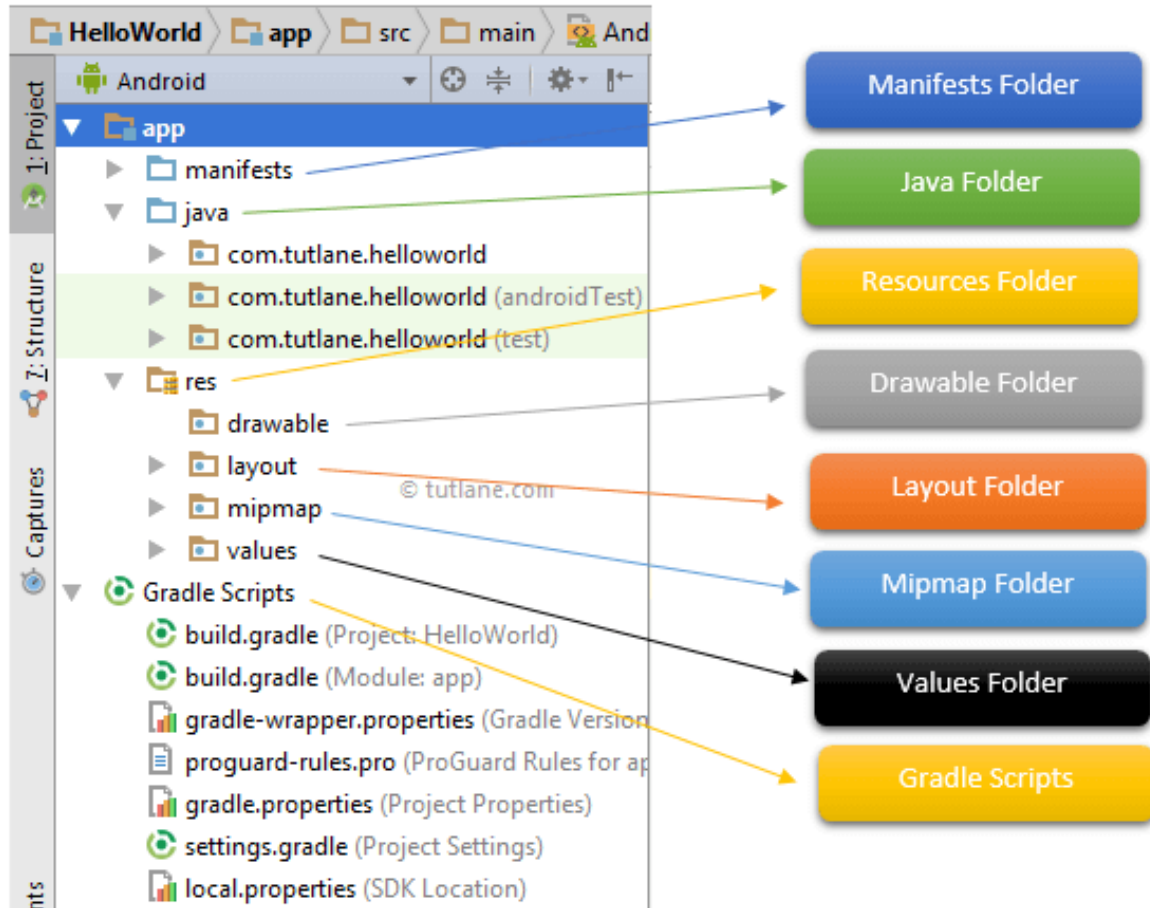


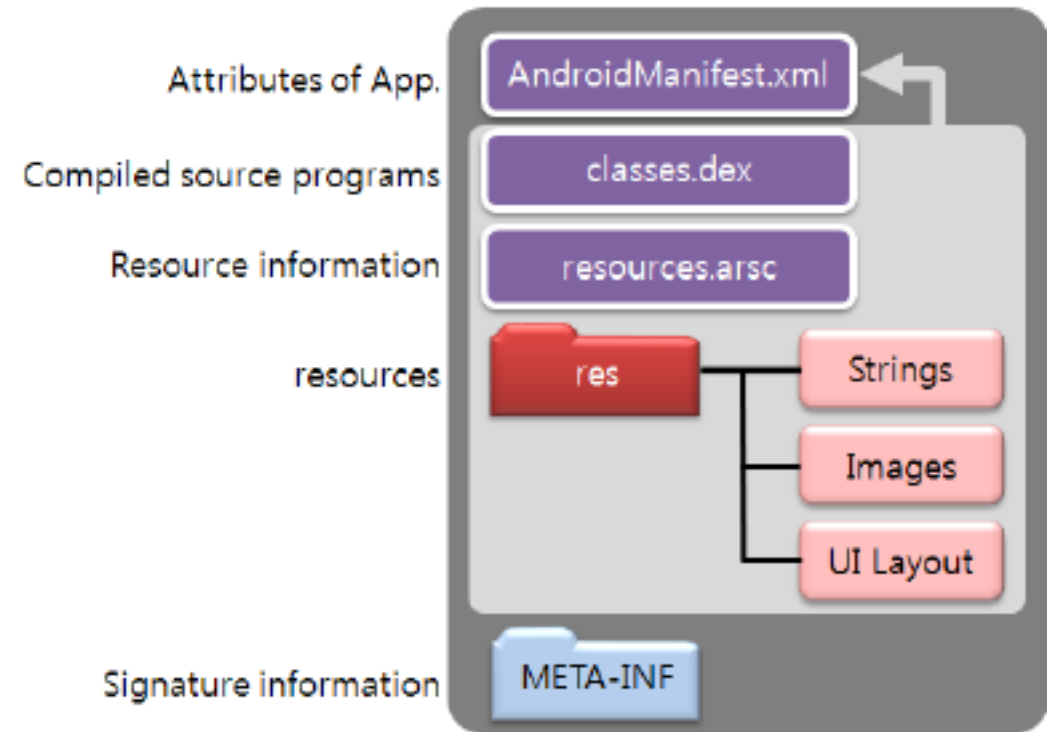
Hackathon Essentials

Android Basics

Structure of App



Developer View



Packaged APK

Manifest

- App Name and meta info
- App Activities, Services, Broadcast Receivers, Content Providers etc.
- Hardware and Software used by the APP
- It is a xml document
- Read More:
