

# Hướng dẫn bài Lab07

## Bài 01:

### - Animation Zoom

```
Animation animation = AnimationUtils.loadAnimation(MainActivity.this, R.anim.zoom);
imgAni.startAnimation(animation);
```

### - Animation Moving

#### o File Animation (*moving.xml*)

```
<?xml version="1.0" encoding="utf-8"?>
<set xmlns:android="http://schemas.android.com/apk/res/android"
    android:fillAfter="true"
    android:interpolator="@android:anim/linear_interpolator">
    <translate
        android:duration="800"
        android:fromXDelta="0%p"
        android:toXDelta="75%p" />
</set>
```

#### o Gọi Animation

```
Animation animation = AnimationUtils.loadAnimation(MainActivity.this, R.anim.moving);
imgAni.startAnimation(animation);
```

### - Animation Rotation (Sử dụng Object Animator)

```
int dest = 360;
if(imgAni.getRotation() == 360){
    System.out.println(imgAni.getAlpha());
    dest = 0;
}
ObjectAnimator animator = ObjectAnimator.ofFloat(imgAni, "rotation", dest);
animator.setDuration(2000);
animator.start();
```

## Bài 02:

### - Hàm showImage

```
private void showImage(String image) {
    ObjectAnimator anim = ObjectAnimator.ofFloat(imgAni, "translationX", 0f, 500f);
    anim.setDuration(2000);
    ObjectAnimator anim1 = ObjectAnimator.ofFloat(imgAni, "alpha", 1f, 0f);
    anim1.setDuration(2000);

    ObjectAnimator anim2 = ObjectAnimator.ofFloat(imgAni, "translationX", -500f, 0f);
    anim2.setDuration(2000);
    ObjectAnimator anim3 = ObjectAnimator.ofFloat(imgAni, "alpha", 0f, 1f);
    anim3.setDuration(2000);

    AnimatorSet ans = new AnimatorSet();
    ans.play(anim2).with(anim3).after(anim).after(anim1);
    ans.start();

    final String imgName = image;

    anim1.addListener(new AnimatorListenerAdapter() {
        @Override
        public void onAnimationCancel(Animator animation) {
            super.onAnimationCancel(animation);
        }

        @Override
        public void onAnimationEnd(Animator animation) {
            if(imgName == "Nobita"){
                imgAni.setImageResource(R.drawable.nobita);
            }

            if(imgName == "Doreamon"){
                imgAni.setImageResource(R.drawable.doraemon);
            }
        }

        @Override
        public void onAnimationRepeat(Animator animation) {
            super.onAnimationRepeat(animation);
        }

        @Override
        public void onAnimationStart(Animator animation) {
            super.onAnimationStart(animation);
        }
    });
}
```

### - Sự kiện click

```
btnAll.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        showImage("All");
    }
});
```

Tương tự các nút Doreamon và Nobita ta truyền **showImage("Doreamon");** và **showImage("Nobita");**

## Bài 03:

### - Animation hour

```
<?xml version="1.0" encoding="utf-8"?>
<set xmlns:android="http://schemas.android.com/apk/res/android">
    <rotate
        android:pivotX="50%"
        android:pivotY="50%"
        android:fromDegrees="0"
        android:toDegrees="360"
        android:duration="3600000"
        android:repeatMode="restart"
        android:repeatCount="infinite"/>
</set>
```

### - Animation minute

```
<?xml version="1.0" encoding="utf-8"?>
<set xmlns:android="http://schemas.android.com/apk/res/android">
    <rotate
        android:pivotX="50%"
        android:pivotY="50%"
        android:fromDegrees="0"
        android:toDegrees="360"
        android:duration="60000"
        android:repeatMode="restart"
        android:repeatCount="infinite"/>
</set>
```

### - Animation seconds

```
<?xml version="1.0" encoding="utf-8"?>
<set xmlns:android="http://schemas.android.com/apk/res/android">
    <rotate
        android:pivotX="50%"
        android:pivotY="50%"
        android:fromDegrees="0"
        android:toDegrees="360"
        android:duration="1000"
        android:repeatMode="restart"
        android:repeatCount="infinite"/>
</set>
```

### - Sự kiện click nút run

```
Animation hour = AnimationUtils.loadAnimation(Bai03Activity.this, R.anim.clock_hour);
Animation minute = AnimationUtils.loadAnimation(Bai03Activity.this, R.anim.clock_minute);
Animation second = AnimationUtils.loadAnimation(Bai03Activity.this, R.anim.clock_second);
imgHour.startAnimation(hour);
imgMinute.startAnimation(minute);
imgSecond.startAnimation(second);
```