CSE4443 – Mobile User Interfaces

More About Views

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Map

- Widgets
- Custom Components
- Drawing
- Image View
- Video View
- Web View
- Map View
- Surface View
- View Groups

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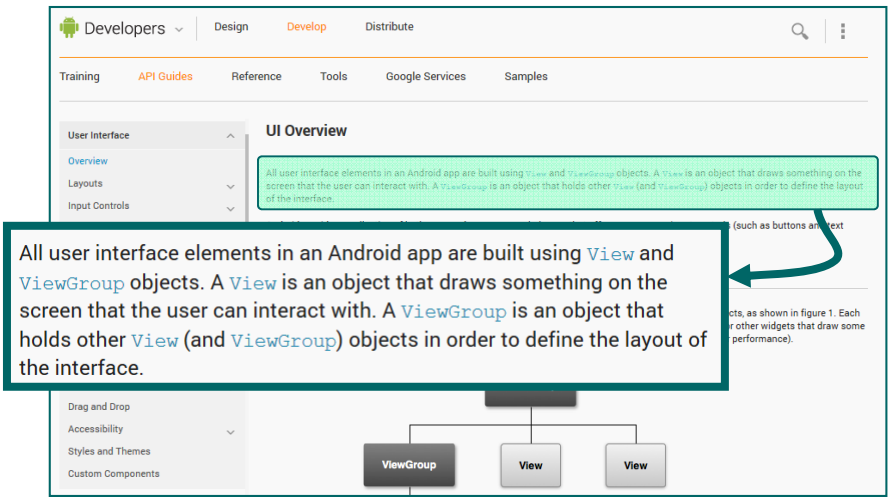
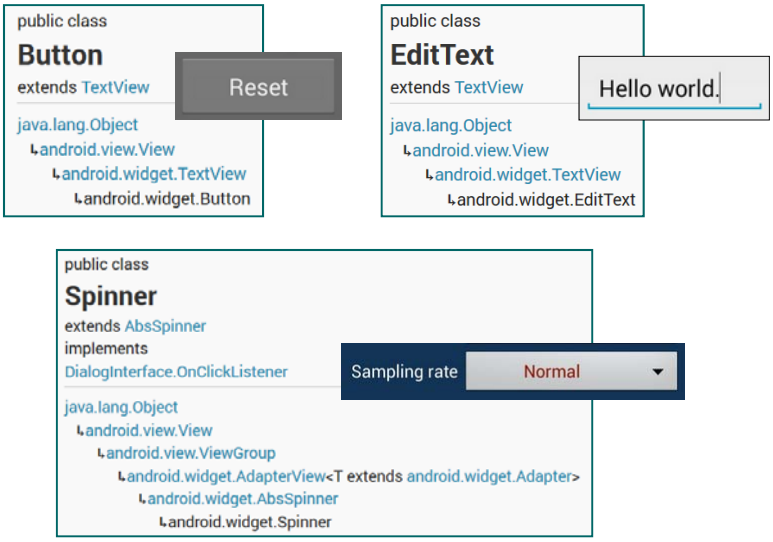
Review



