**Thực hành buổi 5**

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# Bước 1 Tải logo hcmunre\_logo.webp

# Bước 2 Build.gradle.kts

plugins **{** alias(*libs*.*plugins*.*android*.*application*)  
**}***android* **{** namespace = "com.example.lequochuy\_baithuchanh5"  
 compileSdk = 36  
  
 defaultConfig **{** applicationId = "com.example.lequochuy\_baithuchanh5"  
 minSdk = 24  
 targetSdk = 36  
 versionCode = 1  
 versionName = "1.0"  
 testInstrumentationRunner = "androidx.test.runner.AndroidJUnitRunner"  
 **}** buildTypes **{** *release* **{** isMinifyEnabled = false  
 proguardFiles(  
 getDefaultProguardFile("proguard-android-optimize.txt"),  
 "proguard-rules.pro"  
 )  
 **}  
 }** // 👉 Dùng Java 17  
 compileOptions **{** sourceCompatibility = JavaVersion.*VERSION\_17* targetCompatibility = JavaVersion.*VERSION\_17* **}** buildFeatures **{** viewBinding = true  
 **}  
}***dependencies* **{** // Những alias bạn đã có trong libs.versions.toml  
 *implementation*(*libs*.*appcompat*)  
 *implementation*(*libs*.*material*)  
 *implementation*(*libs*.*constraintlayout*)  
 *implementation*(*libs*.*navigation*.*fragment*)  
 *implementation*(*libs*.*navigation*.*ui*)  
  
 // 👉 Thêm các lib cần cho bài Lab06  
 // (dùng toạ độ trực tiếp để khỏi sửa libs.versions.toml)  
 *implementation*("androidx.viewpager2:viewpager2:1.1.0")  
 *implementation*("androidx.fragment:fragment:1.8.4")  
 *implementation*("androidx.activity:activity:1.9.3")  
  
 *testImplementation*(*libs*.*junit*)  
 *androidTestImplementation*(*libs*.*ext*.*junit*)  
 *androidTestImplementation*(*libs*.*espresso*.*core*)  
**}**

# Bước 3 Tạo class FirstFragment

package com.example.lequochuy\_baithuchanh5;  
  
import android.os.Bundle;  
import android.view.LayoutInflater;  
import android.view.View;  
import android.view.ViewGroup;  
import androidx.annotation.NonNull;  
import androidx.annotation.Nullable;  
import androidx.fragment.app.Fragment;  
  
public class FirstFragment extends Fragment {  
 @Nullable @Override  
 public View onCreateView(@NonNull LayoutInflater inflater, @Nullable ViewGroup container,  
 @Nullable Bundle savedInstanceState) {  
 return inflater.inflate(R.layout.*fragment\_first*, container, false);  
 }  
}

# Bước 4 Tạo class SecondFragment

package com.example.lequochuy\_baithuchanh5;  
  
import android.os.Bundle;  
import android.view.LayoutInflater;  
import android.view.View;  
import android.view.ViewGroup;  
import androidx.annotation.NonNull;  
import androidx.annotation.Nullable;  
import androidx.fragment.app.Fragment;  
  
public class SecondFragment extends Fragment {  
 @Nullable @Override  
 public View onCreateView(@NonNull LayoutInflater inflater, @Nullable ViewGroup container,  
 @Nullable Bundle savedInstanceState) {  
 return inflater.inflate(R.layout.*fragment\_second*, container, false);  
 }  
}

# Bước 5 Tạo class SecondActivity

package com.example.lequochuy\_baithuchanh5;  
  
import android.os.Bundle;  
import androidx.appcompat.app.AppCompatActivity;  
  
public class SecondActivity extends AppCompatActivity {  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_second*);  
 }  
  
 @Override  
 public void onBackPressed() {  
 super.onBackPressed();  
 overridePendingTransition(R.anim.*slide\_in\_left*, R.anim.*slide\_out\_right*);  
 }  
}

# Bước 6 Tạo class PagerActivity

package com.example.lequochuy\_baithuchanh5;  
  
import android.os.Bundle;  
import androidx.annotation.NonNull;  
import androidx.appcompat.app.AppCompatActivity;  
import androidx.fragment.app.Fragment;  
import androidx.viewpager2.adapter.FragmentStateAdapter;  
import androidx.viewpager2.widget.ViewPager2;  
  
public class PagerActivity extends AppCompatActivity {  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_pager*);  
  
