## CSC 214 ASSIGNMENT 08

Note: Cheating is still against the rules. Don't.

**This is new, you should read it**: The goal of this assignment is to practice with various odds-and-ends: master-detail user interfaces, playing sounds, colors, styles, themes, and XML drawables.

## <u>Assignment Instructions</u>

- 1. Begin by creating a new new project that essentially duplicates the Lecture 18 example (do not copy my code; retype your own). You must have at least 20 sounds. You may use the sultry sound of my voice counting to 15, but you will need to find 5 more sounds of your own. Whenever the user taps a sound in the list, display a Toast that says "Playing <sound name>!" (where <sound name> is the name of the sound the user tapped). Make sure to retain the fragment that manages your sound pool so that changes in orientation (CTRL-F12) do not interrupt the sound currently being played.
- 2. Modify your application such that rotating the device into landscape orientation uses a master-detail user interface rather than a full-screen list. Display the list of sounds on the left side of the screen. When the user plays a sound, instead of displaying a Toast, update the right side of the screen to display the sound name in large font. The Toast should still be displayed if the device is in portrait orientation.
- 3. Create at least 6 custom colors in a colors.xml file (note that recent versions of Android Studio will create this file for you). Create a custom theme for your app. You must use your custom colors for at least the primary, primary dark, and background colors. Finally, create a second theme specifically for API 21 and higher. This theme should use a completely different set of colors for primary, primary dark, and background colors. When you test your app on devices running Lollipop or later, you should see the colors of this new theme. When testing your app on devices running an earlier version of Android, you should see the colors of the first theme.
- 4. Create a custom button style that uses XML shapes of your own design. It should have a different look and feel for default and pressed states. At least one of those states must use a layered shape (i.e. two shapes, one drawn on top of the other). Update your default theme to use this button style. The list of sounds in both the full screen portrait and master-detail versions of your user interface should use this custom button style. Finally, create a second button style that uses different colors and shapes. Use this button style in your v21 theme.

## HAND IN

Before handing in, create two additional files in your lab directory:

- 1. Create a README that contains the following:
  - a. Your contact information, TA name, and assignment number.
  - b. A brief (one paragraph at most) description of the assignment.
- 2. Create a directory titled "SampleOutput." This directory should contain:
  - a. A file called "logs.txt" that contains examples any relevant logs generated by your application. Remember to use LogCat filters to show *only* your log messages before copying them into the file.
  - b. Screenshots (in PNG or JPG format) taken from an Android Virtual Device that show examples of your application's user interface.

Hand in by uploading the compressed (i.e. "zipped") folder containing your Android Studio project and the required additional files to Blackboard. Remember that **late submissions are not accepted**.