Example Widgets



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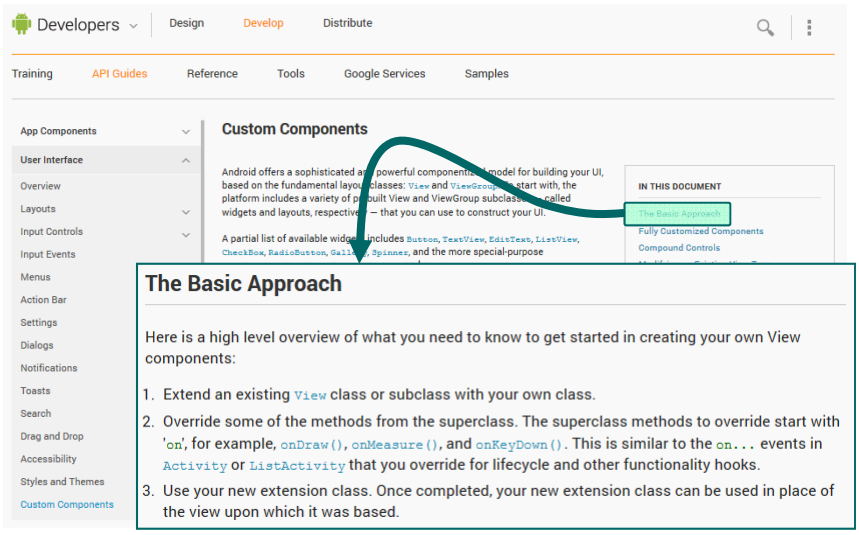
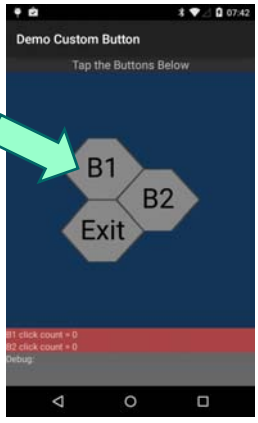
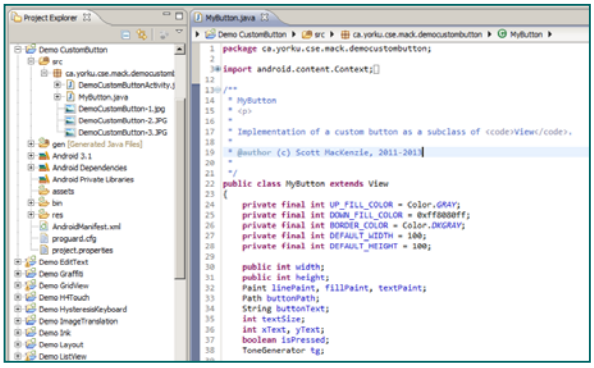
Custom Components



Example - MyButton

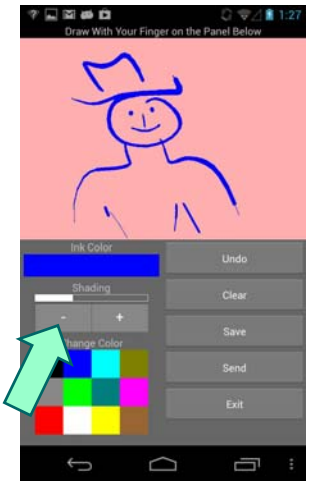
Demo CustomButton

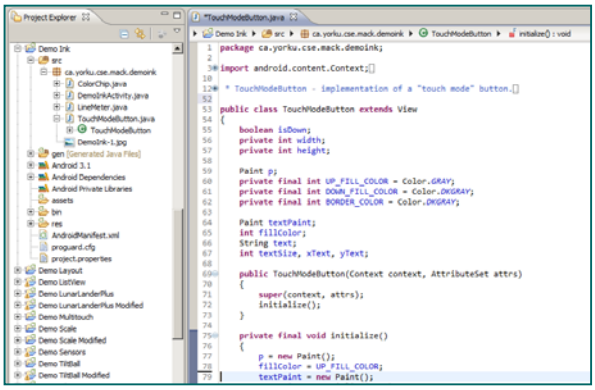




Example - TouchModeButton

Demo Ink





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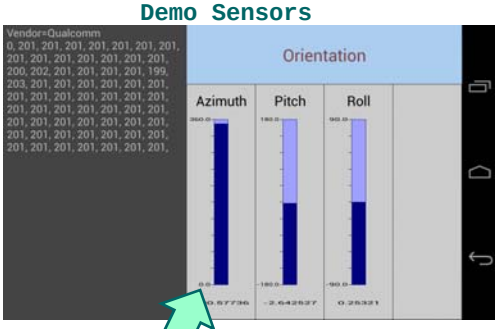
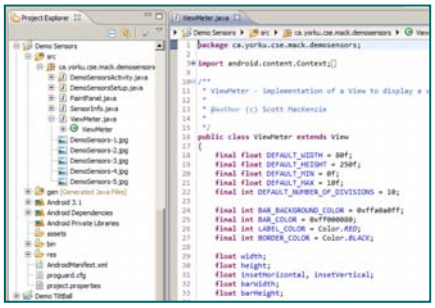
Example - ViewMeter