 ViewPager2 vp = findViewById(R.id.*viewPager*);  
 vp.setAdapter(new FragmentStateAdapter(this) {  
 @NonNull @Override public Fragment createFragment(int position) {  
 return position == 0 ? new FirstFragment() : new SecondFragment();  
 }  
 @Override public int getItemCount() { return 2; }  
 });  
  
 vp.setPageTransformer((page, position) -> {  
 page.setAlpha(1 - Math.*abs*(position) \* 0.3f);  
 page.setTranslationX(-position \* page.getWidth() \* 0.2f);  
 page.setScaleY(1 - Math.*abs*(position) \* 0.1f);  
 });  
 }  
}

# Bước 7 Tạo class MainActivity

package com.example.lequochuy\_baithuchanh5;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.animation.\*;  
import android.widget.Button;  
import android.widget.ImageView;  
import androidx.appcompat.app.AppCompatActivity;  
  
public class MainActivity extends AppCompatActivity {  
  
 private ImageView ivLogo;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
 ivLogo = findViewById(R.id.*iv\_logo*);  
  
 // Bài 1: chạy animation từ XML (trái)  
 bindXml(R.id.*btn\_fade\_in\_xml*, R.anim.*anim\_fade\_in*);  
 bindXml(R.id.*btn\_fade\_out\_xml*, R.anim.*anim\_fade\_out*);  
 bindXml(R.id.*btn\_blink\_xml*, R.anim.*anim\_blink*);  
 bindXml(R.id.*btn\_zoom\_in\_xml*, R.anim.*anim\_zoom\_in*);  
 bindXml(R.id.*btn\_zoom\_out\_xml*, R.anim.*anim\_zoom\_out*);  
 bindXml(R.id.*btn\_rotate\_xml*, R.anim.*anim\_rotate*);  
 bindXml(R.id.*btn\_move\_xml*, R.anim.*anim\_move*);  
 bindXml(R.id.*btn\_slide\_up\_xml*, R.anim.*anim\_slide\_up*);  
 bindXml(R.id.*btn\_bounce\_xml*, R.anim.*anim\_bounce*);  
 bindXml(R.id.*btn\_combine\_xml*, R.anim.*anim\_combine*);  
  
 // Bài 2: chạy animation tạo bằng CODE (phải)  
 bindCode(R.id.*btn\_fade\_in\_code*, new AlphaAnimation(0f,1f){{  
 setDuration(1000); setFillAfter(true);  
 }});  
 bindCode(R.id.*btn\_fade\_out\_code*, new AlphaAnimation(1f,0f){{  
 setDuration(1000); setFillAfter(true);  
 }});  
 bindCode(R.id.*btn\_blink\_code*, new AlphaAnimation(0f,1f){{  
 setDuration(300); setRepeatMode(Animation.*REVERSE*); setRepeatCount(3);  
 }});  
 bindCode(R.id.*btn\_zoom\_in\_code*, new ScaleAnimation(  
 1f,2.5f,1f,2.5f, Animation.*RELATIVE\_TO\_SELF*,0.5f, Animation.*RELATIVE\_TO\_SELF*,0.5f){{  
 setDuration(800); setFillAfter(true);  
 }});  
 bindCode(R.id.*btn\_zoom\_out\_code*, new ScaleAnimation(  
 1f,0.5f,1f,0.5f, Animation.*RELATIVE\_TO\_SELF*,0.5f, Animation.*RELATIVE\_TO\_SELF*,0.5f){{  
 setDuration(800); setFillAfter(true);  
 }});  
 bindCode(R.id.*btn\_rotate\_code*, new RotateAnimation(  
 0f,360f, Animation.*RELATIVE\_TO\_SELF*,0.5f, Animation.*RELATIVE\_TO\_SELF*,0.5f){{  
 setDuration(600); setRepeatMode(Animation.*RESTART*); setRepeatCount(2);  
 }});  
 bindCode(R.id.*btn\_move\_code*, new TranslateAnimation(  
 Animation.*RELATIVE\_TO\_PARENT*,0f, Animation.*RELATIVE\_TO\_PARENT*,0.7f,  
 Animation.*RELATIVE\_TO\_PARENT*,0f, Animation.*RELATIVE\_TO\_PARENT*,0f){{  
 setDuration(700); setFillAfter(true);  
 }});  
 bindCode(R.id.*btn\_slide\_up\_code*, new ScaleAnimation(  
 1f,1f,1f,0f, Animation.*RELATIVE\_TO\_SELF*,0.5f, Animation.*RELATIVE\_TO\_SELF*,1f){{  
 setDuration(500); setFillAfter(true);  
 }});  
 bindCode(R.id.*btn\_bounce\_code*, new ScaleAnimation(  
 1f,1f,0f,1f, Animation.*RELATIVE\_TO\_SELF*,0.5f, Animation.*RELATIVE\_TO\_SELF*,1f){{  
 setDuration(500); setInterpolator(new BounceInterpolator()); setFillAfter(true);  
 }});  
 bindCode(R.id.*btn\_combine\_code*, new AnimationSet(true){{  
 setInterpolator(new LinearInterpolator());  
 addAnimation(new ScaleAnimation(1f,2.5f,1f,2.5f,  
 Animation.*RELATIVE\_TO\_SELF*,0.5f, Animation.*RELATIVE\_TO\_SELF*,0.5f){{  
 setDuration(1500);  
 }});  
 addAnimation(new RotateAnimation(0f,360f,  
 Animation.*RELATIVE\_TO\_SELF*,0.5f, Animation.*RELATIVE\_TO\_SELF*,0.5f){{  
 setDuration(600); setRepeatCount(1); setRepeatMode(Animation.*RESTART*);  
 }});  
 setFillAfter(true);  
 }});  
  
