

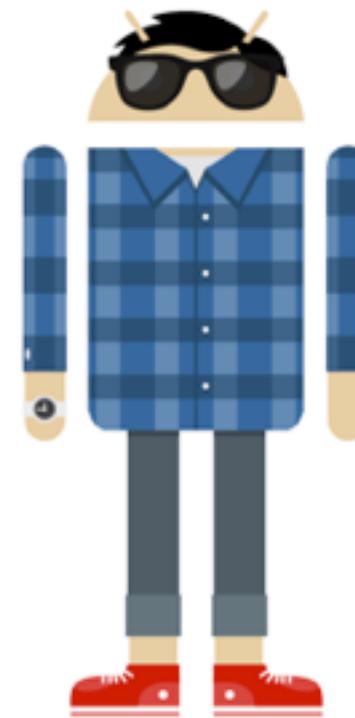


Google
Developers



So you read the style guide.

Now what?



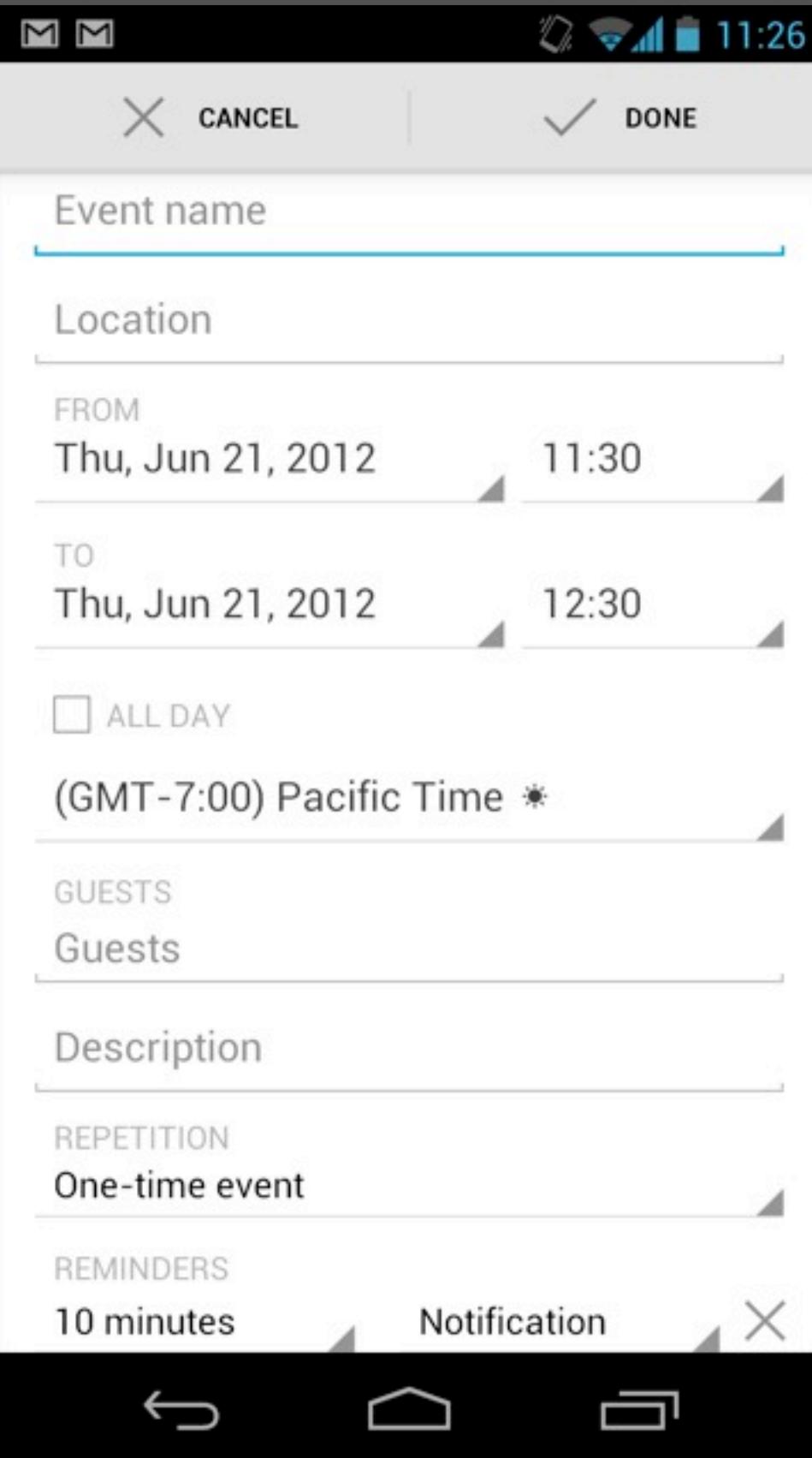
Richard Ngo
Visual Designer

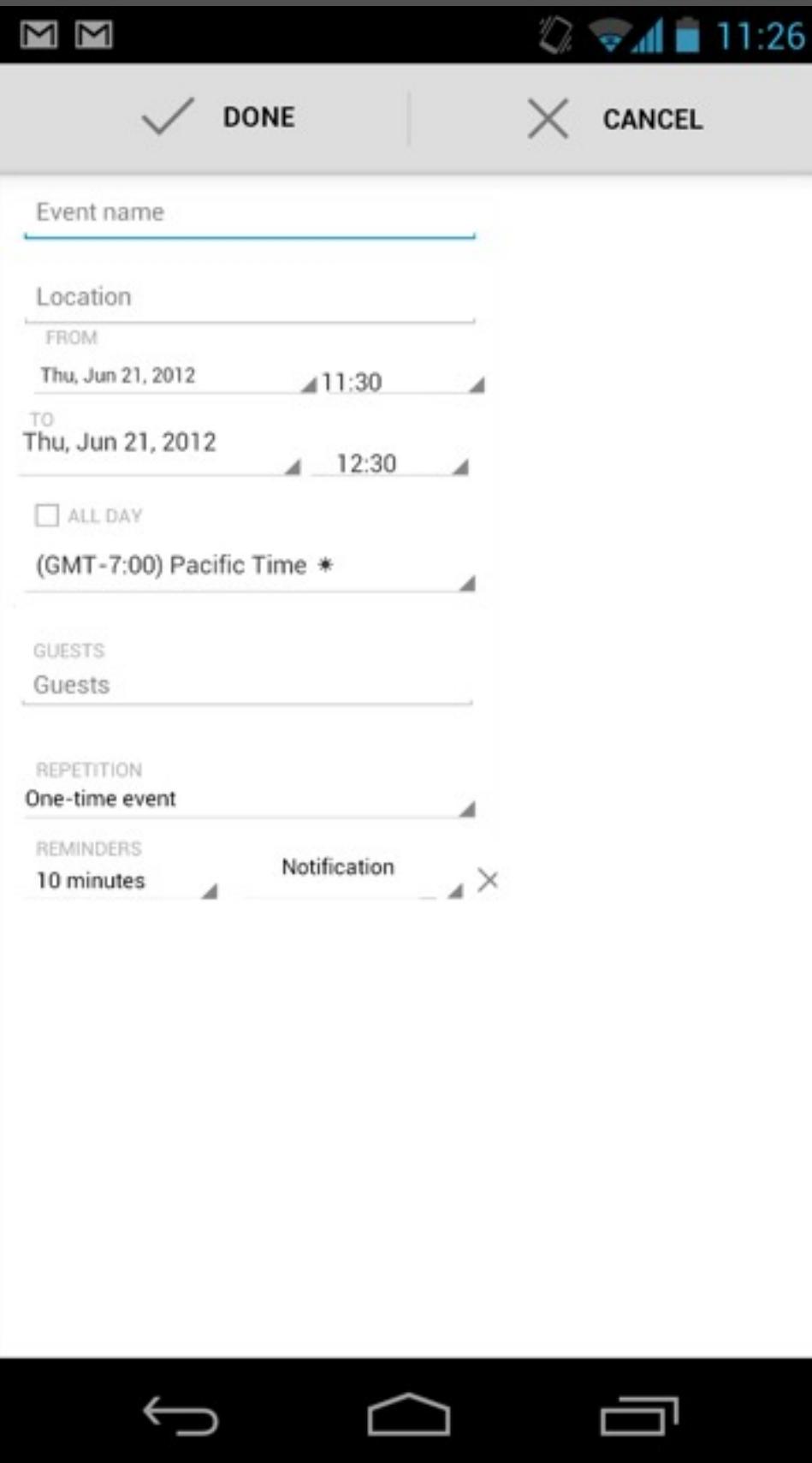