<https://developer.android.com/guide/topics/manifest/manifest-intro>

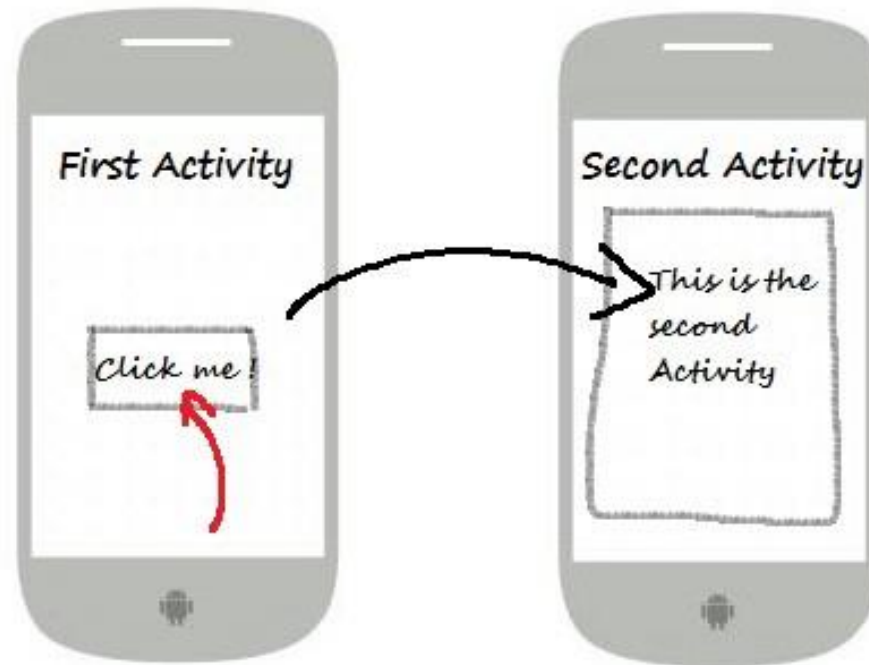
Gradle

- Build system that packages your code into an apk.
- Define the dependencies, SDK versions and build lifecycle for your Android App.
- Quick tutorial of Gradle:
https://docs.gradle.org/current/userguide/tutorial_using_tasks.html



