Graphics and animation

Animation in android is possible from many ways. In this chapter we will discuss one easy and widely used way of making animation called tweened animation.

Tween Animation

Tween Animation takes some parameters such as start value , end value, size , time duration , rotation angle e.t.c and perform the required animation on that object. It can be applied to any type of object. So in order to use this , android has provided us a class called Animation.

In order to perform animation in android , we are going to call a static function loadAnimation() of the class AnimationUtils. We are going to receive the result in an instance of Animation Object. Its syntax is as follows −

```
Animation animation = AnimationUtils.loadAnimation(getApplicationContext(),
   R.anim.myanimation);
```

This animation class has many useful functions which are listed below package com.example.sairamkrishna.myapplication;−

Sr.No	Method & Description
1	**start() -**This method starts the animation.
2	**setDuration(long duration)-** This method sets the duration of an animation.
3	**getDuration() -**This method gets the duration which is set by above method
4	**end()-** This method ends the animation.
5	**cancel() -**This method cancels the animation.

```
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);
    }
}
```