Daniel Lehmann
Software Engineer



Tor Norbye
Tools Engineer

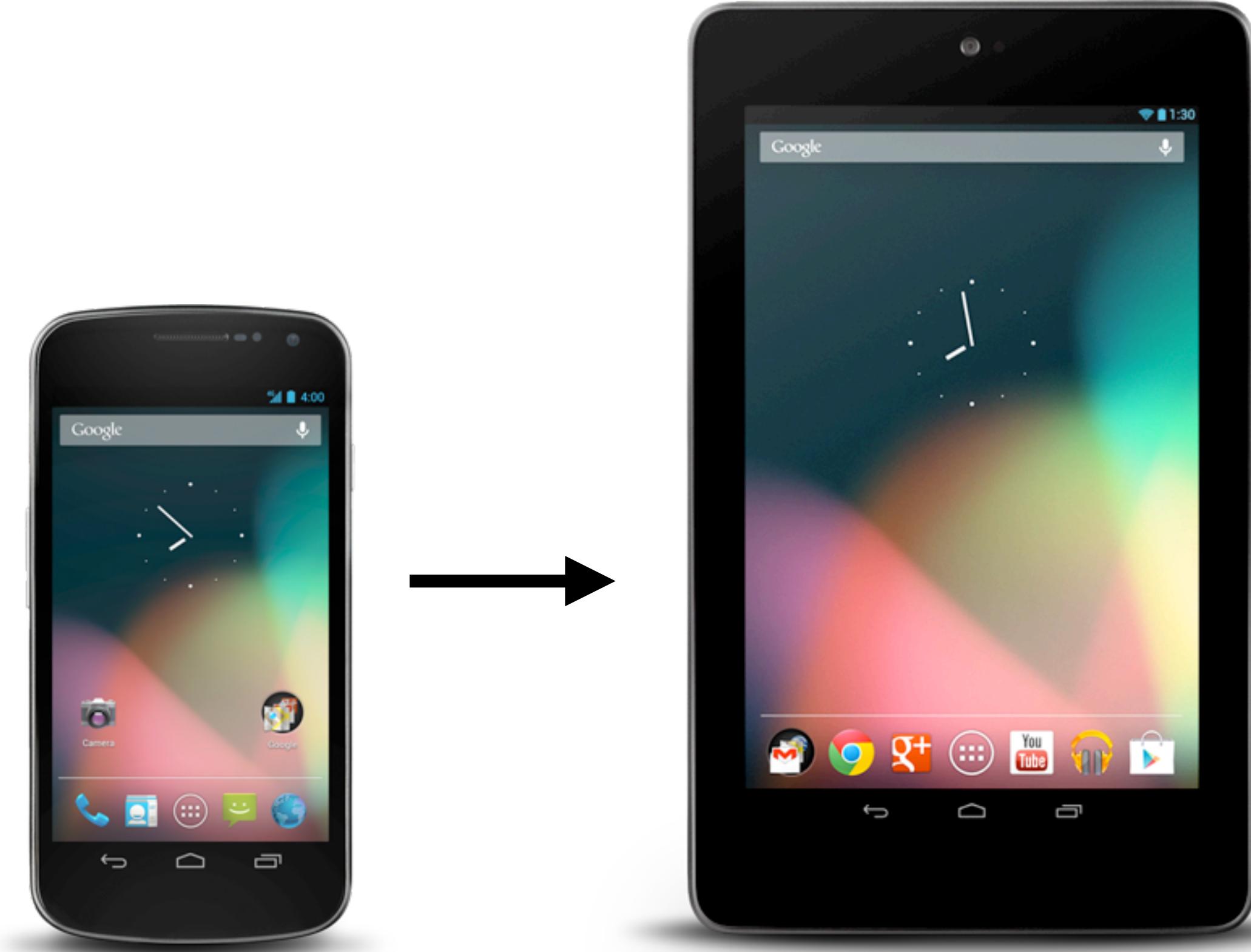






So where do you start?





Standardize in DPs

(Density-independent pixel)



