Android – Fall 2012
Assignment 3
Custom View with XML Attributes

You have already made a custom view. Now it is time to add some customization to it, and make it compatible with xml layouts. This will allow you to use add your view to an xml layout, and have access to all the same properties you would if you were building your layout programmatically. For this assignment you will override the constructors for your view that accept the AttributeSet parameters, handle your view's custom properties, and then use your view in an xml layout.

Objective

- Add XML compatibility to the view you created in assignment 2.
- Add custom properties for your view (color, threshold, speed, whatever) and allow programmer to set those programmatically and via XML.
- Must provide the programmer with the EXACT same functionality in Java and XML. If it can be done in code, it should be available in XML, and vice-versa.
- Smooth out any flaws left over from the previous assignment. Make sure your view is polished and ready for others to use.
- Make a demo app that uses your view in an XML layout. This app should show off some of the different settings your view can handle.

Restrictions

- As always, absolutely no code from the Internet. None. No libraries, no files, no code snippets. Nothing.
- No teams, No sharing code.
- You MUST start with the view you created for assignment 2. If you wrote bad, unmaintainable code you're going to have to live with it. You may refactor your code to work better, or to support new features, but you may not abandon it for a new view entirely.

Submission

This assignment is due October 3rd at 11:59 PM. Like the previous assignments, you will submit a zip of your project directory via handin.

Grading

If you meet all of the requirements, obey all of the restrictions, and your view functions correctly and without error, you will get a B+. If your view has useful settings, looks great, works well, is effective, is efficient, feels natural, or has any other qualities that make me say "Wow, I like that!" you will get an A. I will be looking to see if your control looks and feels like a control from the Android tool kit, and not like a school assignment.