

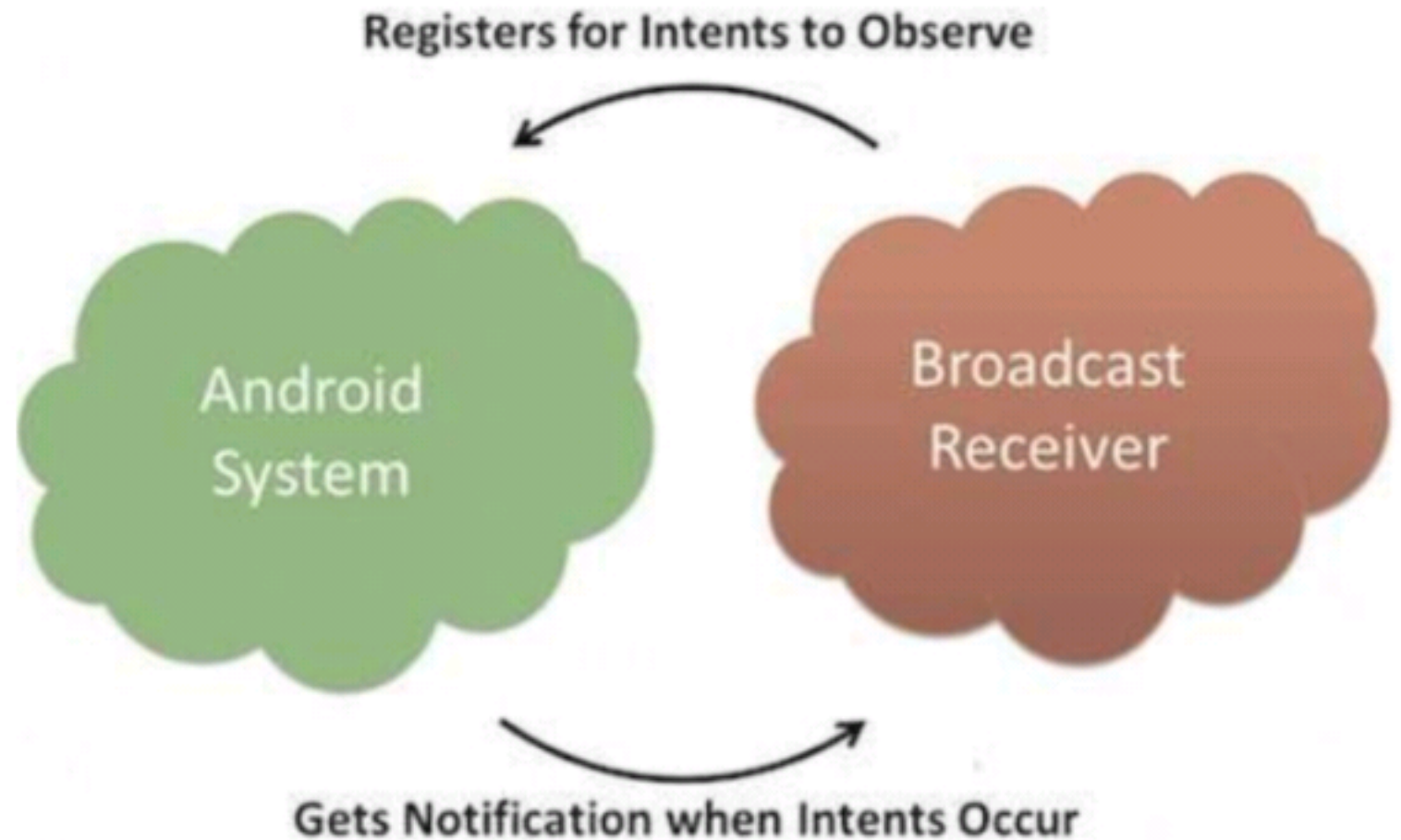
Competitive Exams TechPrep

Broadcast Receiver in Android



Development of Android Applications

Broadcast in android is the system-wide events that can occur when the device starts, when a message is received on the device or when incoming calls are received, or when a device goes to an airplane mode, etc. Broadcast Receivers are used to respond to these system-wide events. Broadcast Receivers allow us to register for the system and application events, and when that event happens, then the register receivers get notified. There are mainly two types of Broadcast Receivers:



- **Static Broadcast Receivers:** These types of Receivers are declared in the manifest file and works even if the app is closed.
- **Dynamic Broadcast Receivers:** These types of receivers work only if the app is active or minimized.

Since from API Level 26, most of the broadcast can only be caught by the dynamic receiver, so we have implemented dynamic receivers in our sample project given below. There are some static fields defined in the Intent class which can be used to broadcast different events. We have taken a change of airplane mode as a broadcast event, but there are many events for which broadcast register can be used. Following are some of the important system-wide generated intents:-

android.intent.action.BATTERY_LOW :

android.intent.action.BOOT_COMPLETED

android.intent.action.CALL

android.intent.action.DATE_CHANGED

The two main things that we have to do
in order to use the broadcast receiver in
our application are:

Creating the Broadcast Receiver:



```
class  
AirplaneModeChangeReceiver:Broad  
castReceiver() {  
  
    override fun onReceive(context:  
Context?, intent: Intent?) {  
  
        // logic of the code needs to be  
written here  
  
    }  
  
}
```

Registering a BroadcastReceiver:



```
IntentFilter(Intent.ACTION_AIRPLAN  
E_MODE_CHANGED).also {  
  
    // receiver is the broadcast  
receiver that we have registered  
  
    // and it is the intent filter  
that we have created  
    registerReceiver(receiver,it)  
  
}
```