3 Devices, same resolution



GALAXY NEXUS 1280X720

NEXUS 7 1280X800

XOOM 1280X800

XOOM

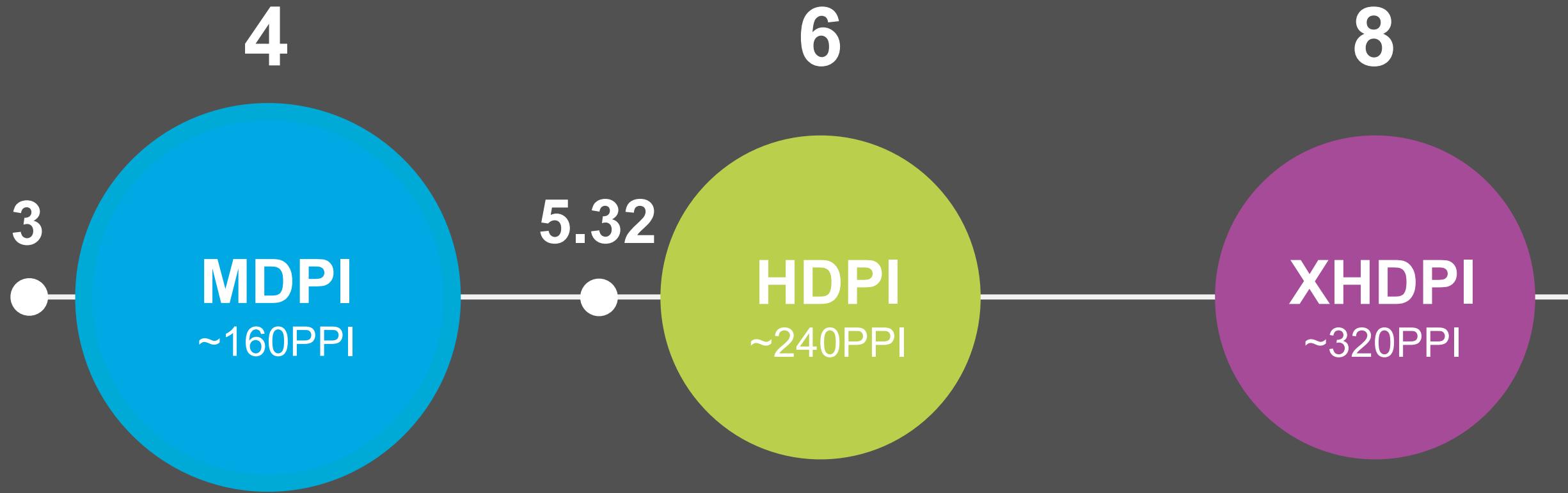


NEXUS 7

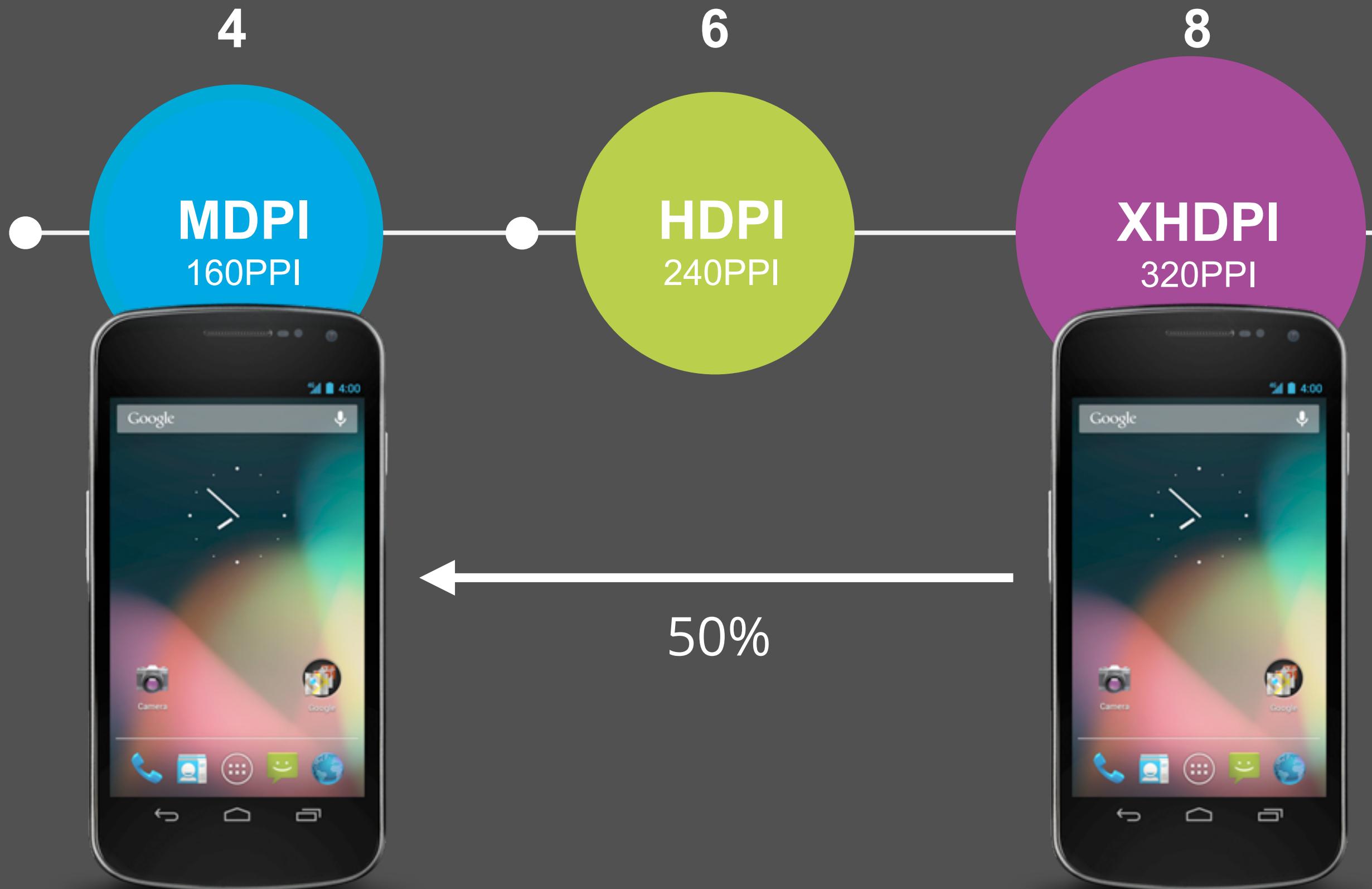


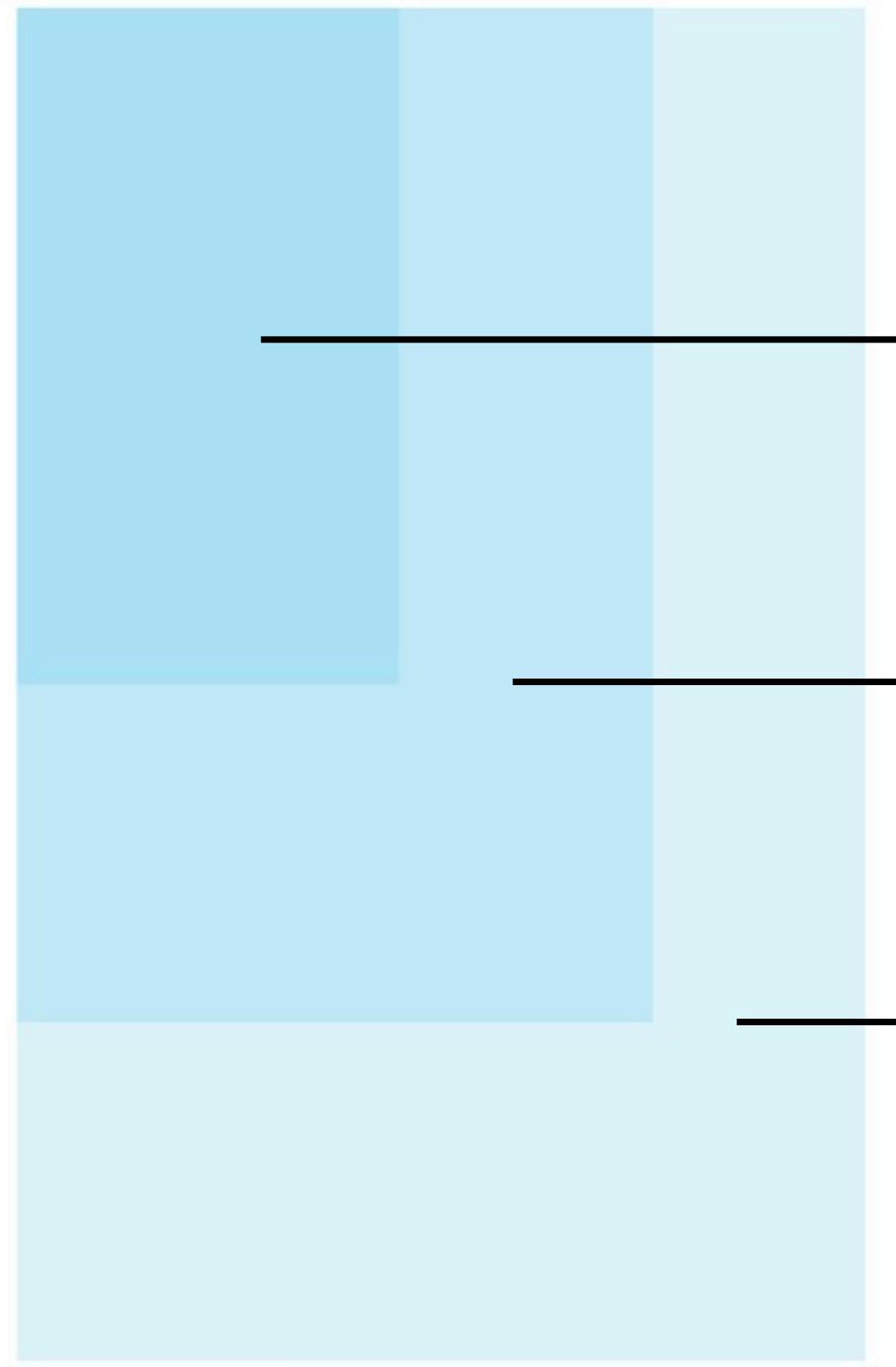
GALAXY NEXUS





1PX IN MDPI = 1DP

