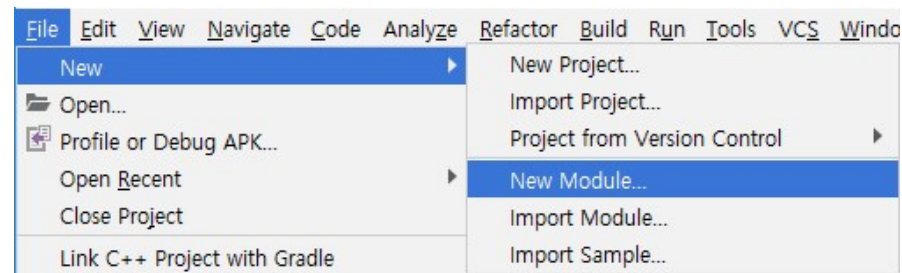
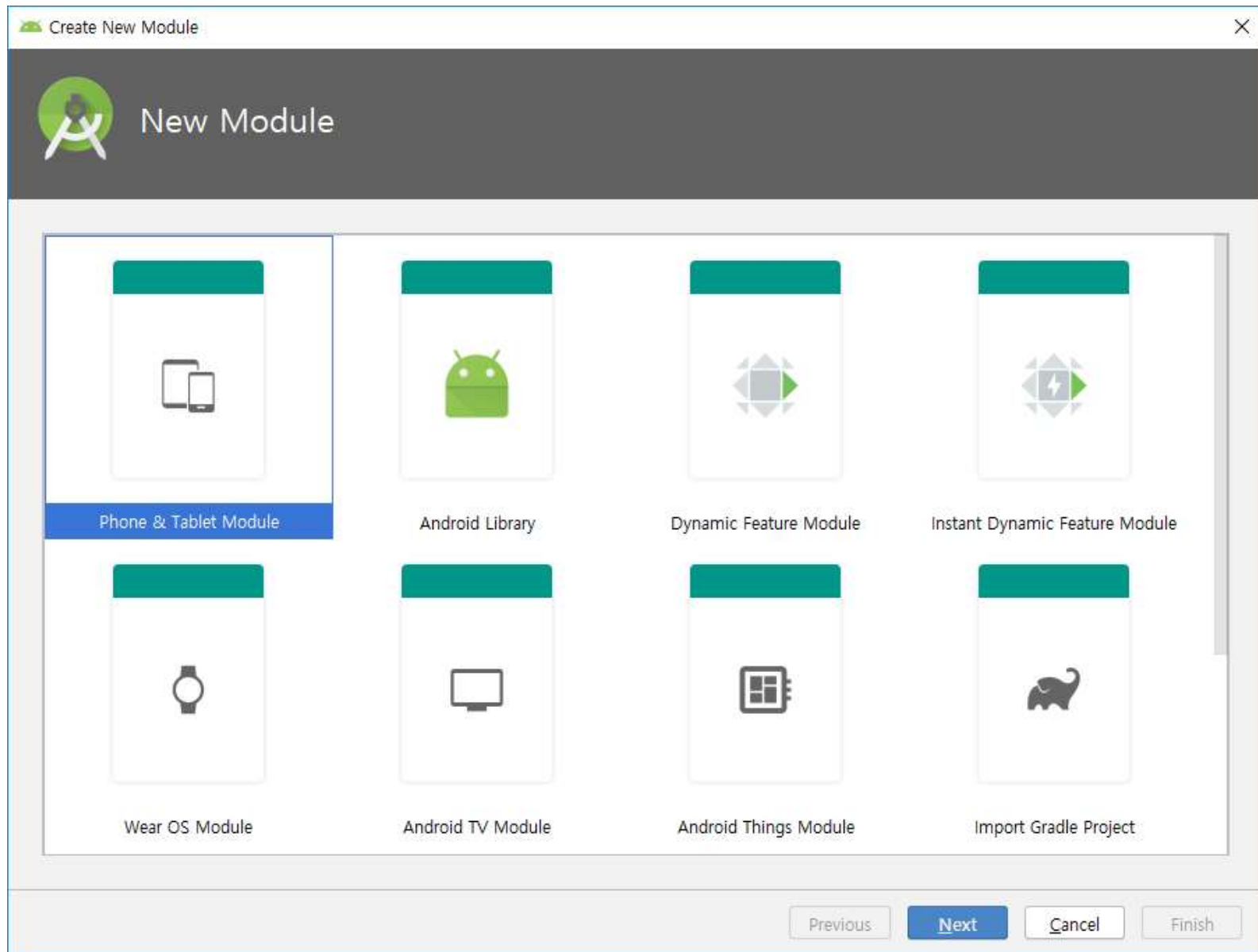