Demo Sensors





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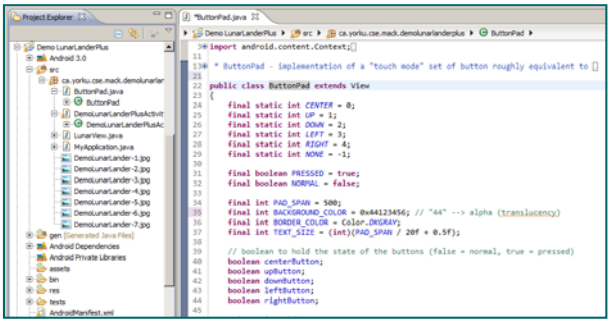
Example - ButtonPad

Demo LunarLanderPlus



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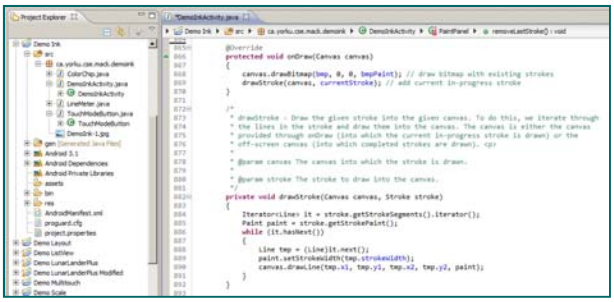
Example - PaintPanel

Demo Ink



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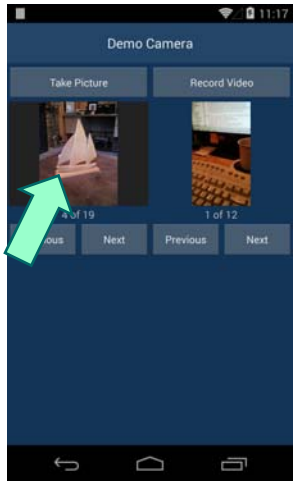
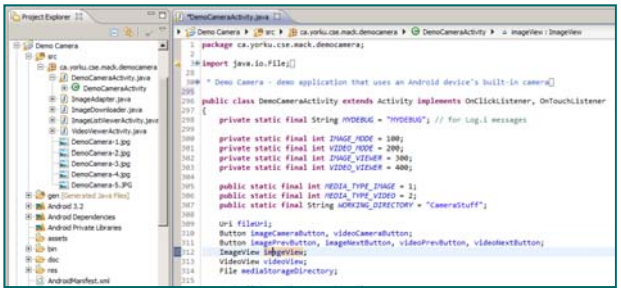
Example

Demo Camera





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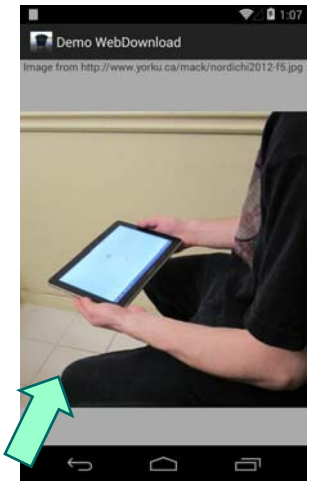
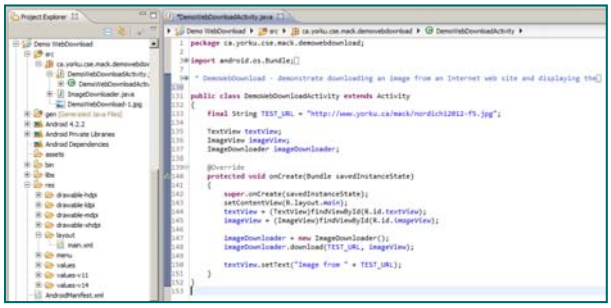
Example

