

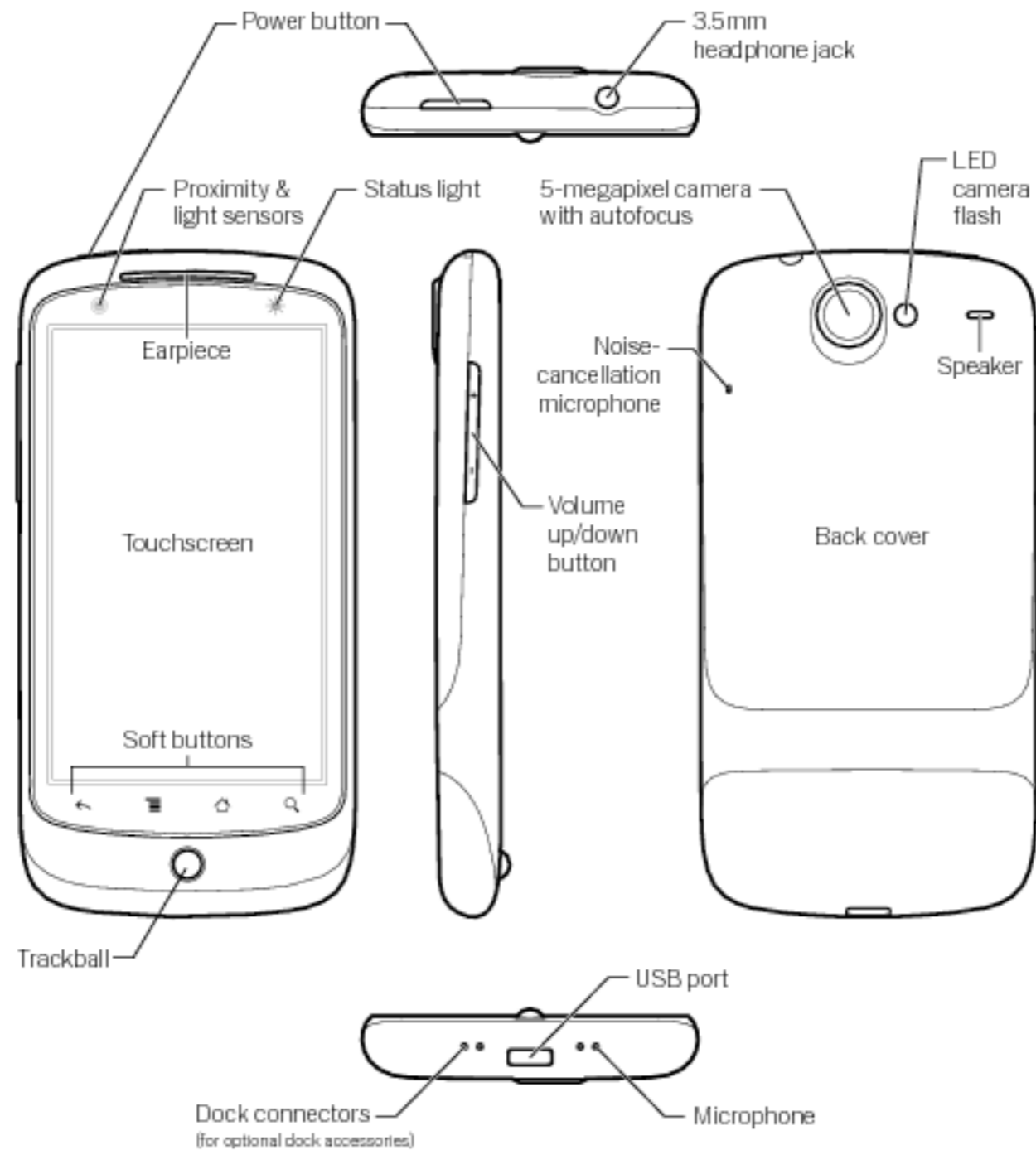
User Interaction: Intro to Android

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INF 133 Fall 2013



Checking out the phone

- Take a look at the sensors



Making the phone work



<http://www.google.com/support/android/bin/topic.py?hl=en&topic=28930>

Making the phone work

- Turn on developer mode
- “home”->“menu”->“settings”->“applications” -> “Development”
 - “USB debugging” on
 - “Stay awake” on
 - “Allow mock locations” on
- Dial `*##*#CHECKIN#*##*`
 - to update phone software

