SERVICE :
A Service is an application component that can perform long-running operations in the background. It does not provide a user interface. Once started, a service might continue running for some time, even after the user switches to another application.

For example, a service can handle network transactions, play music, perform file I/O, or interact with a content provider, all from the background.

Types of Services

Foreground
A foreground service performs some operation that is noticeable to the user. For example, an audio app would use a foreground service to play an audio track. Foreground services must display a Notification.

Background
A background service performs an operation that isn't directly noticed by the user. For example, if an app used a service to compact its storage, that would usually be a background service. Alternative can be work manager

Bound
A service is *bound* when an application component binds to it by calling bindService(). A bound service offers a client-server interface that allows components to interact with the service, send requests, receive results, and even do so across processes with interprocess communication (IPC)

Declaring a service in the manifest

You must declare all services in your application's manifest file,

```
<manifest ... >
  ...
  <application ... >
    <service android:name=".ExampleService" />
    ...
  </application>
</manifest>
```
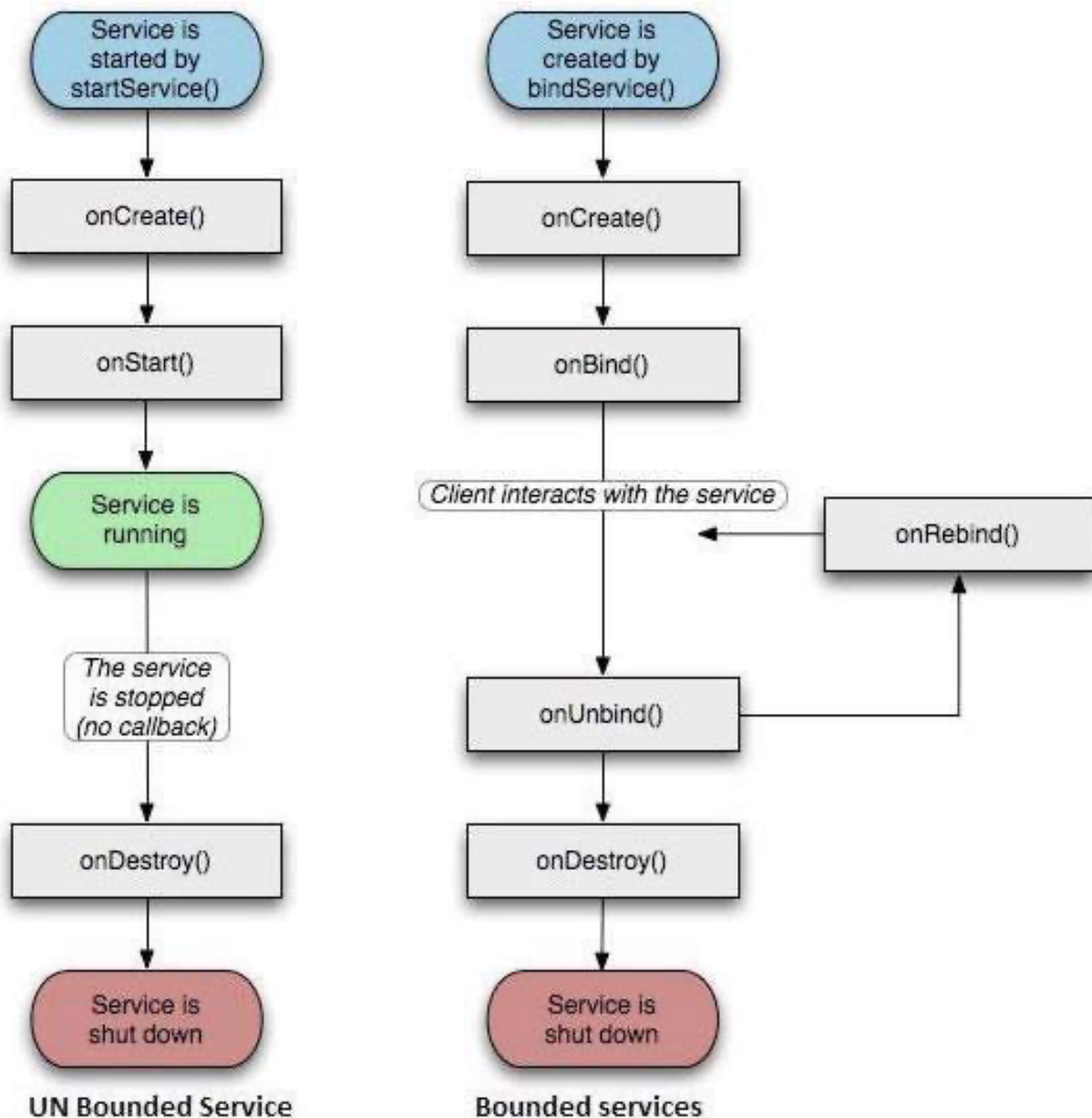
Note:You can ensure that your service is available to only your app by including the android:exported attribute and setting it to false.

UN Bounded Service

- Service is started by startService()
- onCreate()
- onStart()
- Service is running
- *The service is stopped (no callback)*
- onDestroy()
- Service is shut down

Bounded services

- Service is created by bindService()
- onCreate()
- onBind()
- Client interacts with the service
- onRebind()
- onUnbind()
- onDestroy()
- Service is shut down

Note :Keep in mind: **services are not "always running" components**, even when using START_STICKY.
The Android system will not hesitate to kill your service if it needs memory somewhere else. START_STICKY only means that the Android system will re-start your service when it can

BOUND SERVICE :

A bound service is one that allows application components to bind to it by calling bindService() to create a long-standing connection. It generally doesn't allow components to *start* it by calling startService().

Create a bound service when you want to interact with the service from activities and other components in your application or to expose some of your application's functionality to other applications through interprocess communication (IPC).