Demo WebDownload





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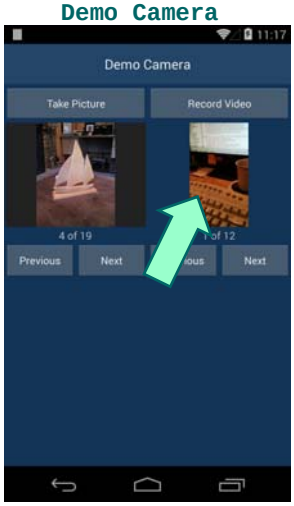

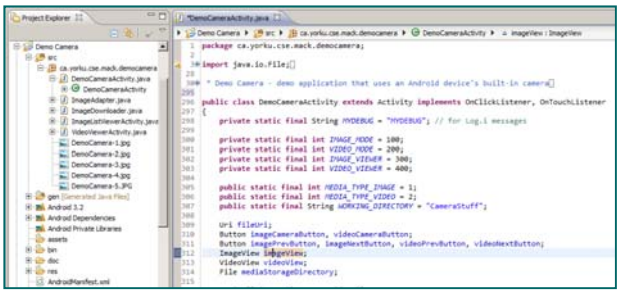

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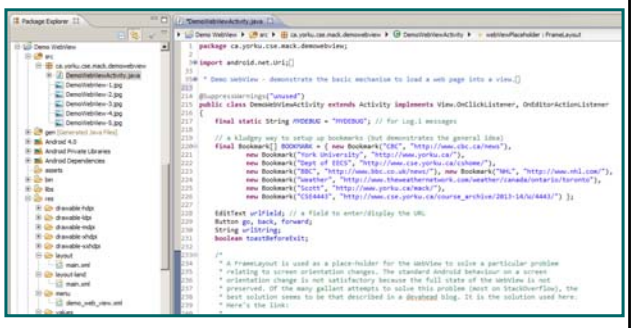
Example

Demo WebView



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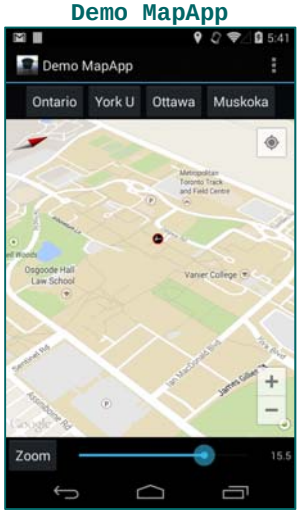
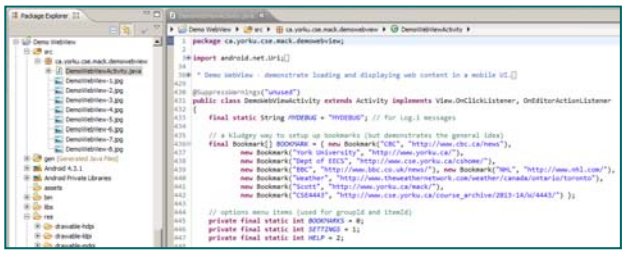
Example