 // Bài 3: chạm logo -> sang SecondActivity (hiệu ứng trượt)  
 ivLogo.setOnClickListener(v -> {  
 startActivity(new Intent(this, SecondActivity.class));  
 overridePendingTransition(R.anim.*slide\_in\_right*, R.anim.*slide\_out\_left*);  
 });  
  
 // Bài 4: nhấn giữ logo -> mở PagerActivity (demo ViewPager2)  
 ivLogo.setOnLongClickListener(v -> {  
 startActivity(new Intent(this, PagerActivity.class));  
 return true;  
 });  
 }  
  
 private void bindXml(int btnId, int animRes) {  
 Button b = findViewById(btnId);  
 b.setOnClickListener(v -> {  
 Animation a = AnimationUtils.*loadAnimation*(getApplicationContext(), animRes);  
 ivLogo.startAnimation(a);  
 });  
 }  
  
 private void bindCode(int btnId, Animation a) {  
 Button b = findViewById(btnId);  
 b.setOnClickListener(v -> ivLogo.startAnimation(a));  
 }  
}

A screenshot of a computer program

AI-generated content may be incorrect.

# Bước 8 Tạo layout activity\_main.xml

<?xml version="1.0" encoding="utf-8"?>  
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:orientation="vertical"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MainActivity">  
  
 <FrameLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="0dp"  
 android:layout\_weight="5">  
  
 <ImageView  
 android:id="@+id/iv\_logo"  
 android:layout\_width="@dimen/image\_base"  
 android:layout\_height="@dimen/image\_base"  
 android:layout\_gravity="center"  
 android:adjustViewBounds="true"  
 android:scaleType="fitCenter"  
 android:contentDescription="@string/app\_name"  
 android:src="@drawable/hcmunre\_logo" />  
 </FrameLayout>  
  
 <!-- Header 2 cột -->  
 <LinearLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:paddingHorizontal="@dimen/margin\_basex2">  
  
 <TextView  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_weight="1"  
 android:gravity="center"  
 android:textStyle="bold"  
 android:text="@string/from\_xml" />  
  
 <TextView  
 android:layout\_width="0dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_weight="1"  
 android:gravity="center"  
 android:textStyle="bold"  
 android:text="@string/from\_code" />  
 </LinearLayout>  
  
 <ScrollView  
 android:layout\_width="match\_parent"  
 android:layout\_height="0dp"  
 android:layout\_weight="6"  
 android:padding="@dimen/margin\_base">  
  
 <LinearLayout  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:orientation="vertical">  
  