리소스 활용과 애니메이션 효과

# Step 1 \_ 모듈 생성





Create New Module

 Phone & Tablet Module

### Configure the new module

Application/Library name

Module name

Package name

com.example.user.lab05

Edit

Minimum SDK

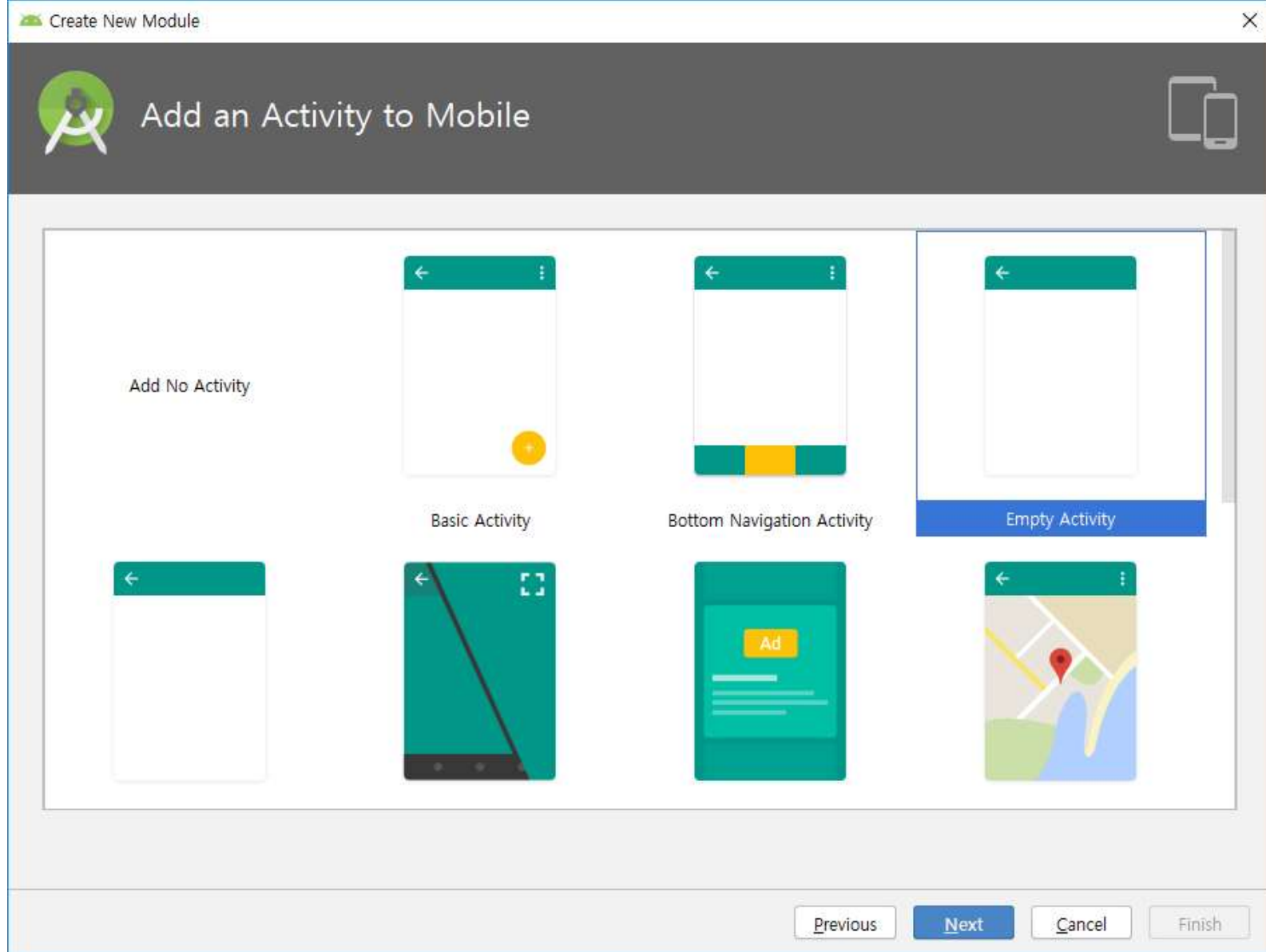
API 15: Android 4.0.3 (IceCreamSandwich) ▼

Previous



Next

Cancel

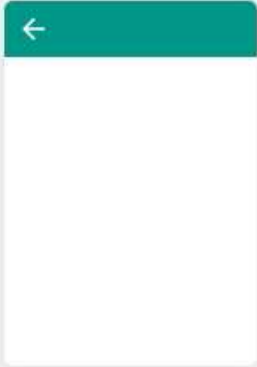
Finish



Create New Module

 Configure Activity

### Creates a new empty activity



Activity Name:

