Android Components

ACTIVITY

SERVICE

BROADCAST RECEIVER

CONTENT PROVIDER

ACTIVITY

- Anything that appears on the screen is basically an activity
- Its an visual representation of an application- so whatever application the user interacts is basically possible because of the presence of an activity
- An application can contain multiple activities

INTENT

- Intention to perform action
- Contains a motive to trigger an event or to perform an action in the android OS or in any application
- Basic functionality of this intent is to start an activity or launch an application

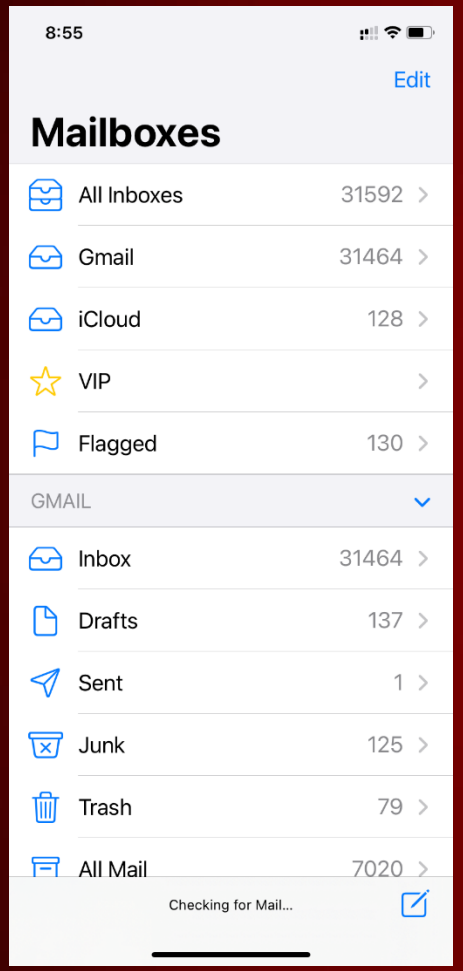
INTENT

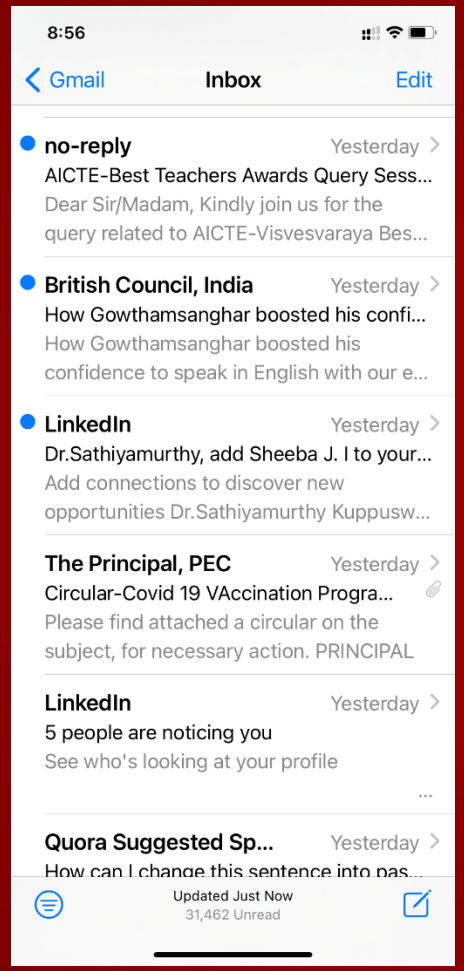
Start an activity

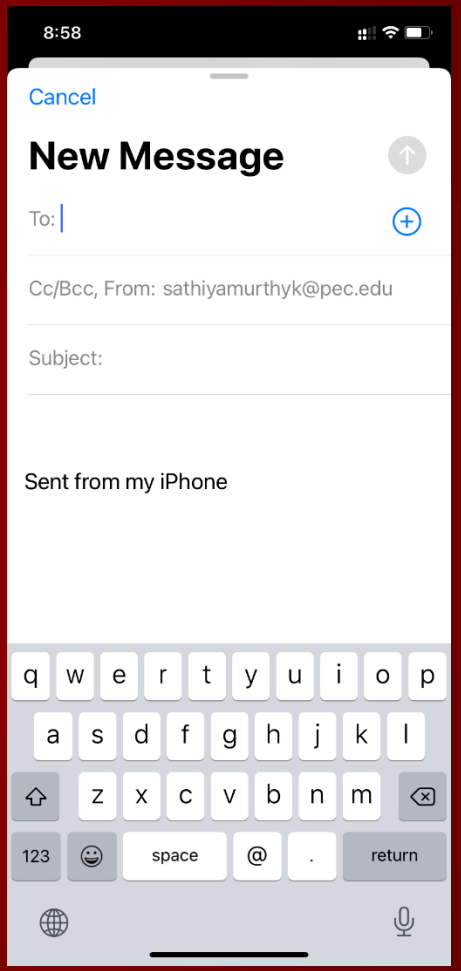
Start a service

Deliver a Broadcast for Broadcast receiver

ACTIVITY







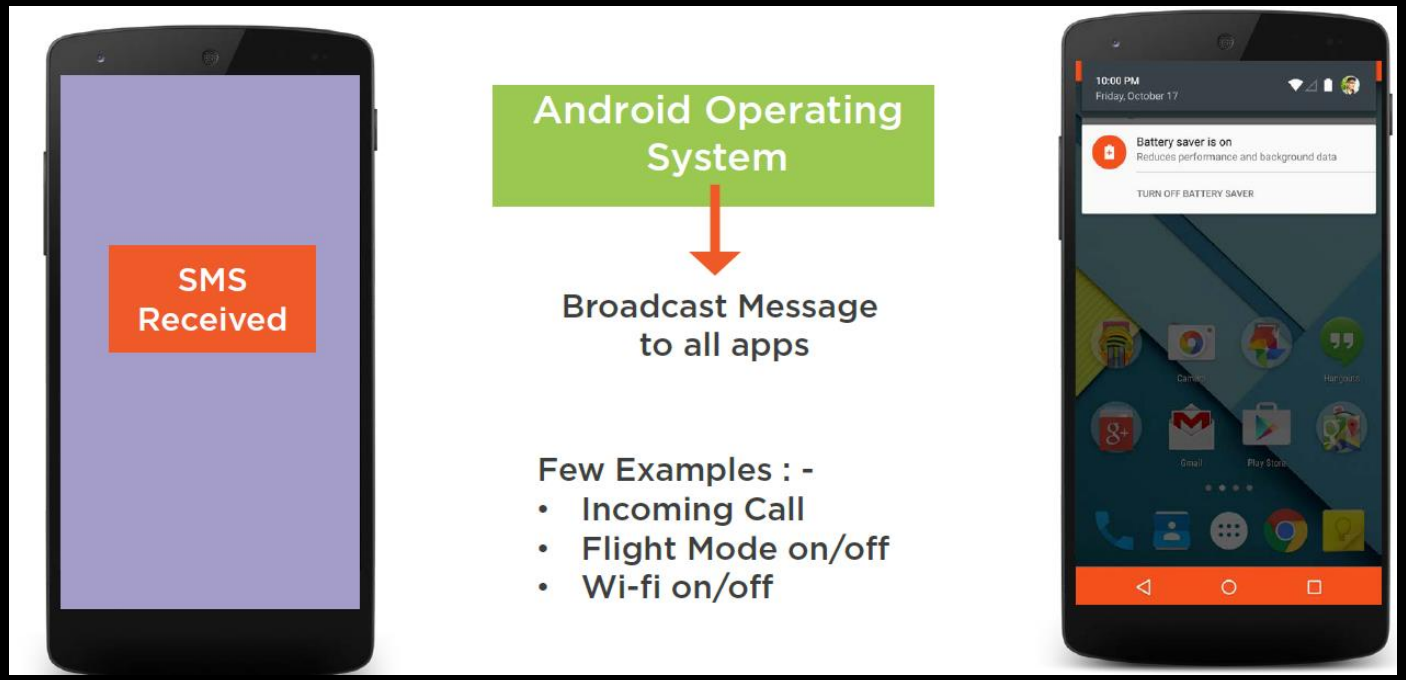
* Migration from 1 activity to another activity is possible with the help of special class Intent

SERVICE

- Runs in Background
- No UI
- Can be started by activity
- Can be started by Broadcast receiver
- Examples
  - Playing music
  - Downloading or uploading an app