 <!-- Mỗi dòng: trái=XML, phải=CODE -->  
 <!-- 1 -->  
 <LinearLayout android:layout\_width="match\_parent" android:layout\_height="wrap\_content">  
 <Button android:id="@+id/btn\_fade\_in\_xml" android:layout\_width="0dp" android:layout\_height="wrap\_content" android:layout\_weight="1" android:text="@string/fade\_in"/>  
 <Button android:id="@+id/btn\_fade\_in\_code" android:layout\_width="0dp" android:layout\_height="wrap\_content" android:layout\_weight="1" android:text="@string/fade\_in"/>  
 </LinearLayout>  
 <!-- 2 -->  
 <LinearLayout android:layout\_width="match\_parent" android:layout\_height="wrap\_content">  
 <Button android:id="@+id/btn\_fade\_out\_xml" android:layout\_width="0dp" android:layout\_height="wrap\_content" android:layout\_weight="1" android:text="@string/fade\_out"/>  
 <Button android:id="@+id/btn\_fade\_out\_code" android:layout\_width="0dp" android:layout\_height="wrap\_content" android:layout\_weight="1" android:text="@string/fade\_out"/>  
 </LinearLayout>  
 <!-- 3 -->  
 <LinearLayout android:layout\_width="match\_parent" android:layout\_height="wrap\_content">  
 <Button android:id="@+id/btn\_blink\_xml" android:layout\_width="0dp" android:layout\_height="wrap\_content" android:layout\_weight="1" android:text="@string/blink"/>  
 <Button android:id="@+id/btn\_blink\_code" android:layout\_width="0dp" android:layout\_height="wrap\_content" android:layout\_weight="1" android:text="@string/blink"/>  
 </LinearLayout>  
 <!-- 4 -->  
 <LinearLayout android:layout\_width="match\_parent" android:layout\_height="wrap\_content">  
 <Button android:id="@+id/btn\_zoom\_in\_xml" android:layout\_width="0dp" android:layout\_height="wrap\_content" android:layout\_weight="1" android:text="@string/zoom\_in"/>  
 <Button android:id="@+id/btn\_zoom\_in\_code" android:layout\_width="0dp" android:layout\_height="wrap\_content" android:layout\_weight="1" android:text="@string/zoom\_in"/>  
 </LinearLayout>  
 <!-- 5 -->  
 <LinearLayout android:layout\_width="match\_parent" android:layout\_height="wrap\_content">  
 <Button android:id="@+id/btn\_zoom\_out\_xml" android:layout\_width="0dp" android:layout\_height="wrap\_content" android:layout\_weight="1" android:text="@string/zoom\_out"/>  
 <Button android:id="@+id/btn\_zoom\_out\_code" android:layout\_width="0dp" android:layout\_height="wrap\_content" android:layout\_weight="1" android:text="@string/zoom\_out"/>  
 </LinearLayout>  
 <!-- 6 -->  
 <LinearLayout android:layout\_width="match\_parent" android:layout\_height="wrap\_content">  
 <Button android:id="@+id/btn\_rotate\_xml" android:layout\_width="0dp" android:layout\_height="wrap\_content" android:layout\_weight="1" android:text="@string/rotate"/>  
 <Button android:id="@+id/btn\_rotate\_code" android:layout\_width="0dp" android:layout\_height="wrap\_content" android:layout\_weight="1" android:text="@string/rotate"/>  
 </LinearLayout>  
 <!-- 7 -->  
 <LinearLayout android:layout\_width="match\_parent" android:layout\_height="wrap\_content">  
 <Button android:id="@+id/btn\_move\_xml" android:layout\_width="0dp" android:layout\_height="wrap\_content" android:layout\_weight="1" android:text="@string/move"/>  
 <Button android:id="@+id/btn\_move\_code" android:layout\_width="0dp" android:layout\_height="wrap\_content" android:layout\_weight="1" android:text="@string/move"/>  
 </LinearLayout>  
 <!-- 8 -->  
 <LinearLayout android:layout\_width="match\_parent" android:layout\_height="wrap\_content">  
 <Button android:id="@+id/btn\_slide\_up\_xml" android:layout\_width="0dp" android:layout\_height="wrap\_content" android:layout\_weight="1" android:text="@string/slide\_up"/>  
 <Button android:id="@+id/btn\_slide\_up\_code" android:layout\_width="0dp" android:layout\_height="wrap\_content" android:layout\_weight="1" android:text="@string/slide\_up"/>  
 </LinearLayout>  
 <!-- 9 -->  
 <LinearLayout android:layout\_width="match\_parent" android:layout\_height="wrap\_content">  
 <Button android:id="@+id/btn\_bounce\_xml" android:layout\_width="0dp" android:layout\_height="wrap\_content" android:layout\_weight="1" android:text="@string/bounce"/>  
 <Button android:id="@+id/btn\_bounce\_code" android:layout\_width="0dp" android:layout\_height="wrap\_content" android:layout\_weight="1" android:text="@string/bounce"/>  
 </LinearLayout>  
 <!-- 10 -->  
 <LinearLayout android:layout\_width="match\_parent" android:layout\_height="wrap\_content">  
 <Button android:id="@+id/btn\_combine\_xml" android:layout\_width="0dp" android:layout\_height="wrap\_content" android:layout\_weight="1" android:text="@string/combine"/>  
 <Button android:id="@+id/btn\_combine\_code" android:layout\_width="0dp" android:layout\_height="wrap\_content" android:layout\_weight="1" android:text="@string/combine"/>  
 </LinearLayout>  
  