MainActivity

☒ Generate Layout File

Layout Name:

activity\_main

Source Language:

Java

The name of the activity class to create

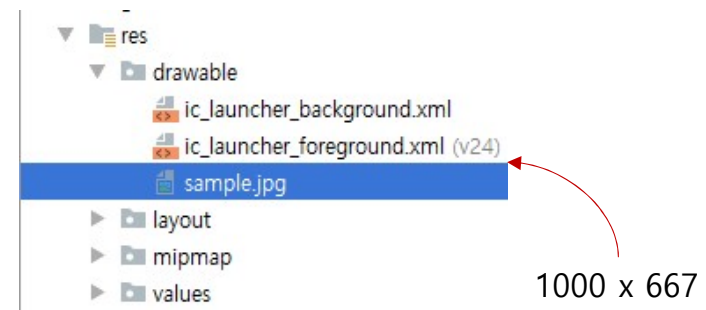
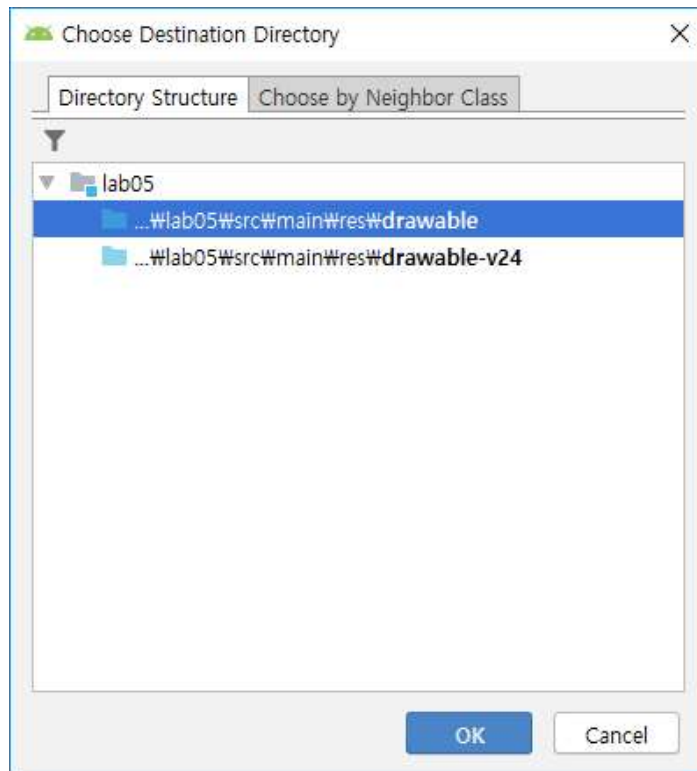
Previous

