# Getting Started with Android

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# Upcoming Assignments

- Readings:
  - Chapter 1 by today
  - Chapter 2 by Friday
  - Chapter 3 by Monday
- Critical Analysis of app due Friday
- Quiz Friday in lab on chapters 1 and 2
- Lab 1 due Monday
- Vision and Scope due Wednesday



## Sharing Androids

- Once we determine partners on teams (Friday, January 15), we will ensure that every team has a device
- Until then, temporarily pair up students w/o Androids with willing students w/ Androids
  - Use lab time today to work on "Critical Analysis of app"
  - If more time is needed, work out exchange
  - Everyone must sign a check-out form to take an Android out of this room



# Setting up G1's

- Clear all data
  - Menu->Settings->SD card & phone storage -> Factory data reset
- Register Google account
  - Can use cpandroids@gmail.com if preferred
- Try wifi
  - Menu->Settings->Wireless controls->Wi-Fi settings->select Mustang Wireless
  - If not registered on Mustang Wireless, send me MAC address (Settings->About Phone->Status)
- Check Android version
  - Later, once Lab 1 is complete and Android SDK is installed, upgrade to 1.6
    - https://sites.google.com/site/androidhowto/how-to-1/flash-dev-phone



### Coolest apps

- Lightning talks on coolest apps you've found so far
  - Stand up
  - 1 minute max
  - What makes it compelling
  - Free or paid?



## Intellectual Property

- If I create a great app in this course, or my senior project, or however as a student, who owns it – me or Cal Poly?
- Students own the IP
  - unless you used some specific facilities only available through Cal Poly (e.g. expensive lab equipment)



## Cal Poly CSC Startups

- iFixit (Kyle Wiens and Luke Soules)
- Urban Dictionary (Aaron Peckham)



# How to make money with apps?

- Apps supplement other revenue source
  - Ex. iFixit
- Paid apps in Android Market
- Free, ad-supported apps in Android Market
  - Ad networks (AdMob, Quattro Wireless)
  - Sell your own ads
- Services to other developers
  - Ex. Skyhook Wireless
- Contests (this class, Android Developer Challenge)
- Others?



#### Android Market

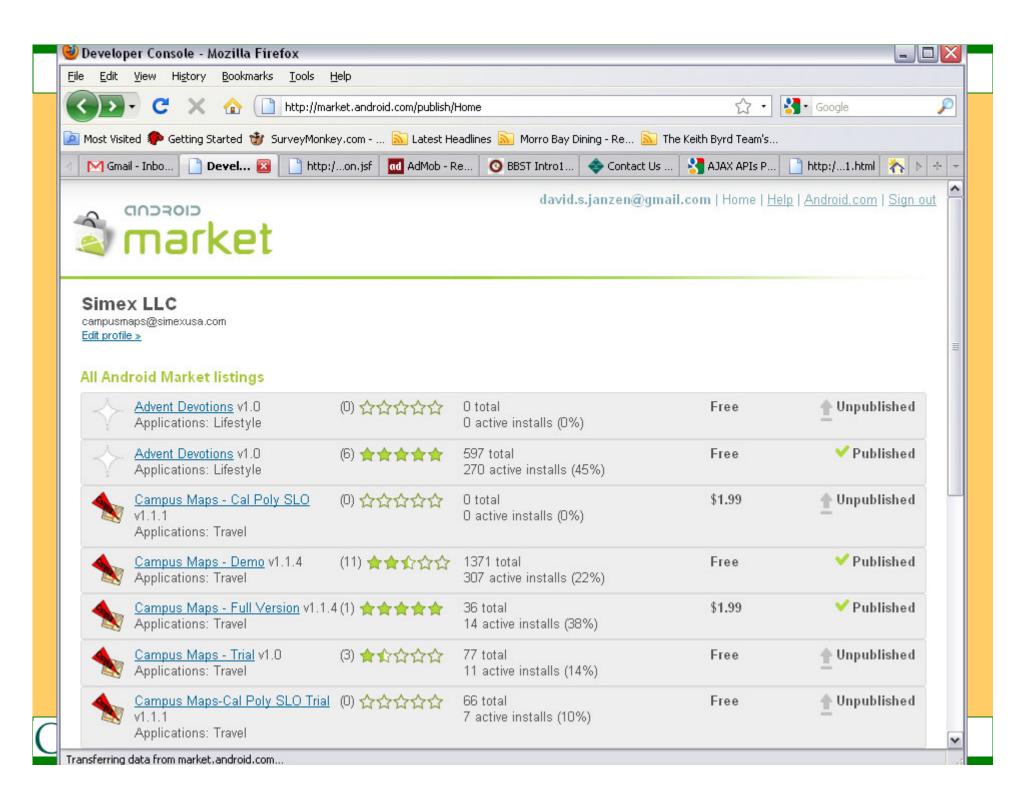
- Categories, downloads, comments
- Free/paid
- Limited search capability
- Featured apps on web
  - http://www.android.com/market/
- Market (and iTunes/App Store)
  - Level playing field, allowing third-party apps
  - Revenue sharing
  - 100K apps in iTunes, 18K in Android



#### Publishing to Android Market

- Requires Google Developer Account
  - \$25 fee, let me know if this is a concern, we may get Google to waive or provide scholarships for this class
- Link to a Merchant Account
  - Google Checkout
  - Link to your checking account
  - Google takes 30% of app purchase price





#### Quick Tour of Android

- Common features:
  - User Interface
    - IO widgets (buttons, textboxes, lists)
    - Images
    - 2D/3D drawing
  - Database
  - Application lifecycle



#### Quick Tour of Android

- Less common features:
  - Google Maps
  - Hardware APIs
    - GPS/Geo-location, calls, accelerometer, compass, bluetooth, camera
  - Multiple processes
    - Managed by Android Dalvik VM
    - Background Services
    - Interprocess communications (e.g. Intents)
  - No difference between third-party and native apps

