Activity生命周期：

1. Activity A启动Activity B

Activity A——onSaveInstanceState——onPause

Activity B——onCreate ——onStart—— onPostCreate——onResume——onPostResume

Activity A——onStop

1. Activity B调用finish()方法

Activity B——onPause

Activity A——onRestart——onStart——onResume——onPostResume

Activity B——onStop——onDestroy

说明：

1. Activity正常关闭的时候无需调用onSaveInstanceState方法
2. Activity异常关闭再重启的时候会调用onRestoreInstanceState方法

Fragments(Android3.0新增特性) represents a behavior or a portion of user interface in an [Activity](http://developer.android.com/reference/android/app/Activity.html)

Loaders(Android3.0新增特性) make it easy to asynchronously load data in an activity or fragment

ActionBar(Android3.0新增特性)

Android drag/drop framework (Android3.0新增特性)

Property animation- animator(Android3.0新增特性)

Data Backup(Android2.2新增特性)

Hardware acceleration(Android3.0新增特性)

Near Field Communication (NFC) (Android2.3新增特性)

Wi-Fi Direct(Android4.0新增特性)

Renderscript(Android3.0新增特性) offers a high performance 3D graphics rendering and compute API at the native level

USB Host and Accessory Modes(Android3.1新增特性)

Session Initiation Protocol (SIP) (Android2.3新增特性)

LaunchMode:

1. "standard" (the default mode) A
2. "singleTop" D
3. "singleTask" C
4. "singleInstance" B

依次启动A-B-C-D-D-C-B-A，然后连续回退到桌面

Task1:A-A-AC-ACD-ACD(D会调用[onNewIntent()](http://developer.android.com/reference/android/app/Activity.html" \l "onNewIntent(android.content.Intent))方法)-AC(D会关闭)-AC-ACA，AC-A-0-0

Task2:0- B-B- B- B- B- B(B会调用[onNewIntent()](http://developer.android.com/reference/android/app/Activity.html" \l "onNewIntent(android.content.Intent))方法)-B，B-B-B-0

[alwaysRetainTaskState](http://developer.android.com/guide/topics/manifest/activity-element.html#always)，[clearTaskOnLaunch](http://developer.android.com/guide/topics/manifest/activity-element.html" \l "clear)只有定义在root activity of a task才有效

[finishOnTaskLaunch](http://developer.android.com/guide/topics/manifest/activity-element.html#finish)文档上说对root activity有效，实际测试无效

Service的[onStartCommand()](http://developer.android.com/reference/android/app/Service.html" \l "onStartCommand(android.content.Intent, int, int))返回结果代表服务被系统异常终止后自动所做的操作：

[START\_NOT\_STICKY](http://developer.android.com/reference/android/app/Service.html#START_NOT_STICKY)：无任何操作

[START\_STICKY](http://developer.android.com/reference/android/app/Service.html#START_STICKY)：重启一个空服务，参数为Null

[START\_REDELIVER\_INTENT](http://developer.android.com/reference/android/app/Service.html#START_REDELIVER_INTENT)：重启上次的服务，参数为之前的Intent

Only activities, services, and content providers can bind to a service—you **cannot** bind to a service from a broadcast receiver

Content Provider定义五种类型：

blob(64k byte[]),float,integer,null,string

broadcast receivers should employ services rather than simply put time-consuming operations in a thread,that’s because service process is ranked higher than background process

view的三个构造函数

两种动画类型，四种动画效果，9个动画插入器