Next

Cancel

Finish

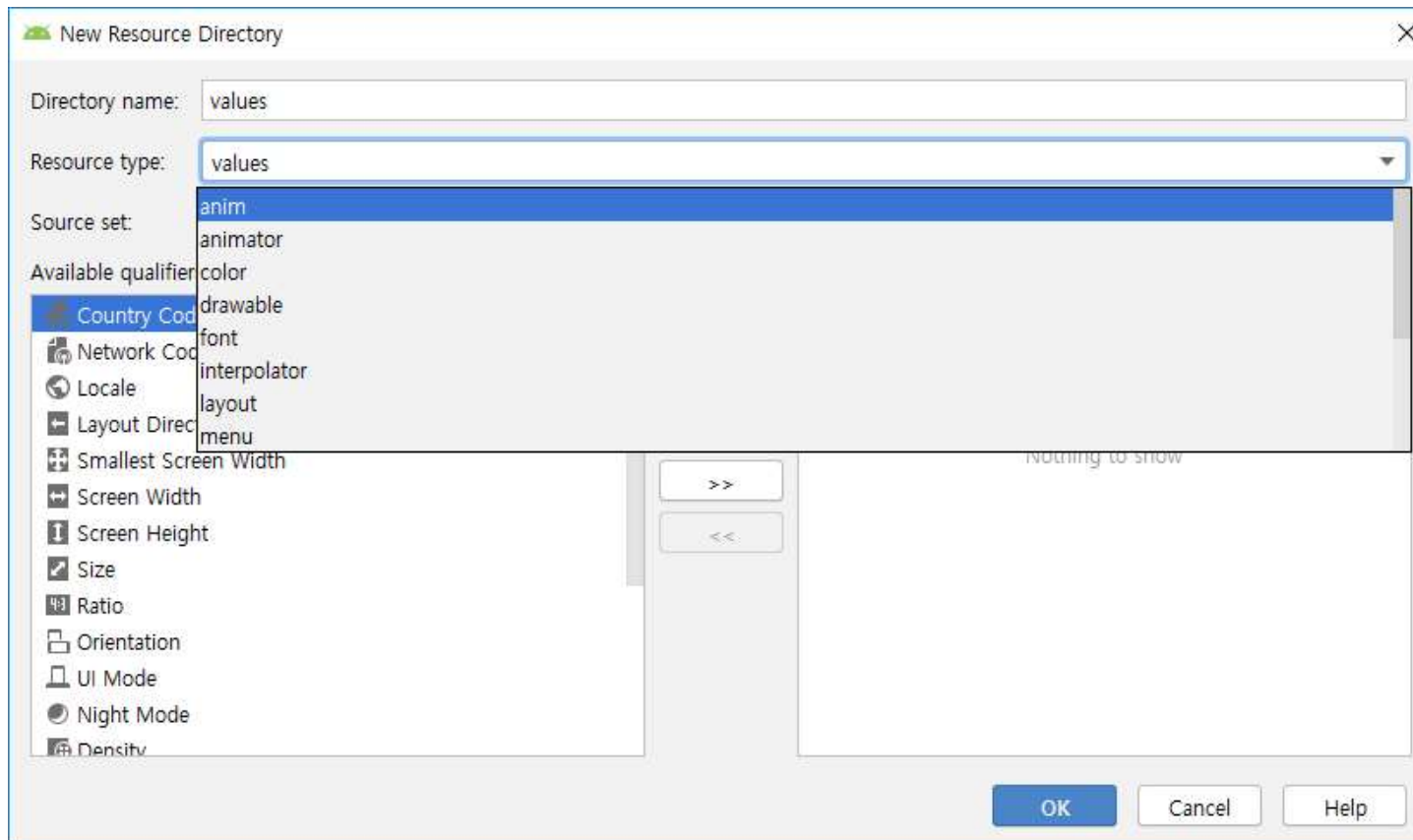
## Step 2 \_ 파일 복사



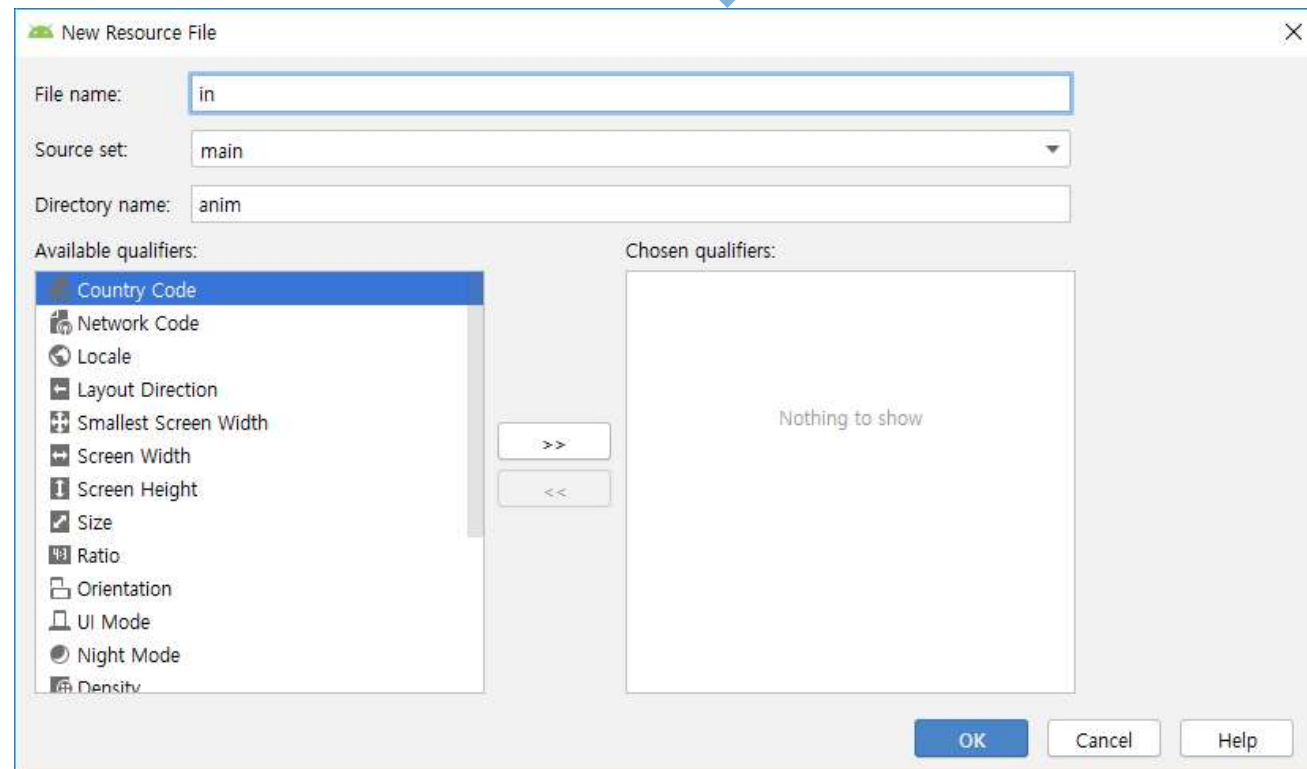
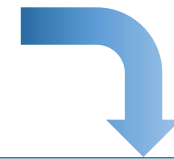
## Step 3 \_ anim 폴더 생성

