

## TWEEN ANIMATION

Animations add vivacity and personality to your apps.

*Tween animation creates an animation by performing a series of transformations on a single image with an animation.*

Following image shows the how Tween animation is applied on a certain image.



## Additional Reading to Android OS programming – Level 1

---

Following are the series of steps to be followed to incorporate Tween animation in your android application.

**Step 1 :** Copy the image into the **res/drawable** folder on which you wish to perform Tween animation.

**Step 2 :** Create a folder named **anim** in the res folder.

**Step 3 :** In the newly formed **anim** folder create Android XML files for all types of animations you wish to apply which will contain all details of the animations respectively.

In our example we will have 4 xml files since we are applying 4 kinds of animations.

The xml files are as follows:

### 1. Alpha.xml

```
1 <?xml version="1.0" encoding="utf-8"?>
2 <alpha xmlns:android="http://schemas.android.com/apk/res/android"
3     android:fromAlpha="0.0"
4     android:duration="10000"
5     android:toAlpha="1.0">
6 </alpha>
7
```

## 2. Rotate.xml

```
1 <?xml version="1.0" encoding="utf-8"?>
2 <set xmlns:android="http://schemas.android.com/apk/res/android">
3 <rotate
4     android:fromDegrees="0"
5     android:toDegrees="360"
6     android:pivotX="50%"
7     android:pivotY="50%"
8     android:repeatMode="reverse"
9     android:repeatCount="infinite"
10    android:interpolator="@android:anim/accelerate_interpolator"
11    android:duration="3000"/>
12
13 </set>
14
```

## 3. Translate.xml

```
1 <?xml version="1.0" encoding="utf-8"?>
2 <translate xmlns:android="http://schemas.android.com/apk/res/android"
3     android:fromXDelta="0"
4     android:fromYDelta="0"
5     android:toXDelta="50"
6     android:toYDelta="50"
7     android:duration="5000"
8     >
9
10
11 </translate>
12
```

## 4. Scale.xml

```
1 <?xml version="1.0" encoding="utf-8"?>
2 <scale xmlns:android="http://schemas.android.com/apk/res/android"
3     android:fromXScale="1.0"
4     android:fromYScale="1.0"
5     android:toXScale="2.0"
6     android:toYScale="2.0"
7     android:pivotX="50%"
8     android:pivotY="50%"
9     android:duration="5000">
10 </scale>
11
```

## Additional Reading to Android OS programming – Level 1

---

**Step 4 :** In the main.xml file create a spinner view which will help us to select the animation and an image view to add the image.

```
<ImageView
    android:id="@+id/imageView1"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_below="@+id/spinner1"
    android:layout_centerHorizontal="true"
    android:layout_marginTop="59dp"
    android:src="@drawable/ic_launcher" />

<Spinner
    android:id="@+id/spinner1"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignLeft="@+id/textView1"
    android:layout_below="@+id/textView1"
    android:layout_marginTop="40dp"
    android:entries="@array/animation" />
```

**Step 5 :** Finally bind both the views in the java file and apply the appropriate animation as selected in the spinner view.

The complete project and .apk file is available with this documentation.

<https://drive.google.com/open?id=0B4rCFkKCcCeKd2ZFck8ybWNFTFU>