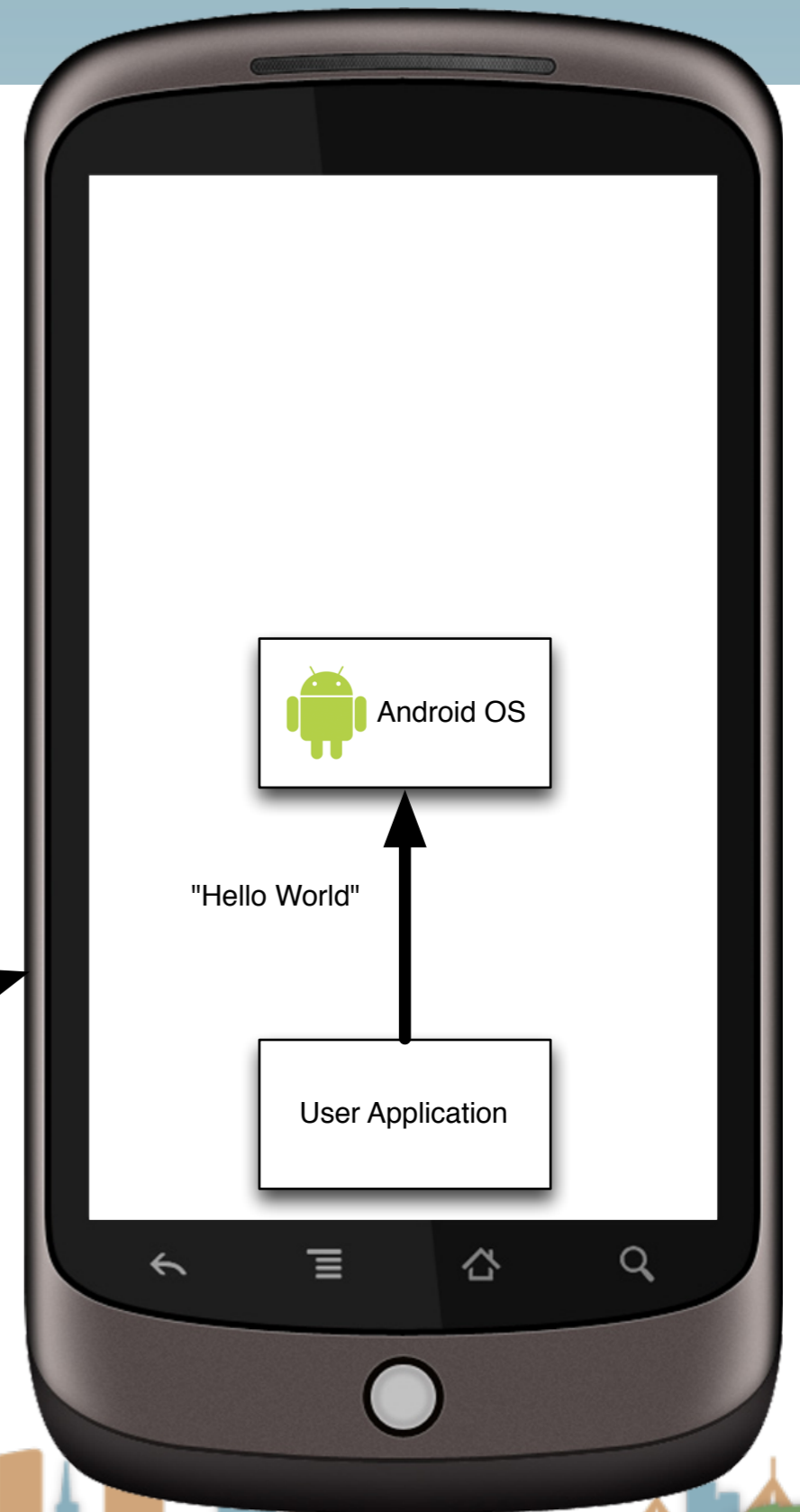
How to handle the assignment

- Stage 1
 - get your environment working with an emulator