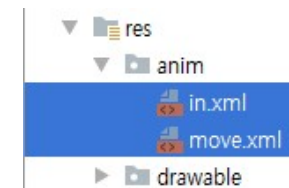
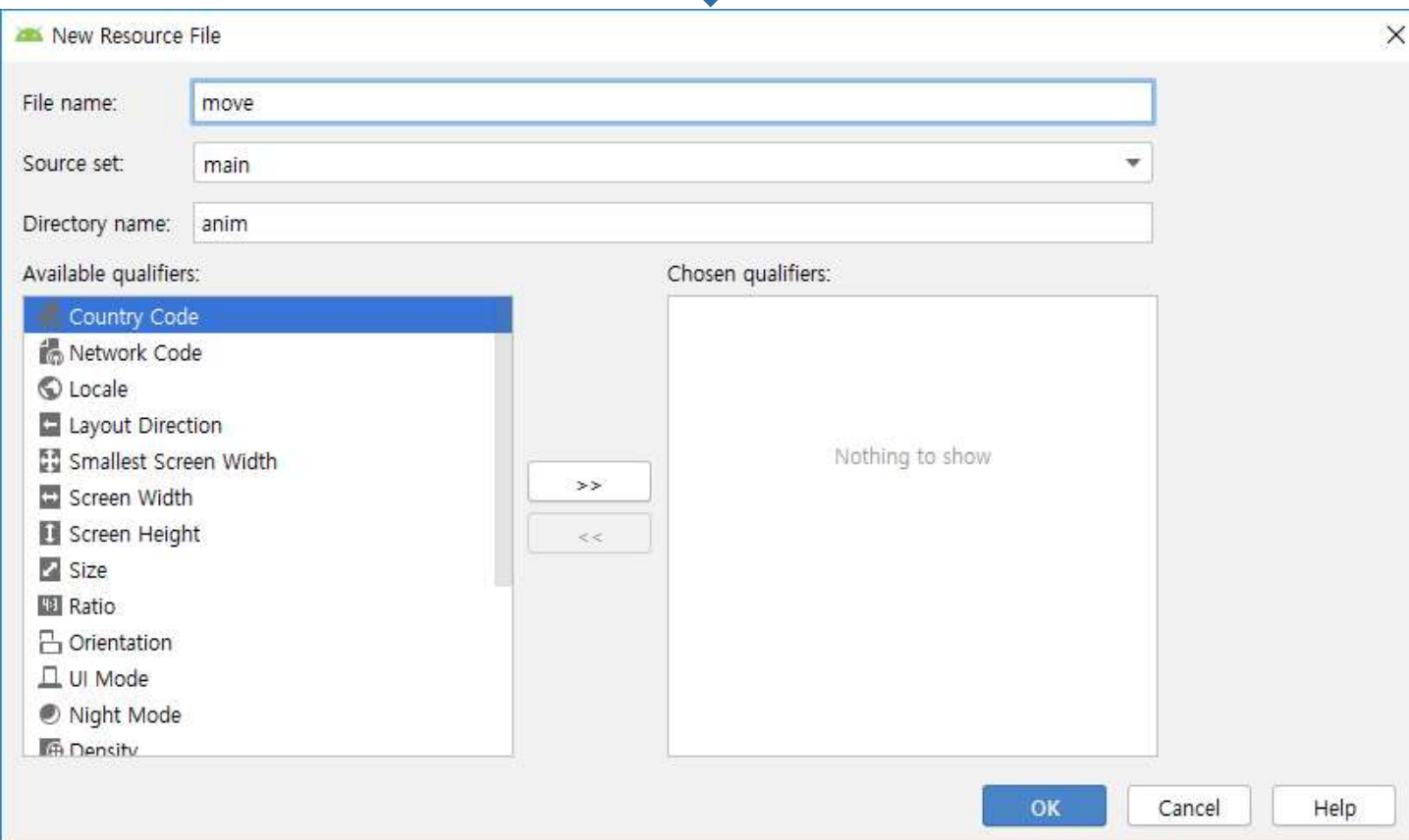