8:32
Memory
3 hours
Average memory use
1.6 GB
Performance
Normal
Total memory
1.9 GB
Average used (%)
86%
Free
273 MB
Memory used by apps
51 apps used memory in the last 3 hours

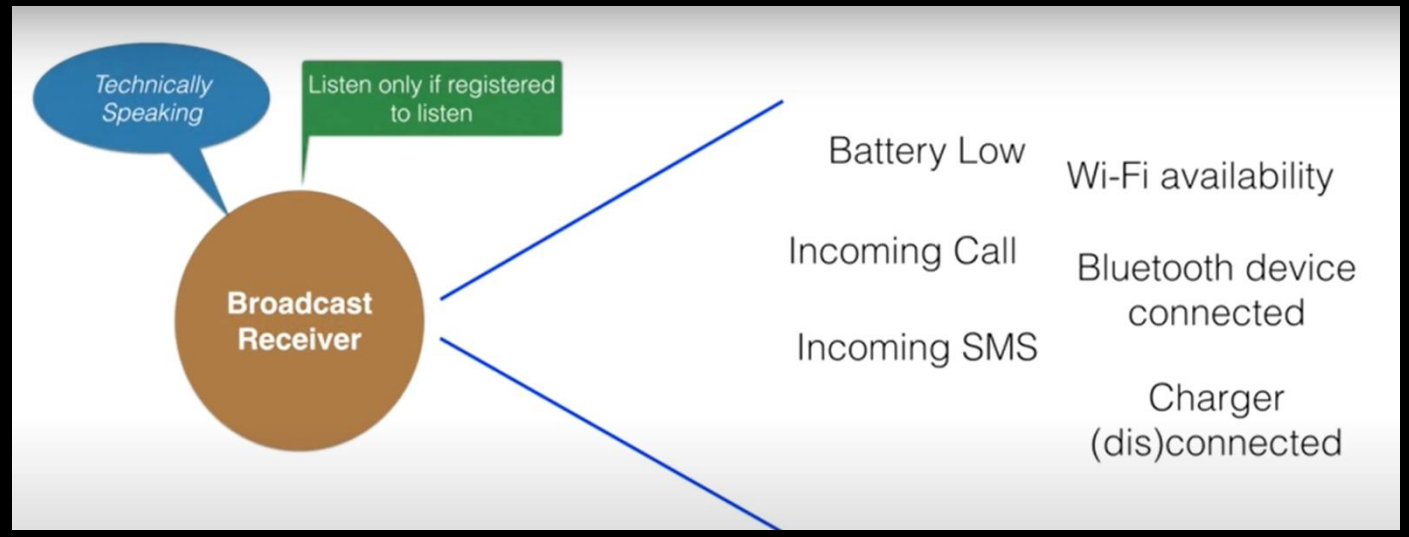
8:33
App usage
3 hours
Average memory use
Android OS
447 MB
Facebook
170 MB
System UI
111 MB
Google App
101 MB
WhatsApp
97 MB
Google Play services
96 MB