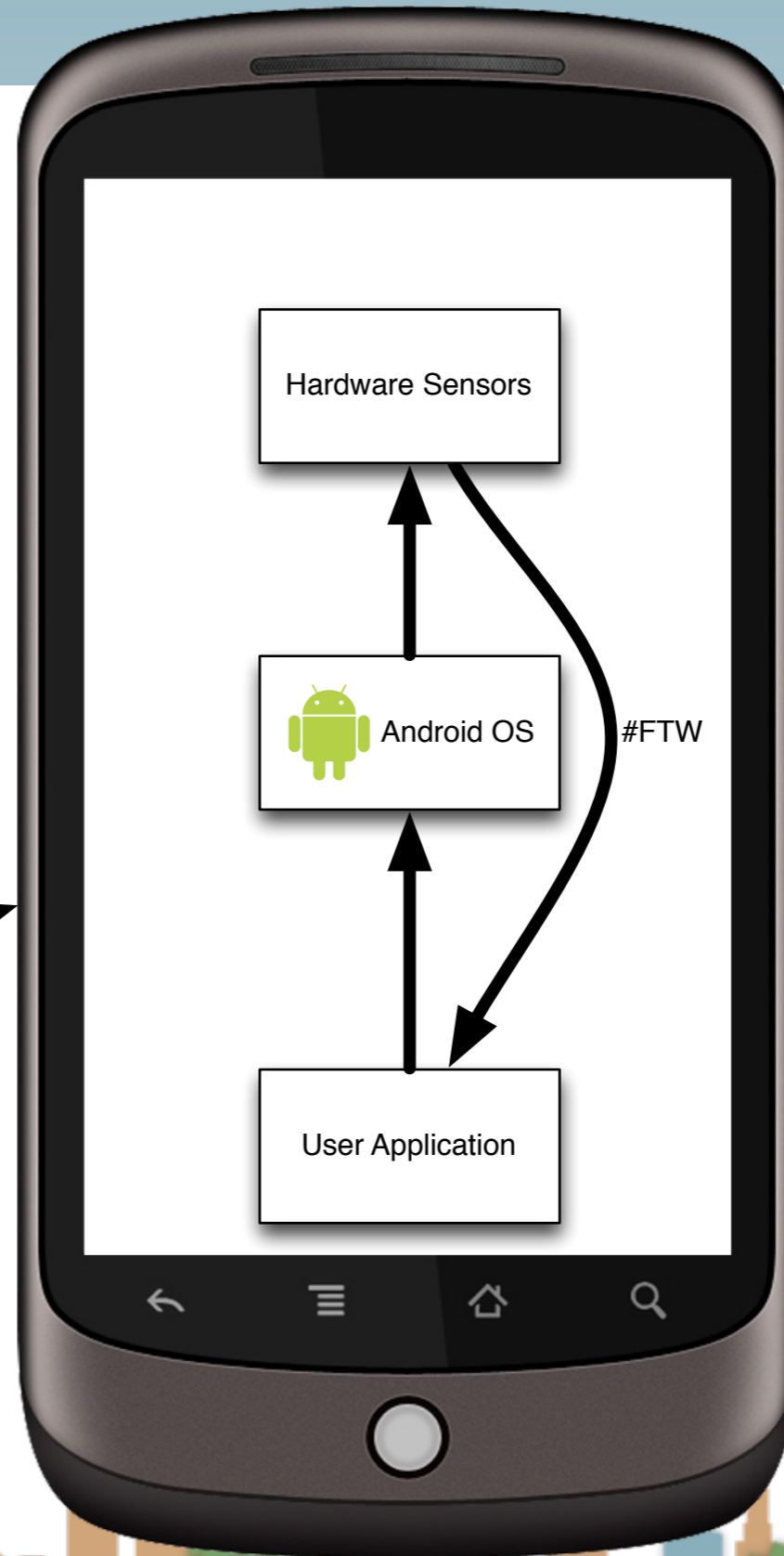
How to handle the assignment

- Stage 2
- get your environment working with a real phone



How to handle the assignment