# Step 4 \_ 애니메이션 XML 파일 생성





# Step 5 \_ in.xml 파일 작성

```
<?xml version="1.0" encoding="utf-8"?>
<set xmlns:android="http://schemas.android.com/apk/res/android">
  <scale 크기 {
    android:fromXScale="0.0" 처음 너비
    android:toXScale="1.0" 최종 너비
    android:fromYScale="0.0"
    android:toYScale="1.0"
    android:pivotX="50%" > 기준
    android:pivotY="50%" < 기준
    android:startOffset="0" ~ 시작시간
    android:duration="2000" /> (ms단위)
  } < />
  <alpha 투명도
    android:fromAlpha="0.0"
    android:toAlpha="1.0"
    android:startOffset="0"
    android:duration="2000" />
</set>
```

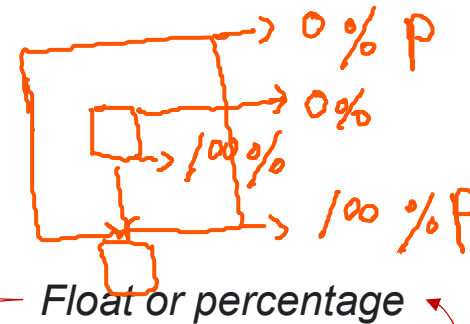
time

이미지가 화면에 보일 때 점점 커지면서 투명도를 조정하는 애니메이션

# Step 6 \_ move.xml 파일 작성

뷰가 하단으로 슬라이드 되면서 사라지는 애니메이션

```
<?xml version="1.0" encoding="utf-8"?>
<set xmlns:android="http://schemas.android.com/apk/res/android">
  <translate 이동
    android:startOffset="0"
    android:duration="2000"
    android:fromYDelta="0%"
    android:toYDelta="100%p" />
</set>
```



%가 없으면 px 단위

three formats available:

- values from -100 to 100 ending with "%" indicating a percentage relative to itself;
- values from -100 to 100 ending in "%p", indicating a percentage relative to its parent;
- a float value with no suffix, indicating an absolute value (in pixels relative to the normal position)

# Step 7 \_res/values/style.xml 작성

<resources>

*<!-- Base application theme. -->*

**<style name="AppTheme" parent="Theme.AppCompat.Light.DarkActionBar">**

*<!-- Customize your theme here. -->*

**<item name="colorPrimary">@color/colorPrimary</item>**

**<item name="colorPrimaryDark">@color/colorPrimaryDark</item>**

**<item name="colorAccent">@color/colorAccent</item>**

**</style>**

**<style name="MyTheme" parent="Theme.AppCompat.Light.DarkActionBar">**

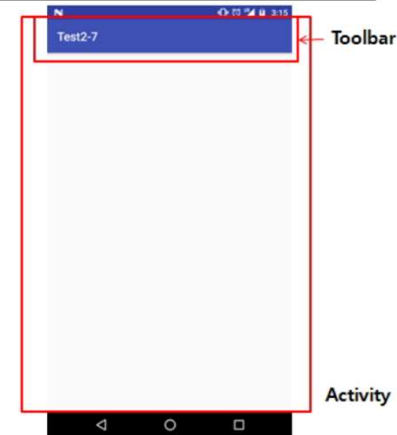
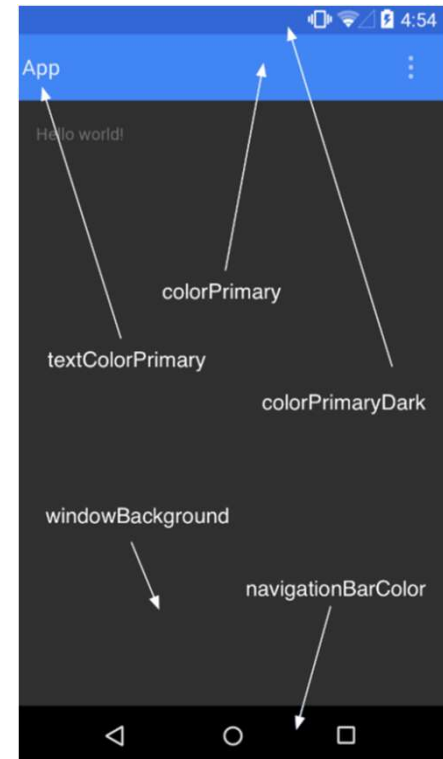
**<item name="windowNoTitle">true</item>**

**<item name="windowActionBar">false</item>**

**<item name="android:windowFullscreen">true</item>**

**</style>**

**</resources>**



## Step 8 \_ AndroidManifest.xml에 스타일 설정

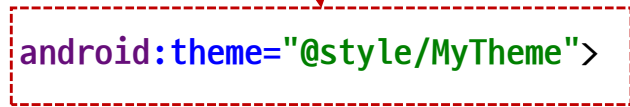
```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.user.lab05">
```

```
    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/AppTheme">
        <activity android:name=".MainActivity" android:theme="@style/MyTheme">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
    </application>

</manifest>
```