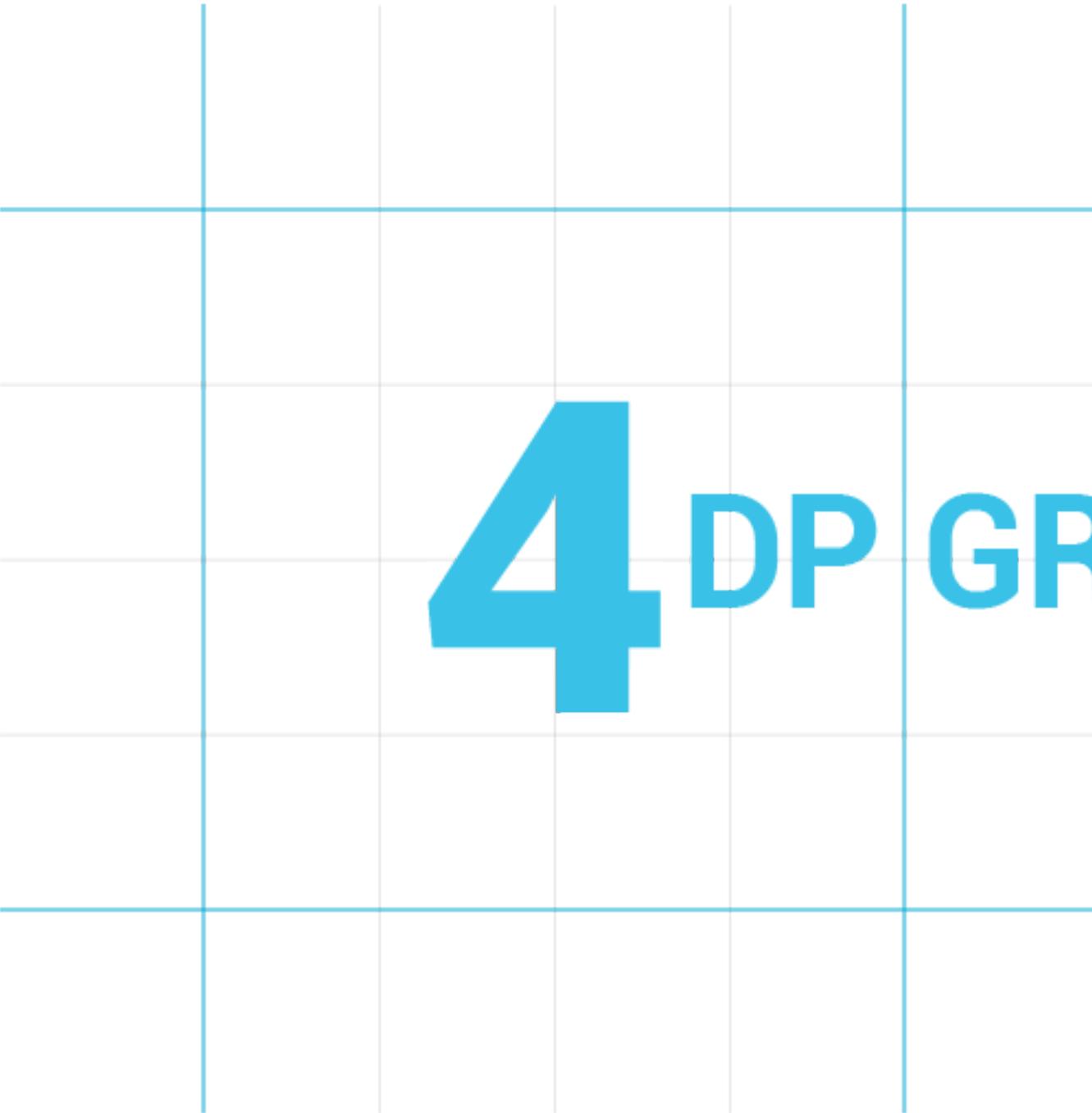




GALAXY NEXUS
360X640DP

NEXUS 7
600X960DP

XOOM
800X1280DP



4 DP GRID



32-bit Preview Options...

Zoom In ⌘ +
Zoom Out ⌘ -
Fit on Screen ⌘ 0
Actual Pixels ⌘ 1
Print Size

Screen Mode

Preferences ▾

General