- Stage 3
- get your environment working on a real phone with sensors

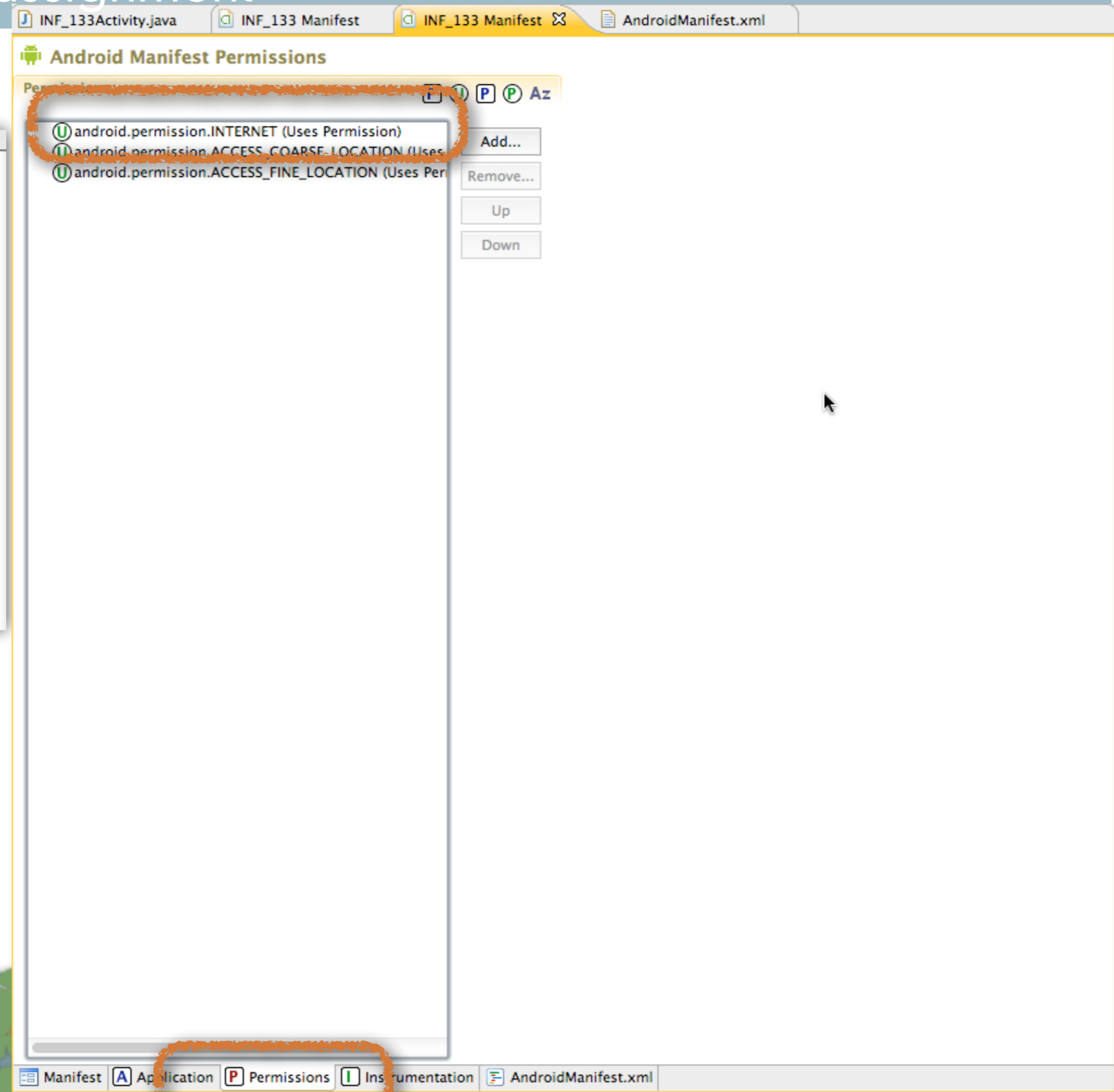
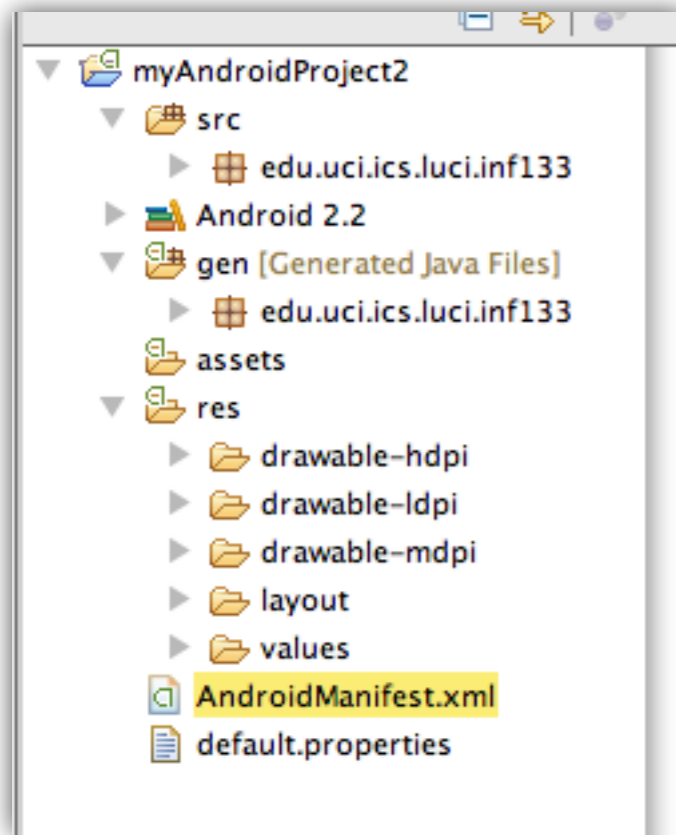