테마(Theme): 액티비티 혹은 앱 전체를 위한 스타일



# Step 9 \_ activity\_main.xml 파일 작성

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Hello World!!" />

    <ImageView
        android:id="@+id/img"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:scaleType="centerCrop"
        android:maxLength="500dp"
        android:maxLength="300dp"
        android:adjustViewBounds="true"
        android:src="@drawable/sample"
        android:layout_alignParentBottom="true" />

</RelativeLayout>
```



# Step 10 \_ MainActivity.java 작성

```
public class MainActivity extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        final ImageView imageView = findViewById(R.id.img);
        // 애니메이션 획득
        Animation anim = AnimationUtils.loadAnimation(this, R.anim.in);
        anim.setAnimationListener(new Animation.AnimationListener() {
            @Override
            public void onAnimationStart(Animation animation) {}

            @Override
            public void onAnimationEnd(Animation animation) {
                Animation anim = AnimationUtils.loadAnimation(MainActivity.this, R.anim.move);
                anim.setFillAfter(true);
                // 마지막 상황에서 멈추게. 안그러면 원상 복귀
                imageView.startAnimation(anim);
            }

            @Override
            public void onAnimationRepeat(Animation animation) {}
        });
        // 애니메이션 시작
        imageView.startAnimation(anim);
    }
}
```

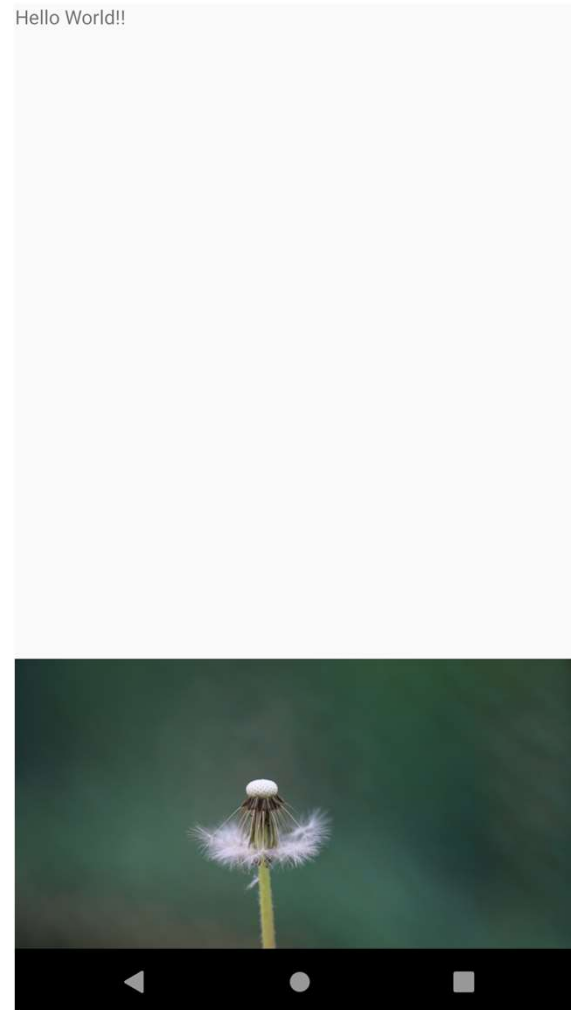
*시작*

*끝*

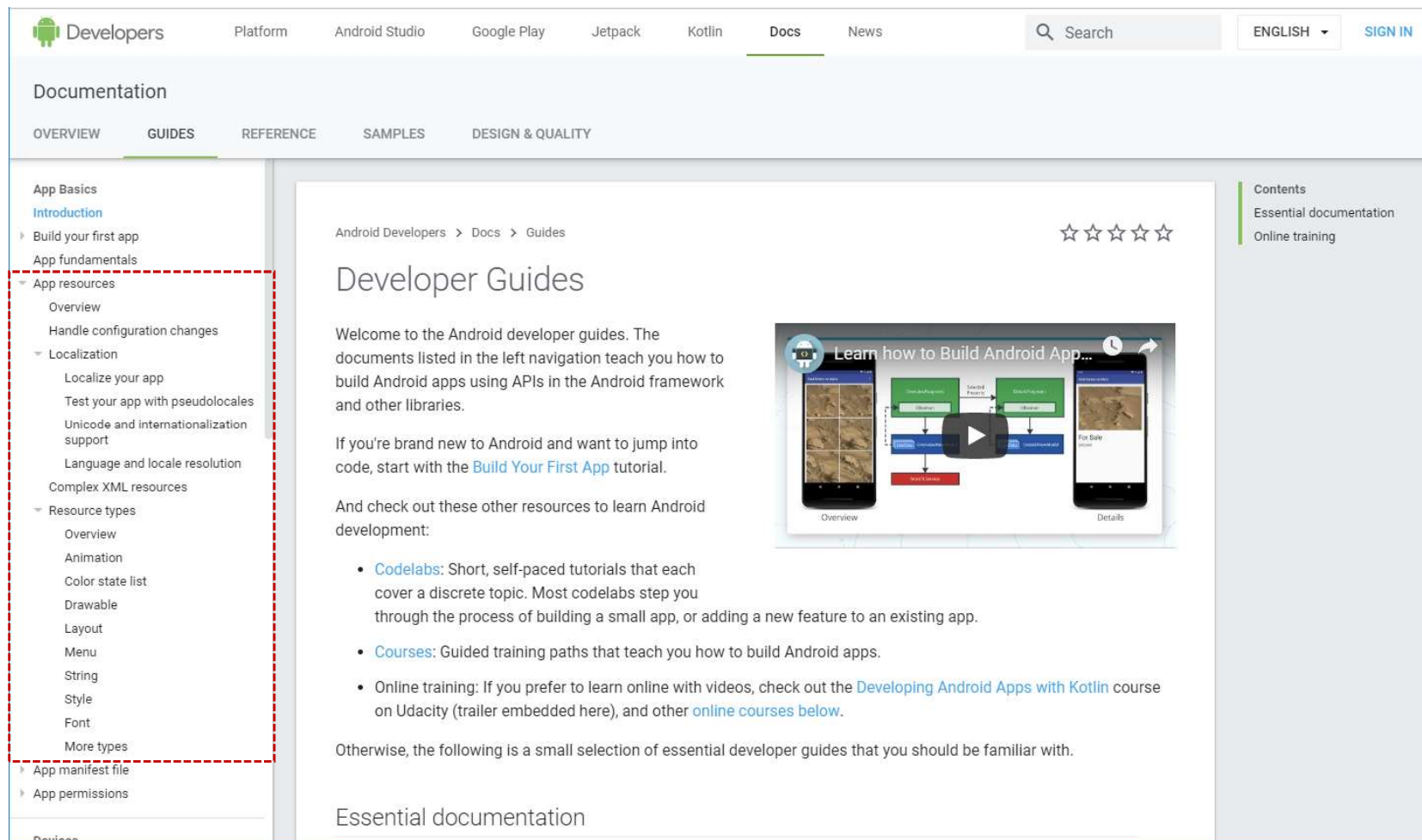
*반복*

void	setFillAfter(boolean fillAfter)
	If fillAfter is true, the transformation that this animation performed will persist when it is finished.