Interface
File Handling
Performance
Cursors
Transparency & Gamut
Units & Rulers
Guides, Grid & Slices
Plug-Ins
Type
3D

Guides

Color: Cyan

Style: Lines

Smart Guides

Color: Magenta

Grid

Color: Custom

Style: Lines

Slices

Line Color: Light Blue

Show Slice Numbers

✓ Extras

Show

⌘ H

Rulers

⌘ R

✓ Snap

⇧ ⌘ ;

Snap To

▶

✓ Guides

✓ Grid

✓ Layers

✓ Slices

✓ Document Bounds

Gridline Every 4 pixels

All

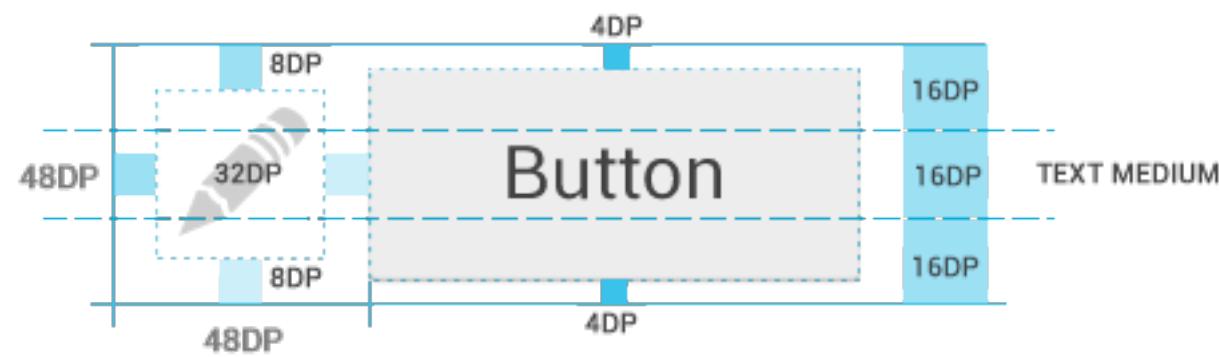
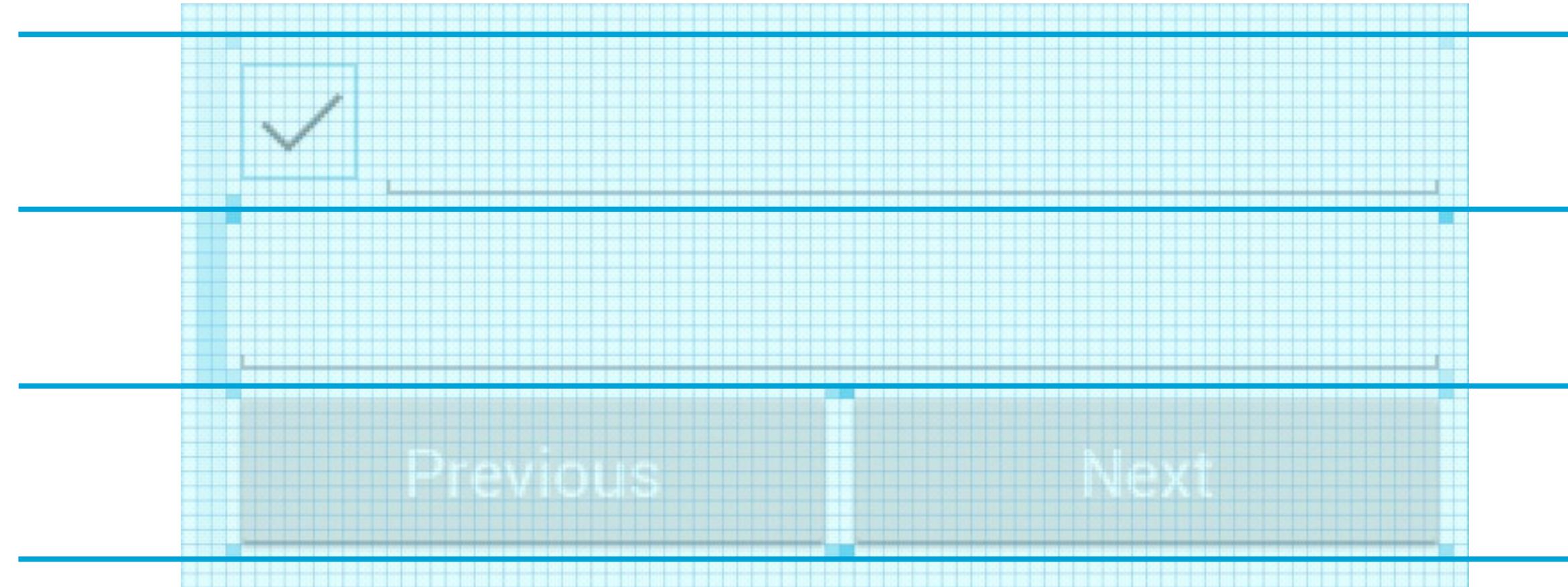
Subdivisions None