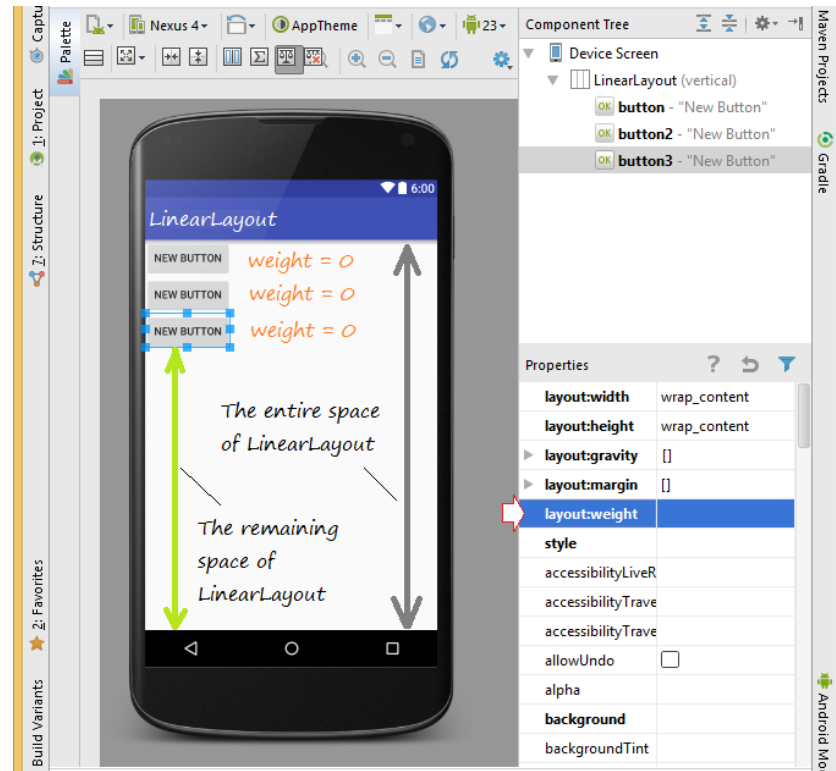
Activity Classes

- A single focused thing a user can do



- Quick Tutorial: <https://developer.android.com/training/basics/firstapp/starting-activity>