# Step 11 \_ 실행



# App resources <https://developer.android.com/guide>



The screenshot shows the Android Developer website's 'Developer Guides' section. The left sidebar contains a navigation menu with categories like 'App Basics', 'App resources', 'Resource types', and 'App manifest file'. The 'App resources' category is highlighted with a red dashed box. The main content area is titled 'Developer Guides' and includes a welcome message, a video thumbnail for 'Learn how to Build Android App...', and a list of resources: Codelabs, Courses, and Online training. The right sidebar shows 'Contents' with links to 'Essential documentation' and 'Online training'.

Android Developers > Docs > Guides

## Developer Guides

Welcome to the Android developer guides. The documents listed in the left navigation teach you how to build Android apps using APIs in the Android framework and other libraries.

If you're brand new to Android and want to jump into code, start with the [Build Your First App](#) tutorial.

And check out these other resources to learn Android development:

- [Codelabs](#): Short, self-paced tutorials that each cover a discrete topic. Most codelabs step you through the process of building a small app, or adding a new feature to an existing app.
- [Courses](#): Guided training paths that teach you how to build Android apps.
- [Online training](#): If you prefer to learn online with videos, check out the [Developing Android Apps with Kotlin](#) course on Udacity (trailer embedded here), and other [online courses below](#).

Otherwise, the following is a small selection of essential developer guides that you should be familiar with.

### Essential documentation

**App Basics**  
[Introduction](#)  
Build your first app  
App fundamentals  
App resources  
Overview  
Handle configuration changes  
Localization  
Localize your app  
Test your app with pseudolocales  
Unicode and internationalization support  
Language and locale resolution  
Complex XML resources  
Resource types  
Overview  
Animation  
Color state list  
Drawable  
Layout  
Menu  
String  
Style  
Font  
More types  
App manifest file  
App permissions  
Devices

**Contents**  
Essential documentation  
Online training