BROADCAST RECEIVER

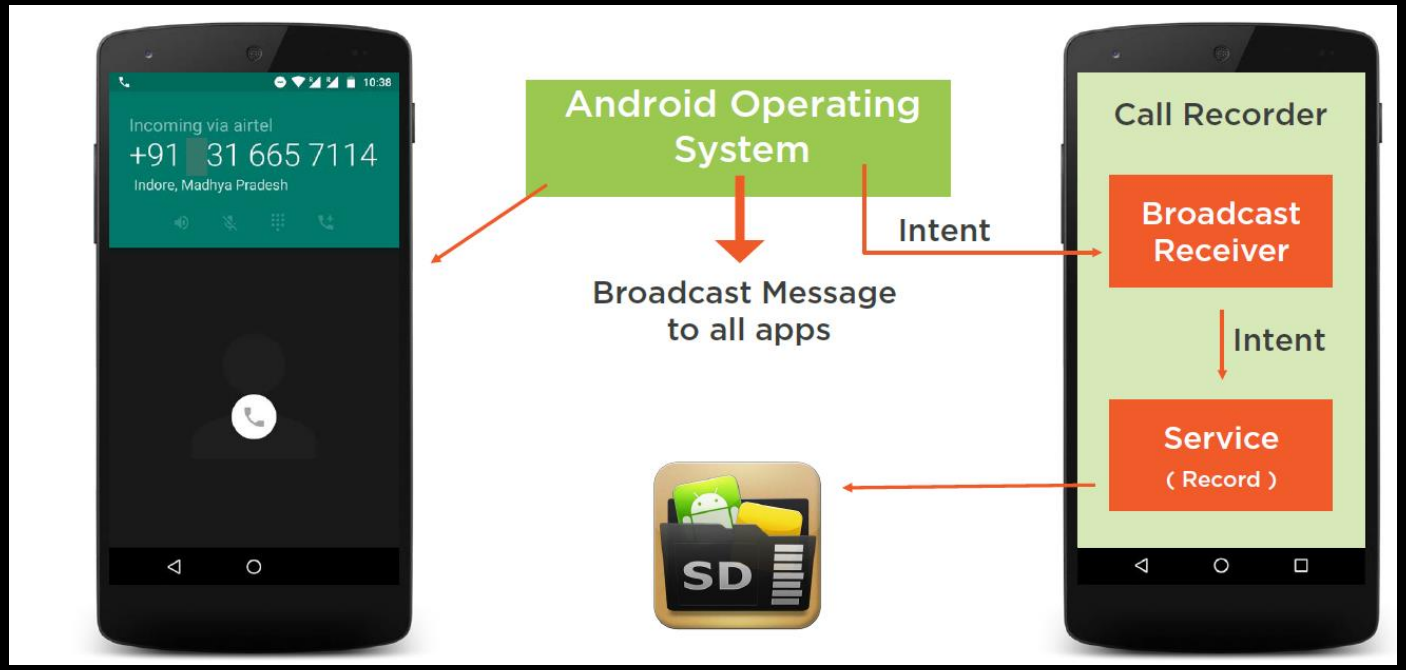
Whenever there is some kind of disturbances then AOS broadcast messages to all applications