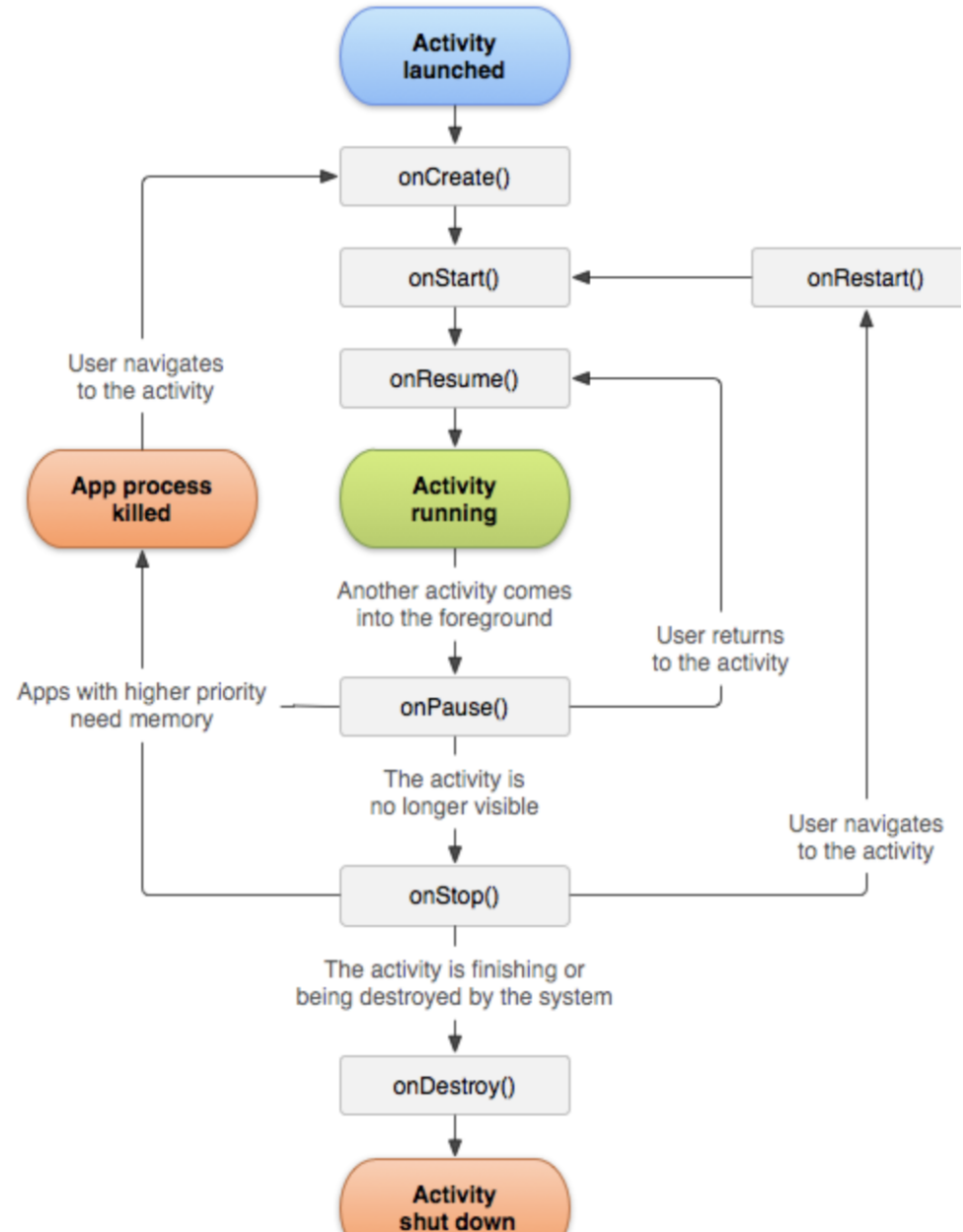
Views and Layouts for an Activity



Activity Lifecycle

Important Functions:

- onCreate()
- onStop()



Java Class for Activity

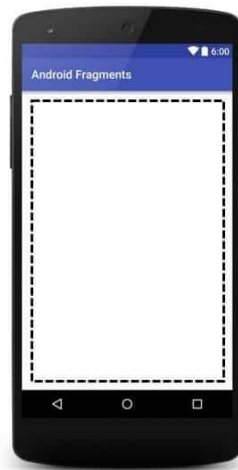
- Control the code for callback functions.
- Define the layout connected to an activity
- Access features of AndroidOS (Camera, Speakers etc..)
- Launch other activities, start services!
- Anything you want to do basically!

Fragments

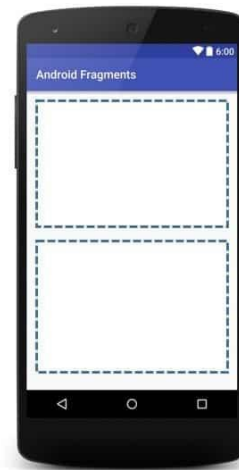
- Like Frames in HTML ;)
- They are attached to Activities
- Build more sophisticated User Interfaces
- Code: <https://developer.android.com/guide/components/fragments>



Activity without Fragment



Fragment inside an Activity



Activity holding two
Fragments

Questions

- These are the components involved in creating the Android app for today's Hack Session. ;)

