),
                        R.anim.fade);
        image.startAnimation(animation1);
    public void blink(View view){
        ImageView image = (ImageView)findViewById(R.id.imageView);
        Animation animation1 =
                AnimationUtils.LoadAnimation(getApplicationContext(),
                        R.anim.blink);
        image.startAnimation(animation1);
    }
    public void move(View view){
        ImageView image = (ImageView)findViewById(R.id.imageView);
        Animation animation1 =
                AnimationUtils.LoadAnimation(getApplicationContext(),
```

```
R.anim.move);
        image.startAnimation(animation1);
    public void slide(View view){
        ImageView image = (ImageView)findViewById(R.id.imageView);
        Animation animation1 =
                AnimationUtils.LoadAnimation(getApplicationContext(),
R.anim.slide):
        image.startAnimation(animation1);
    }
}
/res/anim/myanimation.xml
<?xml version="1.0" encoding="utf-8"?>
<set xmlns:android="http://schemas.android.com/apk/res/android">
    <scale xmlns:android="http://schemas.android.com/apk/res/android"</pre>
        android:fromXScale="0.5"
        android:toXScale="3.0"
        android:fromYScale="0.5"
        android:toYScale="3.0"
        android:duration="5000"
        android:pivotX="50%"
        android:pivotY="50%" >
    </scale>
    <scale xmlns:android="http://schemas.android.com/apk/res/android"</pre>
        android:startOffset="5000"
        android:fromXScale="3.0"
        android:toXScale="0.5"
        android:fromYScale="3.0"
        android:toYScale="0.5"
        android:duration="5000"
        android:pivotX="50%"
        android:pivotY="50%" >
    </scale>
</set>
```

# /res/anim/clockwise.xml

```
<?xml version="1.0" encoding="utf-8"?>
<set xmlns:android="http://schemas.android.com/apk/res/android">
    <rotate xmlns:android="http://schemas.android.com/apk/res/android"</pre>
        android:fromDegrees="0"
        android:toDegrees="360"
        android:pivotX="50%"
        android:pivotY="50%"
        android:duration="5000" >
    </rotate>
    <rotate xmlns:android="http://schemas.android.com/apk/res/android"</pre>
        android:startOffset="5000"
        android:fromDegrees="360"
        android:toDegrees="0"
        android:pivotX="50%"
        android:pivotY="50%"
        android:duration="5000" >
    </rotate>
</set>
/res/anim/fade.xml
<?xml version="1.0" encoding="utf-8"?>
<set xmlns:android="http://schemas.android.com/apk/res/android"</pre>
    android:interpolator="@android:anim/accelerate_interpolator" >
    <alpha
        android:fromAlpha="0"
        android:toAlpha="1"
        android:duration="2000" >
    </alpha>
    <alpha
        android:startOffset="2000"
        android:fromAlpha="1"
        android:toAlpha="0"
        android:duration="2000" >
    </alpha>
</set>
```

## /res/anim/blink.xml

```
<?xml version="1.0" encoding="utf-8"?>
<set xmlns:android="http://schemas.android.com/apk/res/android">
    <alpha android:fromAlpha="0.0"
        android:toAlpha="1.0"
        android:interpolator="@android:anim/accelerate_interpolator"
        android:duration="600"
        android:repeatMode="reverse"
        android:repeatCount="infinite"/>
</set>
/res/anim/move.xml
<?xml version="1.0" encoding="utf-8"?>
<set
    xmlns:android="http://schemas.android.com/apk/res/android"
    android:interpolator="@android:anim/linear_interpolator"
    android:fillAfter="true">
    <translate</pre>
        android:fromXDelta="0%p"
        android:toXDelta="75%p"
        android:duration="800" />
</set>
/res/anim/slide.xml
<?xml version="1.0" encoding="utf-8"?>
<set xmlns:android="http://schemas.android.com/apk/res/android"</pre>
    android:fillAfter="true" >
    <scale
        android:duration="500"
        android:fromXScale="1.0"
        android:fromYScale="1.0"
        android:interpolator="@android:anim/linear_interpolator"
        android:toXScale="1.0"
        android:toYScale="0.0" />
</set>
```