Demo MapApp





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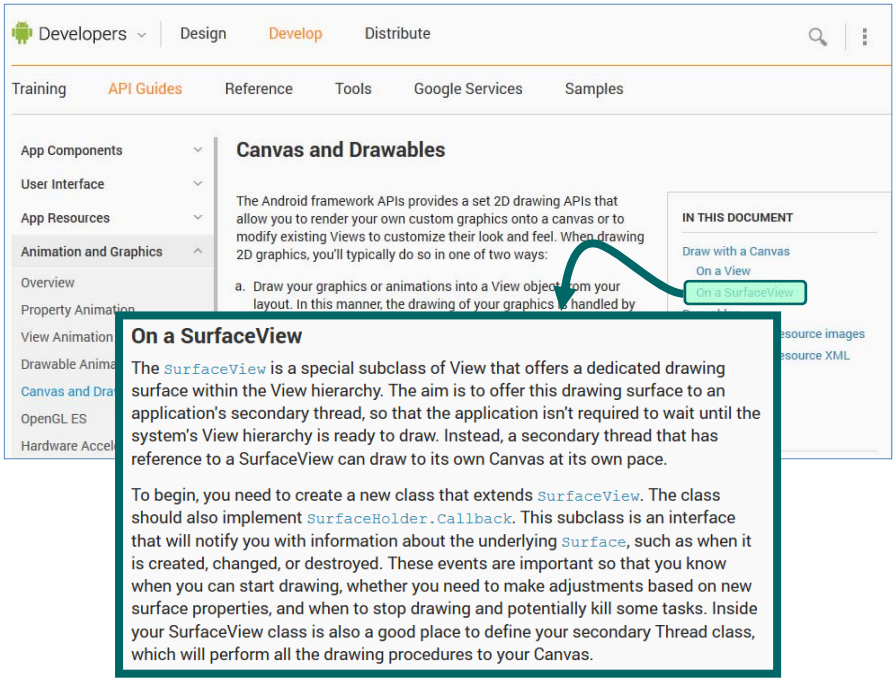
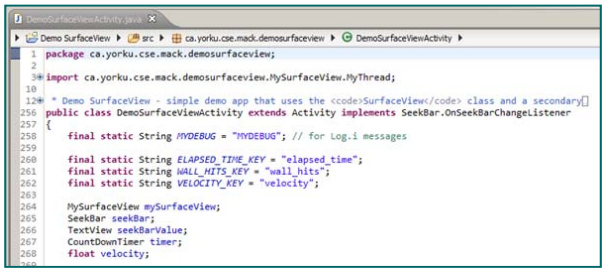


Example

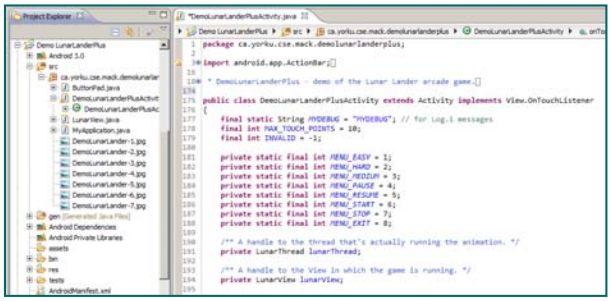
Demo_SurfaceView



```
package ca.yorku.cse.mack.demosurfaceview;

import ca.yorku.cse.mack.demosurfaceview.MySurfaceView.MyThread;

/* Demo SurfaceView - simple demo app that uses the <code>SurfaceView</code> class and a secondary
public class DemoSurfaceViewActivity extends Activity implements SeekBar.OnSeekBarChangeListener
{
    final static String MYDEBUG = "MYDEBUG"; // for Log.i messages

    final static String ELAPSED_TIME_KEY = "elapsed_time";
    final static String WALL_HITS_KEY = "wall_hits";
    final static String VELOCITY_KEY = "velocity";

    MySurfaceView mySurfaceView;
    SeekBar seekBar;
    TextView seekBarValue;
    CountDownTimer timer;
    float velocity;
```

Example

Demo_LunarLanderPlus



```
package ca.yorku.cse.mack.demolunarlanderplus;

import android.app.ActionBar;

/* DemoLunarLanderPlus - demo of the Lunar Lander arcade game.
public class DemoLunarLanderPlusActivity extends Activity implements View.OnTouchListener
{
    final static String MYDEBUG = "MYDEBUG"; // for Log.i messages
    final int MAX_TOUCH_POINTS = 10;
    final int INVALID = -1;

    private static final int MENU_EASY = 1;
    private static final int MENU_HARD = 2;
    private static final int MENU_MEDIUM = 3;
    private static final int MENU_PAUSE = 4;
    private static final int MENU_RESUME = 5;
    private static final int MENU_START = 6;
    private static final int MENU_STOP = 7;
    private static final int MENU_EXIT = 8;

    /** A handle to the thread that's actually running the animation. */
    private LunarThread lunarThread;

    /** A handle to the View in which the game is running. */
    private LunarView lunarView;
```