 </LinearLayout>  
 </ScrollView>  
  
</LinearLayout>

# Bước 9 Tạo layout activity\_second.xml

<?xml version="1.0" encoding="utf-8"?>  
<FrameLayout 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="Second Activity" android:textSize="24sp"  
 android:layout\_gravity="center"/>  
</FrameLayout>

# Bước 10 Tạo layout activity\_pager.xml

<?xml version="1.0" encoding="utf-8"?>  
<FrameLayout 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="Second Activity" android:textSize="24sp"  
 android:layout\_gravity="center"/>  
</FrameLayout>

# Bước 11 Tạo layout fragment\_first.xml

<?xml version="1.0" encoding="utf-8"?>  
<FrameLayout 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="ViewPager2 — Page 1" android:textSize="24sp"  
 android:layout\_gravity="center"/>  
</FrameLayout>

# Bước 12 Tạo layout fragment\_second.xml

<?xml version="1.0" encoding="utf-8"?>  
<FrameLayout 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="ViewPager2 — Page 2" android:textSize="24sp"  
 android:layout\_gravity="center"/>  
</FrameLayout>

A screenshot of a computer

AI-generated content may be incorrect.

# Bước 13 Tạo anim 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:duration="300" android:repeatMode="reverse" android:repeatCount="3"/>  
</set>

# Bước 14 Tạo anim anim\_bounce.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/bounce\_interpolator">  
 <scale android:duration="500"  
 android:fromXScale="1.0" android:fromYScale="0.0"  
 android:toXScale="1.0" android:toYScale="1.0"/>  
</set>

# Bước 15 Tạo anim anim\_combine.xml

<?xml version="1.0" encoding="utf-8"?>  
<set xmlns:android="http://schemas.android.com/apk/res/android" android:fillAfter="true">  
 <scale android:duration="1500"  
 android:fromXScale="1" android:fromYScale="1"  
 android:pivotX="50%" android:pivotY="50%"  
 android:toXScale="2.5" android:toYScale="2.5"/>  
 <rotate android:duration="600"  
 android:fromDegrees="0" android:toDegrees="360"  
 android:pivotX="50%" android:pivotY="50%"  
 android:repeatCount="1" android:repeatMode="restart"/>  
</set>

# Bước 16 Tạo anim anim\_fade\_in.xml

<?xml version="1.0" encoding="utf-8"?>  
<set xmlns:android="http://schemas.android.com/apk/res/android" android:fillAfter="true">  
 <alpha android:duration="1000" android:fromAlpha="0.0" android:toAlpha="1.0"/>  
</set>

# Bước 17 Tạo anim anim\_fade\_out.xml

<?xml version="1.0" encoding="utf-8"?>  
<set xmlns:android="http://schemas.android.com/apk/res/android" android:fillAfter="true">  
 <alpha android:duration="1000" android:fromAlpha="1.0" android:toAlpha="0.0"/>  
</set>

# Bước 18 Tạo anim anim\_move.xml

<?xml version="1.0" encoding="utf-8"?>  
<set xmlns:android="http://schemas.android.com/apk/res/android" android:fillAfter="true">  
 <translate android:fromXDelta="0%p" android:toXDelta="70%p" android:duration="700"/>  
</set>

# Bước 19 Tạo anim anim\_rotate.xml

<?xml version="1.0" encoding="utf-8"?>  
<set xmlns:android="http://schemas.android.com/apk/res/android">  
 <rotate android:fromDegrees="0" android:toDegrees="360"  
 android:pivotX="50%" android:pivotY="50%"  
 android:duration="600" android:repeatMode="restart" android:repeatCount="2"/>  
</set>

# Bước 20 Tạo anim anim\_slide\_up.xml

<?xml version="1.0" encoding="utf-8"?>  
<set xmlns:android="http://schemas.android.com/apk/res/android" android:fillAfter="true">  
 <scale android:duration="500"  
 android:fromXScale="1.0" android:fromYScale="1.0"  
 android:toXScale="1.0" android:toYScale="0.0"/>  
</set>

