**All Possible states in Android Activity**

**onCreate()**

**This method will be call when activity will be created for the first time. This is the starting point of the activity.**

**onStart()**

**This method will be call just before the activity becomes visible on the screen. This state follows onCreate()function.**

**onResume()**

**This method will be call after onStart() method and if the activity is the foreground activity on the screen.**

**onPause()**

**This method will be call when the activity is just about to call another activity so that the current activity has to be paused and the new activity has to be resumed. Here the previous activity is not stopped but it loss the foreground visibility means it goes as background activity. Also if any other application will be on top of the activity, then also the activity will go to this state.**

**onStop()**

**This method is called when your activity is no longer visible on the screen.**

**onDestroy()**

**This method is called when your current activity has the last chance to do any processing before it is destroyed.**

**Create Project: Android Activity Lifecycle Example**

**1. Create a project with project name: ActivityLifeCycleExample**

**2. Fill Application Name: ActivityLifeCycleExample**

**3. Fill the Package Name as: com.mm214.activitylifecycleexample**

**4. Add below 2 java files (MainActivity.Java and SecondActivity.Java) in you project’s src folder.**

**MainActivity.Java**

package com.mm214.activitylifecycleexample;

import android.os.Bundle;

import android.app.Activity;

import android.content.Intent;

import android.util.Log;

import android.view.View;

import android.widget.Toast;

public class MainActivity extends Activity {

/\*\* Called when the activity is first created. \*/

@Override

public void onCreate(Bundle savedInstanceState)

{

super.onCreate(savedInstanceState);

setContentView(R.layout.main);

Toast.makeText(this, "On Create Called In First Activity", Toast.LENGTH\_LONG).show();

Log.i("FirstActivity", "Inside onCreate");

}

@Override

protected void onStart() {

// TODO Auto-generated method stub

super.onStart();

Toast.makeText(this, "On Start Called In First Activity", Toast.LENGTH\_LONG).show();

Log.i("FirstActivity", "Inside onStart");

}

@Override

protected void onResume()

{

// TODO Auto-generated method stub

super.onResume();

Toast.makeText(this, "On Resume Called In First Activity", Toast.LENGTH\_LONG).show();

Log.i("FirstActivity", "Inside onResume");

}

@Override

protected void onPause() {

// TODO Auto-generated method stub

super.onPause();

Toast.makeText(this, "On Pause Called In First Activity", Toast.LENGTH\_LONG).show();

Log.i("FirstActivity", "Inside onPause");

}

@Override

protected void onStop() {

// TODO Auto-generated method stub

super.onStop();

Toast.makeText(this, "On Stop Called In First Activity", Toast.LENGTH\_LONG).show();

Log.i("FirstActivity", "Inside onStop");

}

@Override

protected void onDestroy()

{

// TODO Auto-generated method stub

super.onDestroy();

Toast.makeText(this, "On Destroy Called In First Activity", Toast.LENGTH\_LONG).show();

Log.i("FirstActivity", "Inside onDestroy");

}

public void startSecondActivity(View V)

{

// create an new Intent and Start Second Activity

Intent intent=new Intent(this,SecondActivity.class);

startActivity(intent);

}

}

**SecondActivity.Java**

package com.mm214.activitylifecycleexample;

import android.app.Activity;

import android.os.Bundle;

import android.util.Log;

import android.widget.Toast;

public class SecondActivity extends Activity

{

/\*\* Called when the activity is first created. \*/

@Override

public void onCreate(Bundle savedInstanceState)

{

super.onCreate(savedInstanceState);

setContentView(R.layout.layout2);

Toast.makeText(this, "On Create Called In Second Activity", Toast.LENGTH\_LONG).show();

Log.i("SecondActivity", "Inside onCreate");

}

@Override

protected void onStart() {

// TODO Auto-generated method stub

super.onStart();

Toast.makeText(this, "On Start Called In Second Activity", Toast.LENGTH\_LONG).show();

Log.i("SecondActivity", "Inside onStart");

}

@Override

protected void onResume()

{

// TODO Auto-generated method stub

super.onResume();

Toast.makeText(this, "On Resume Called In Second Activity", Toast.LENGTH\_LONG).show();

Log.i("SecondActivity", "Inside onResume");

}

@Override

protected void onPause() {

// TODO Auto-generated method stub

super.onPause();

Toast.makeText(this, "On Pause Called In Second Activity", Toast.LENGTH\_LONG).show();

Log.i("SecondActivity", "Inside onPause");

}

@Override

protected void onStop() {

// TODO Auto-generated method stub

super.onStop();

Toast.makeText(this, "On Stop Called In Second Activity", Toast.LENGTH\_LONG).show();

Log.i("SecondActivity", "Inside onStop");

}

@Override

protected void onDestroy()

{

// TODO Auto-generated method stub

super.onDestroy();

Toast.makeText(this, "On Destroy Called In Second Activity", Toast.LENGTH\_LONG).show();

Log.i("SecondActivity", "Inside onDestroy");

}

}

**6. Add below 2 xml layout files (main.xml and layout2.xml) in your project’s res/layout folder.**

**• main.xml**

<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"

android:orientation="vertical"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

>

<TextView

android:id="@+id/textView1"

android:layout\_gravity="center\_horizontal"

android:textSize="23dp"

android:layout\_marginTop="150dp"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="This Is Fist Activity Activity"

/>

<Button

android:id="@+id/button1"

android:layout\_gravity="center\_horizontal"

android:layout\_marginTop="20dp"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text=" Second Activity "

android:onClick="startSecondActivity"/>

</LinearLayout>

**layout2.xml**

<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"

android:orientation="vertical"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

>

<TextView

android:id="@+id/textView1"

android:layout\_marginTop="150dp"

android:layout\_gravity="center\_horizontal"

android:textSize="23dp"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="This Is Second Activity" />

</LinearLayout>

**7. Add the below Manifest file (AndroidManifest.xml) in your project’s root folder.**

**AndroidManifest.xml**

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

<manifest xmlns:android="http://schemas.android.com/apk/res/android"

package="com.mm214.activitylifecycleexample"

android:versionCode="1"

android:versionName="1.0" >

<uses-sdk

android:minSdkVersion="8"

android:targetSdkVersion="17" />

<application

android:allowBackup="true"

android:icon="@drawable/ic\_launcher"

android:label="@string/app\_name"

android:theme="@style/AppTheme" >

<activity

android:name="com.mm214.activitylifecycleexample.MainActivity"

android:label="@string/app\_name" >

<intent-filter>

<action android:name="android.intent.action.MAIN" />

<category android:name="android.intent.category.LAUNCHER" />

</intent-filter>

</activity>

<activity

android:name=".SecondActivity">

</activity>

</application>

</manifest>

8. Build and Run the application, then observe all states of an android activity. You can see a Android Toast of each changed android states.