OK

Cancel

Prev

Next



Android Design Stencil

HOLO LIGHT & DARK

All elements are standardized in MDPI and created with vector shapes.

20120229

TYPOGRAPHY

Roboto, text size micro -12sp

Roboto, text size small -14sp

Roboto, text size medium -18sp

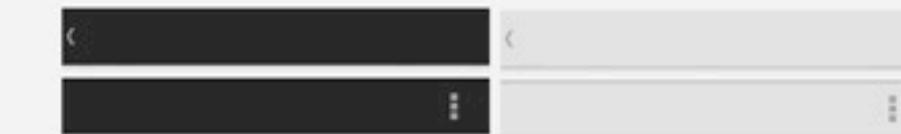
Roboto, text size large -22sp

COLOR

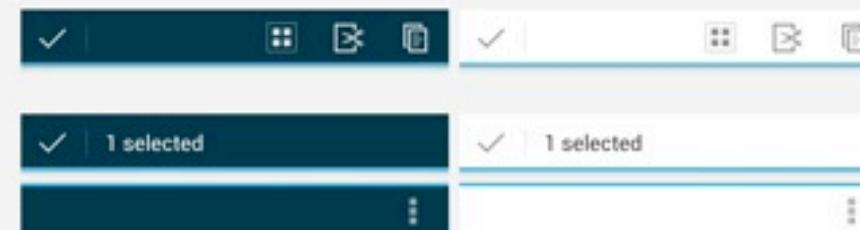


ACTION BAR

PORTRAIT HEIGHT



CONTEXTUAL ACTION BAR



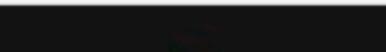
CONTEXTUAL SPLIT ACTION BAR



LANDSCAPE HEIGHT



CHECKBOX



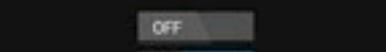
RADIO BUTTON



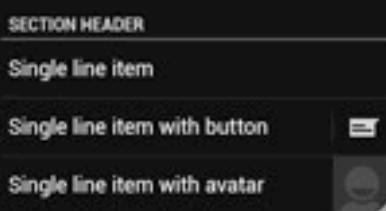
SWITCHES



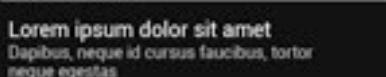
DEFAULT BUTTONS



LIST



THREE LINE LIST



TEXTFIELD

DISABLED

NORMAL

ACTIVATED

PROGRESS BAR

DISABLED

PRESSED

FOCUSSED

NORMAL

PROGRESS SCRUBBERS

DISABLED

PRESSED

FOCUSSED

NORMAL

INDETERMINATE PROGRESS BAR & SPINNER

SPINNERS

NORMAL

FOCUSSED

PRESSED

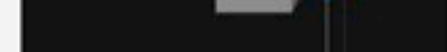
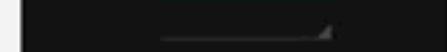
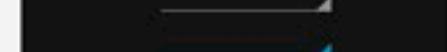
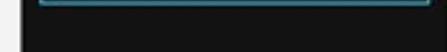
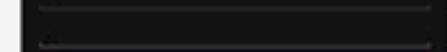
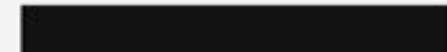
DISABLED FOCUSSED