BROADCAST RECEIVER



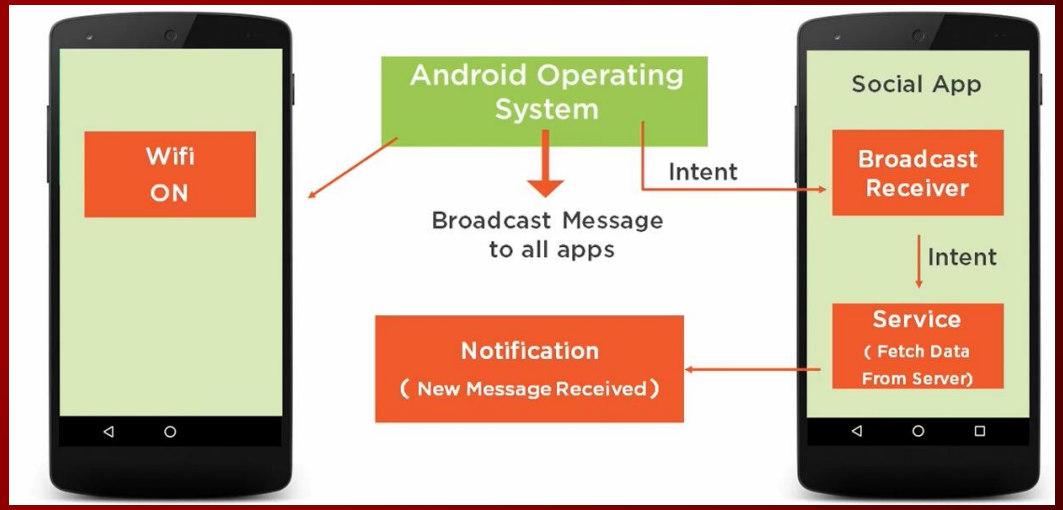
BROADCAST RECEIVER

Example – call recorder app registered for call receiver

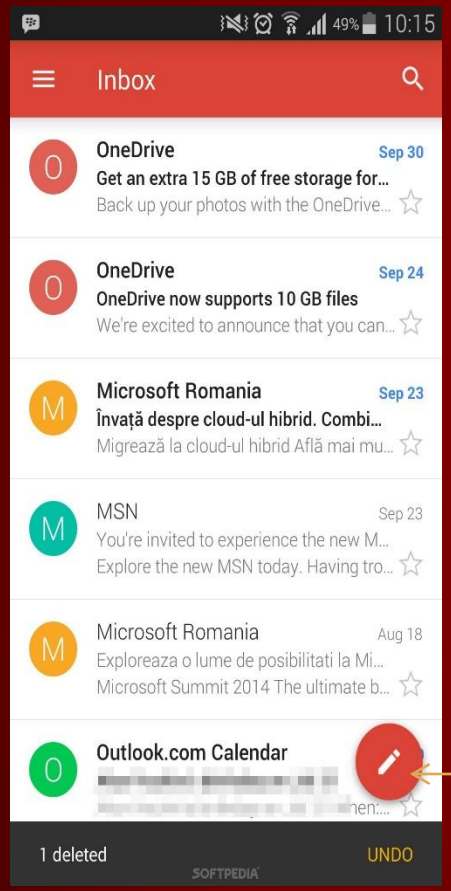


BROADCAST RECEIVER

- Example for social media data update with WIFI on