Real Phone

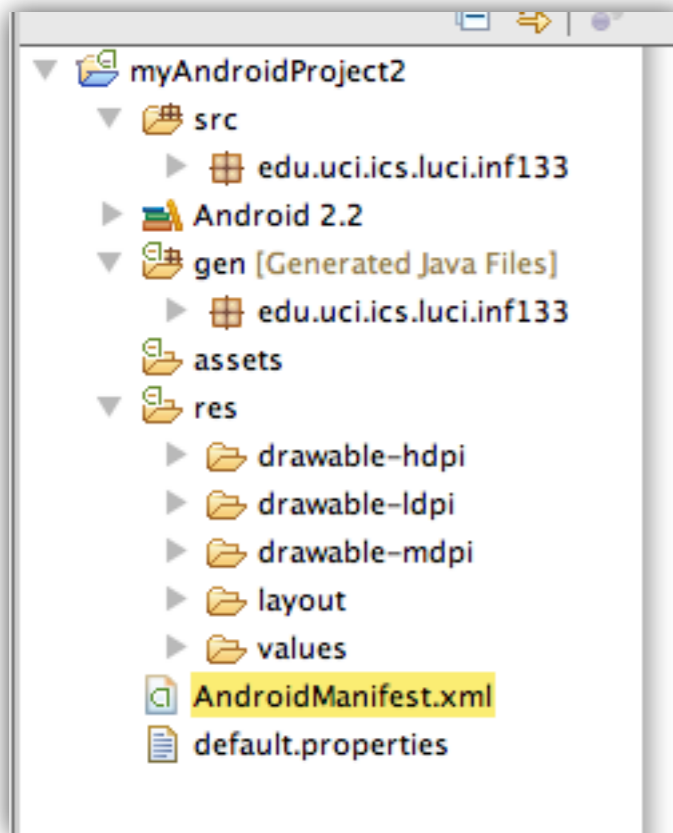
How to handle the assignment

- Start a new Android Application project for Android API 10
 - Give your application permissions in AndroidManifest.xml
 - Add a “Uses Permission”
 - to use the Internet
 - android.permission.INTERNET
 - to use location
 - android.permission.ACCESS_FINE_LOCATION
 - android.permission.ACCESS_COARSE_LOCATION
 - Make your application debuggable

How to handle the assignment



How to handle the assignment



INF_133 Activity.java | INF_133 Manifest | INF_133 Manifest | AndroidManifest.xml

Android Manifest Application

Application Toggle

The `application` tag describes application-level components contained in the package, as well as general application attributes.

Define an `<application>` tag in the AndroidManifest.xml

Application Attributes

Defines the attributes specific to the application.

| Name | Value | Attribute | Value |
|------------------------|-------------------------------------|---------------------------|-------|
| Debuggable | true | Debuggable | true |
| Theme | | Vm safe mode | |
| Label | @string/sensorsimulatorsettings | Manage space activity | |
| Icon | @drawable/mobile_shake_application0 | Allow clear user data | |
| Description | | Test only | |
| Permission | | Backup agent | |
| Process | | Allow backup | |
| Task affinity | | Kill after restore | |
| Allow task reparenting | | Restore needs application | |
| Has code | | Restore any version | |
| Persistent | | Never encrypt | |
| Enabled | | Can't save state | |

Application Nodes

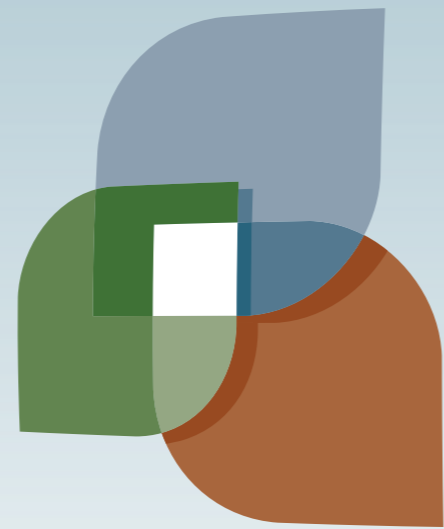
S P A A R M U Az

- [P] .dbprovider.SensorSimulatorProvider
- [A] .SensorSimulatorSettingsActivity

Manifest | **A** Application | P Permissions | I Instrumentation | AndroidManifest.xml

How to handle the assignment

- High-Level
 - You are going to ask Android to give you information about the phone's orientation
 - You are going to do something in response to the information (with U/I and audio)



L U C I

