# Practical: 9

**[ 2CEIT5PE5: MOBILE APPLICATION DEVELOPMENT]**

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**AIM - Create Android Application to demonstrate Frame by frame animation and splash screen to demonstrate twin animation according to below instructions.**

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### MainActivity.kt

package com.example.mad\_pracatical\_9\_21012021003

import android.graphics.drawable.AnimationDrawable import androidx.appcompat.app.AppCompatActivity import android.os.Bundle

import android.widget.ImageView

import com.example.mad\_pracatical\_9\_21012021003.R class MainActivity : AppCompatActivity() {

lateinit var alarmanimation : AnimationDrawable lateinit var heartanimation : AnimationDrawable

override fun onCreate(savedInstanceState: Bundle?) { super.onCreate(savedInstanceState) setContentView(R.layout.activity\_main)

val alarm : ImageView = findViewById(R.id.alarm) alarm.setBackgroundResource(R.drawable.alarm\_animation\_list) alarmanimation = alarm.background as AnimationDrawable

val heart : ImageView = findViewById(R.id.heart) heart.setBackgroundResource(R.drawable.heart\_animation\_list) heartanimation = heart.background as AnimationDrawable

}

override fun onWindowFocusChanged(hasFocus: Boolean) { super.onWindowFocusChanged(hasFocus)

if (hasFocus) { alarmanimation.start() heartanimation.start()

}

else {

alarmanimation.stop() heartanimation.stop()

}

}

}

**SplashActivity.kt**

package com.example.mad\_pracatical\_9\_21012021003

import android.annotation.SuppressLint import android.content.Intent

import android.graphics.drawable.AnimationDrawable import androidx.appcompat.app.AppCompatActivity import android.os.Bundle

import android.view.animation.Animation import android.view.animation.AnimationUtils

//import com.example.mad\_practical\_9\_21012021003.R import android.widget.ImageView

class SplashActivity : AppCompatActivity(), Animation.AnimationListener {

lateinit var imageanimation : AnimationDrawable lateinit var logoimage : ImageView

lateinit var logoanimation : Animation

override fun onCreate(savedInstanceState: Bundle?) { super.onCreate(savedInstanceState) setContentView(R.layout.activity\_splash) logoimage=findViewById(R.id.uvpce) logoimage.setBackgroundResource((R.drawable.uvpce\_animation\_list)) imageanimation = logoimage.background as AnimationDrawable logoanimation= AnimationUtils.loadAnimation(this, R.anim.twin\_animation) logoanimation.setAnimationListener(this)

}

override fun onWindowFocusChanged(hasFocus: Boolean) { super.onWindowFocusChanged(hasFocus)

if (hasFocus) { imageanimation.start()

logoimage.startAnimation(logoanimation)

}

else {

imageanimation.stop()

}

}

override fun onAnimationStart(p0: Animation?) {

}

override fun onAnimationEnd(p0: Animation?) {

Intent(this, MainActivity::class.java).apply { startActivity(this) }

}

override fun onAnimationRepeat(p0: Animation?) {

}

}

### activity\_main.xml

<?xml version="1.0" encoding="utf-8"?>

<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="[http://schemas.android.com/apk/res/android"](http://schemas.android.com/apk/res/android)

xmlns:app="[http://schemas.android.com/apk/res-auto"](http://schemas.android.com/apk/res-auto) xmlns:tools="[http://schemas.android.com/tools"](http://schemas.android.com/tools) android:layout\_width="match\_parent" android:layout\_height="match\_parent" tools:context=".MainActivity">

<TextView android:id="@+id/textView"

android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:layout\_margin="20dp" android:text="@string/app\_name" android:textAppearance="?attr/textAppearanceHeadline6" android:textSize="20sp" app:layout\_constraintStart\_toStartOf="parent" app:layout\_constraintTop\_toTopOf="parent" />

<com.google.android.material.card.MaterialCardView android:id="@+id/card" android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:layout\_margin="20dp" app:cardElevation="20dp" app:layout\_constraintEnd\_toEndOf="parent" app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/textView">

<LinearLayout android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:orientation="vertical">

<ImageView android:id="@+id/alarm"

android:layout\_width="match\_parent" android:layout\_height="250dp" android:scaleType="center" />

<LinearLayout android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:orientation="vertical" android:padding="16dp">

<TextView android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Create Alarm Time"

android:textAppearance="?attr/textAppearanceHeadline6" />

<TextView android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:layout\_marginTop="8dp"

android:text="By pressing buttons, Alarm can be created and cancelled.\n\nCheck current time by looking below real digital clock. "

android:textAppearance="?attr/textAppearanceBody2" />

<ImageView android:id="@+id/heart" android:layout\_width="40dp" android:layout\_height="40dp" android:layout\_marginTop="2dp" android:layout\_marginEnd="25dp" android:layout\_gravity="right"

android:src="@drawable/heart\_animation\_list"/>

<LinearLayout android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:orientation="horizontal" android:layout\_marginTop="10dp">

<com.google.android.material.button.MaterialButton android:id="@+id/create\_alarm" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Create Alarm" android:backgroundTint="@color/blue" app:icon="@drawable/baseline\_add\_alarm\_24" />

<com.google.android.material.button.MaterialButton android:id="@+id/cancel\_alarm" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Cancel Alarm" android:textColor="@color/blue" android:background="#00FFFFFF" app:icon="@drawable/baseline\_alarm\_off\_24" app:iconTint="@color/blue"/>

</LinearLayout>

</LinearLayout>

</LinearLayout>

</com.google.android.material.card.MaterialCardView>

</androidx.constraintlayout.widget.ConstraintLayout>

### activity\_splash.xml

<?xml version="1.0" encoding="utf-8"?>

<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="[http://schemas.android.com/apk/res/android"](http://schemas.android.com/apk/res/android)

xmlns:app="[http://schemas.android.com/apk/res-auto"](http://schemas.android.com/apk/res-auto) xmlns:tools="[http://schemas.android.com/tools"](http://schemas.android.com/tools) android:layout\_width="match\_parent" android:layout\_height="match\_parent" tools:context=".SplashActivity" android:background="@drawable/gradiant\_rectangle">

<ImageView android:id="@+id/uvpce"

android:layout\_width="match\_parent" android:layout\_height="100dp" app:layout\_constraintBottom\_toBottomOf="parent" app:layout\_constraintEnd\_toEndOf="parent" app:layout\_constraintStart\_toStartOf="parent" app:layout\_constraintTop\_toTopOf="parent" />

</androidx.constraintlayout.widget.ConstraintLayout>

 