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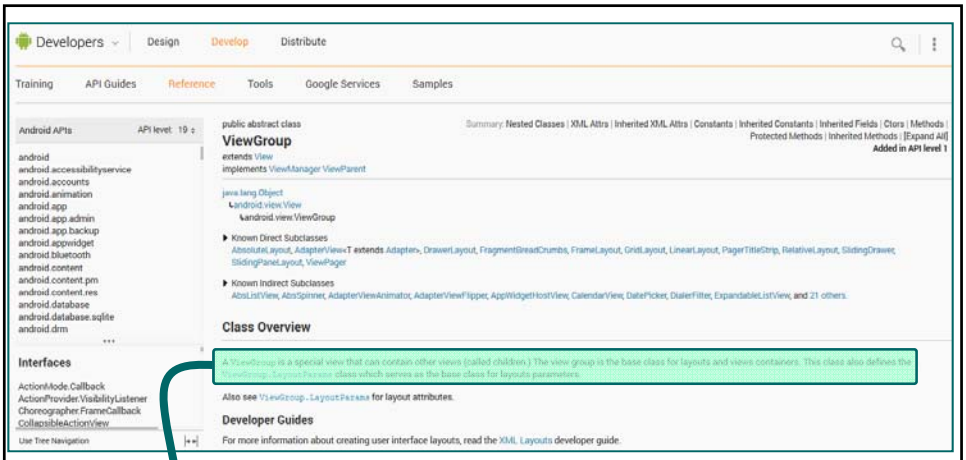
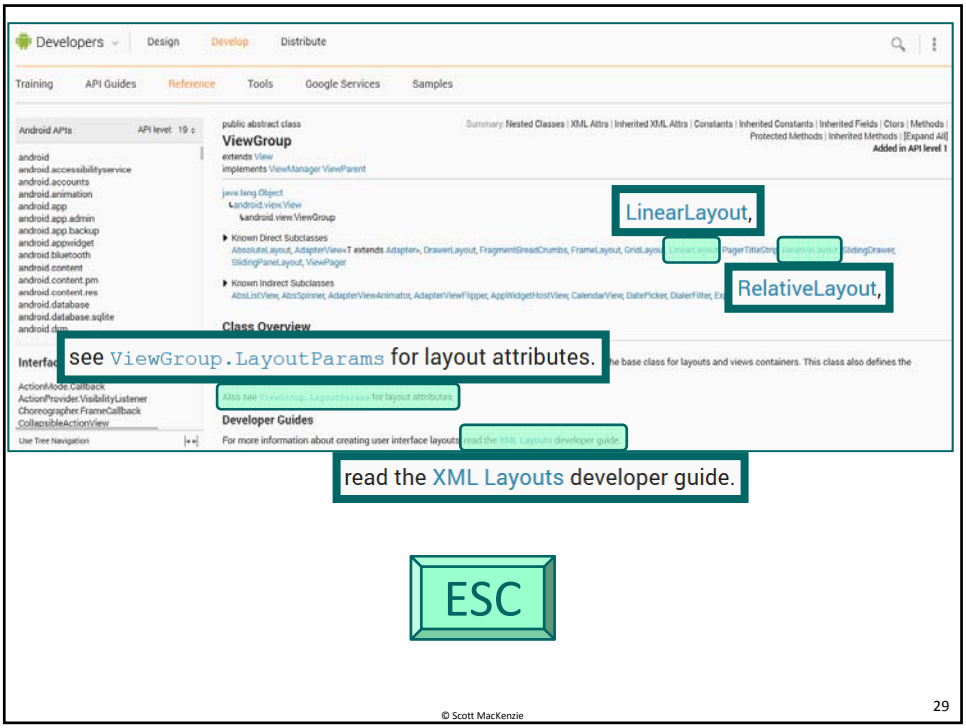


A `ViewGroup` is a special view that can contain other views (called children.) The view group is the base class for layouts and views containers. This class also defines the `ViewGroup.LayoutParams` class which serves as the base class for layouts parameters.



Postscript

- Display properties include
  - Size (inches, cm)
  - Resolution
  - Pixel density
  - Orientation (natural, actual)

Demo Display

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Homework

- Download all the “demo” programs from earlier slides
- Import into Android projects
- Connect your device and click “Run”
- Observe UI behaviour
- Ready the APIs (and links within)
- Study source code

Thank You