# Bước 21 Tạo anim anim\_zoom\_in.xml

<?xml version="1.0" encoding="utf-8"?>  
<set xmlns:android="http://schemas.android.com/apk/res/android" android:fillAfter="true">  
 <scale android:duration="800"  
 android:fromXScale="1" android:fromYScale="1"  
 android:pivotX="50%" android:pivotY="50%"  
 android:toXScale="2.5" android:toYScale="2.5"/>  
</set>

# Bước 22 Tạo anim anim\_zoom\_out.xml

<?xml version="1.0" encoding="utf-8"?>  
<set xmlns:android="http://schemas.android.com/apk/res/android" android:fillAfter="true">  
 <scale android:duration="800"  
 android:fromXScale="1.0" android:fromYScale="1.0"  
 android:pivotX="50%" android:pivotY="50%"  
 android:toXScale="0.5" android:toYScale="0.5"/>  
</set>

# Bước 23 Tạo slide\_in\_left.xml

<?xml version="1.0" encoding="utf-8"?>  
<translate xmlns:android="http://schemas.android.com/apk/res/android"  
 android:fromXDelta="-100%p" android:toXDelta="0" android:duration="300"/>

# Bước 4 Tạo slide\_in\_right.xml

<?xml version="1.0" encoding="utf-8"?>  
<translate xmlns:android="http://schemas.android.com/apk/res/android"  
 android:fromXDelta="100%p" android:toXDelta="0" android:duration="300"/>

# Bước 25 Tạo slide\_out\_left.xml

<?xml version="1.0" encoding="utf-8"?>  
<translate xmlns:android="http://schemas.android.com/apk/res/android"  
 android:fromXDelta="0" android:toXDelta="-100%p" android:duration="300"/>

# Bước 26 Tạo slide\_out\_right.xml

<?xml version="1.0" encoding="utf-8"?>  
<translate xmlns:android="http://schemas.android.com/apk/res/android"  
 android:fromXDelta="0" android:toXDelta="100%p" android:duration="300"/>

A screenshot of a computer

AI-generated content may be incorrect.

# Bước 27 Tạo strings.xml

<?xml version="1.0" encoding="utf-8"?>  
<resources>  
 <string name="app\_name">AnimationLab06</string>  
  
 <!-- Left column: From XML -->  
 <string name="from\_xml">From XML</string>  
 <string name="fade\_in">Fade In</string>  
 <string name="fade\_out">Fade Out</string>  
 <string name="blink">Blink</string>  
 <string name="zoom\_in">Zoom In</string>  
 <string name="zoom\_out">Zoom Out</string>  
 <string name="rotate">Rotate</string>  
 <string name="move">Move</string>  
 <string name="slide\_up">Slide Up</string>  
 <string name="bounce">Bounce</string>  
 <string name="combine">Combine</string>  
  
 <!-- Right column: From CODE -->  
 <string name="from\_code">From CODE</string>  
 <!-- Strings mặc định của template -->  
 <string name="action\_settings">Settings</string>  
 <string name="first\_fragment\_label">First Fragment</string>  
 <string name="second\_fragment\_label">Second Fragment</string>  
</resources>

# Bước 28 Tạo dimens.xml

<?xml version="1.0" encoding="utf-8"?>  
<resources>  
 <dimen name="margin\_base">8dp</dimen>  
 <dimen name="margin\_basex2">16dp</dimen>  
 <dimen name="image\_base">120dp</dimen>  
</resources>

# Bước 29 Sửa AndroidManifest.xml

<?xml version="1.0" encoding="utf-8"?>  
<manifest xmlns:android="http://schemas.android.com/apk/res/android">  
  
 <application  
 android:allowBackup="true"  
 android:label="@string/app\_name"  
 android:icon="@mipmap/ic\_launcher"  
 android:roundIcon="@mipmap/ic\_launcher\_round"  
 android:supportsRtl="true"  
 android:theme="@style/Theme.Material3.DayNight.NoActionBar">  
  
 <activity android:name=".PagerActivity" android:exported="false" />  
 <activity android:name=".SecondActivity" android:exported="false" />  
  
 <!-- LAUNCHER -->  
 <activity android:name=".MainActivity" android:exported="true">  
 <intent-filter>  
 <action android:name="android.intent.action.MAIN" />  
 <category android:name="android.intent.category.LAUNCHER" />  
 </intent-filter>  
 </activity>  
  
 </application>  
</manifest>

# Kết Quả

A screenshot of a computer

AI-generated content may be incorrect.