**Topic: UI Layout and Orientation**  
(Previous topic: ListViews and Adapters)

Intro

* Reminders:
  + Lab 4 beta was due Saturday, code reviews are due tomorrow (Tuesday)
    - Questions about the lab? Bugs you’re trying to solve?
  + You don’t need to have done a beta version to do a review
  + Office hours at 4:00 or by appointment, I can use Skype (or hangouts), we can share screens
* Show where we are in the syllabus, week 5, next week we cover fragments

Layout intro

* Layouts are containers for widgets
* They can be declared either programmatically or with AXML
  + AXML is more common because… (ask them) it separates UI presentation from behavior
  + They can be nested
* Types
  + Linear
  + Relative
  + Table
  + Grid
  + Frame

Linear Layouts

* Commonly Used Layout Properties (XML attribute shown in parenthesis)
  + Orientation
  + Width (layout\_width) and Height (layout\_height)
    - absolute value in pixels
    - wrap\_parent
    - wrap\_conetnt
* Properties of Widgets in the layout
  + Layout of the widget
    - Width and Height, same as layout properties
    - Margin (layout\_marginTop), space outside the widget, in pixels
    - Weight (layout\_weight)
    - Gravity (layout\_gravity)
  + Content of the widget
    - gravity (gravity)
  + Padding (drawablePadding), space inside the widget, around the content, in pixels

Relative Layouts

Density Independent Pixels

We’ll talk about this when we cover fragments: http://developer.android.com/guide/practices/screens\_support.html