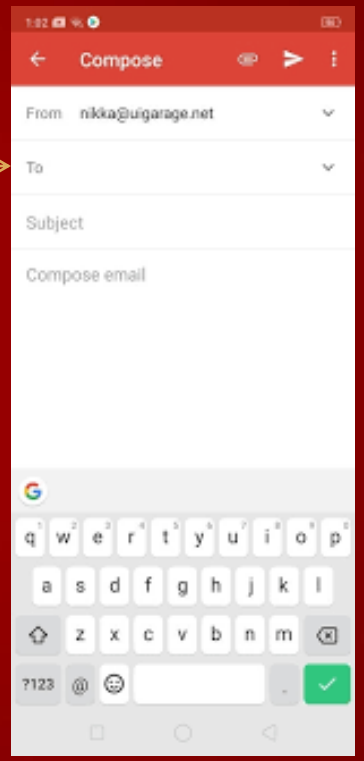


Using Activities to listen to Events



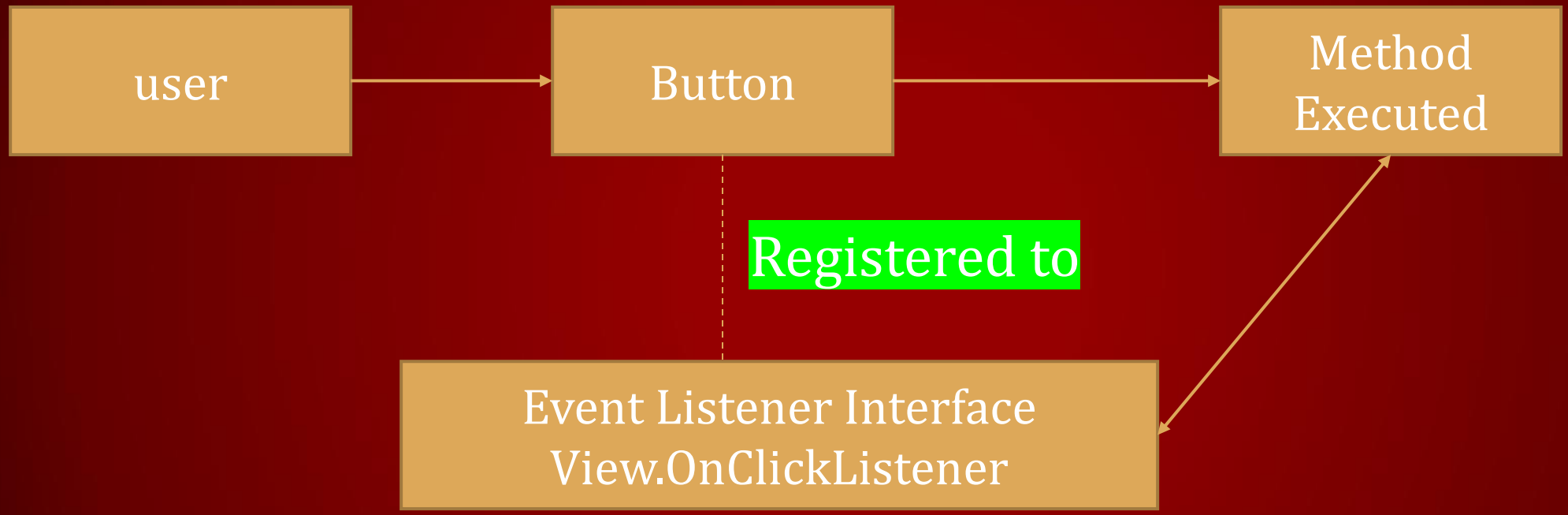
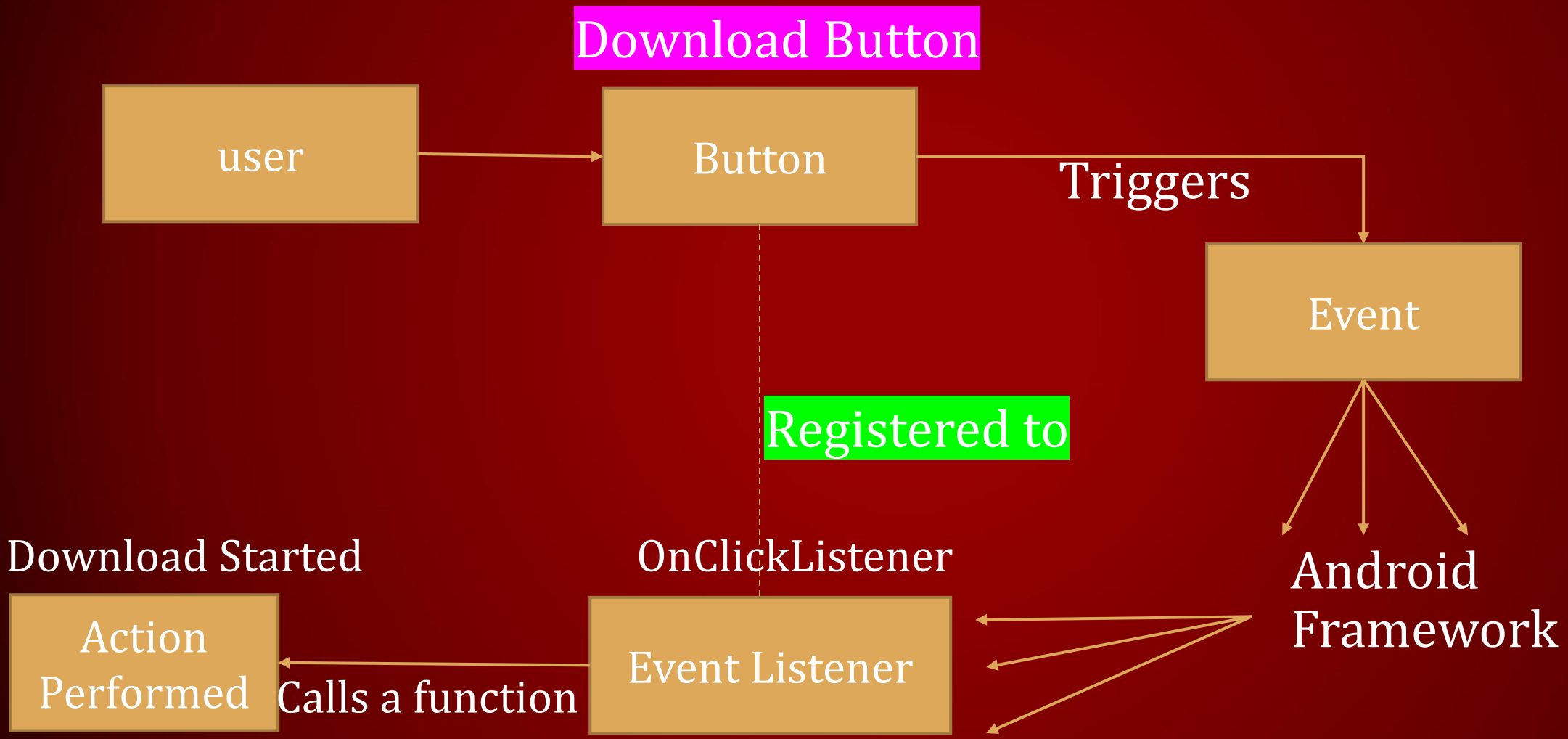
Intent

Navigate to second Activity



Event is Triggered

Event Handling



Event Handling: Downloading Example