DISABLED

QUICKSCROLL

SCROLLBARS

MENU



Design Downloads

<http://developer.android.com/design/downloads/>

The screenshot shows the 'Downloads' section of the Android Design website. The top navigation bar includes 'Developers' (with a dropdown arrow), 'Design' (highlighted in blue), 'Develop', 'Distribute', a search icon, and a more options icon.

The left sidebar has dropdown menus for 'Get Started', 'Style', 'Patterns', 'Building Blocks', and 'Downloads' (which is selected and highlighted in blue). The main content area is titled 'Downloads' and includes a 'Download All' button. Below this, there's a note about bundled downloads and individual file download options. A section titled 'Stencils and Sources' describes how to drag and drop stencils for Ice Cream Sandwich apps. It features a grid of checkboxes and radio buttons for selecting different stencil formats and tools. Three specific options are highlighted in blue: 'Adobe® Fireworks® PNG Stencil', 'Omni® OmniGraffle® Stencil', and 'Adobe® Photoshop® Sources'. At the bottom, there are 'OFF' and 'ON' buttons.

Downloads

Want everything? We've bundled all the downloads available on Android Design into a single ZIP file. You can also download individual files listed below.

Download All

You may use these materials without restriction in your apps and to develop your apps.

Stencils and Sources

Drag and drop your way to beautifully designed Ice Cream Sandwich apps. The stencils feature the rich typography, colors, interactive controls, and icons found throughout Android 4.0, along with phone and tablet outlines to frame your creations. Source files for icons and controls are also available.

OFF ON



Android Design Stencil

Holo Light & Dark

All elements are standardized in MDPI and created with vector shapes.

20120229

TYPOGRAPHY

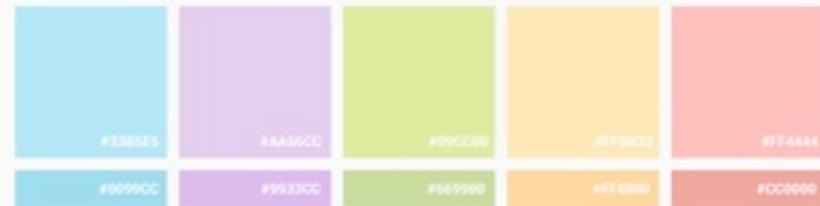
Roboto, text size micro -12sp

Roboto, text size small - 14sp

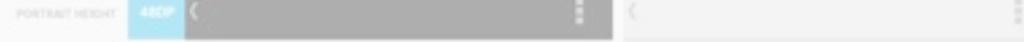
Roboto, text size medium -18sp

Roboto, text size large -22sp

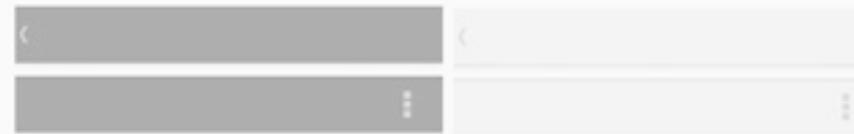
COLOR



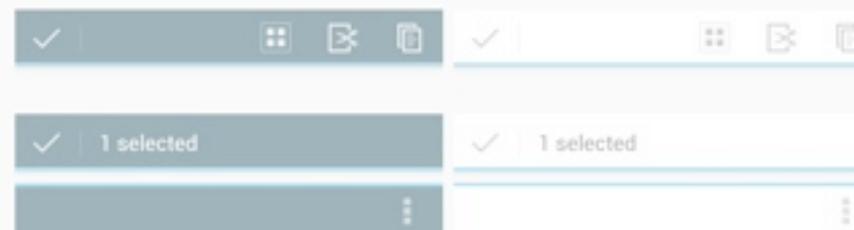
ACTION BAR



SPLIT ACTION BAR



CONTEXTUAL ACTION BAR



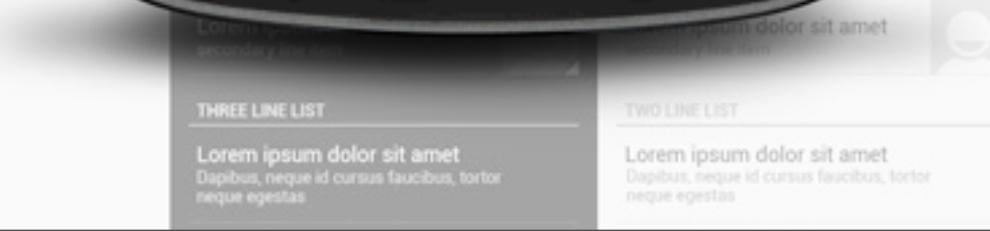
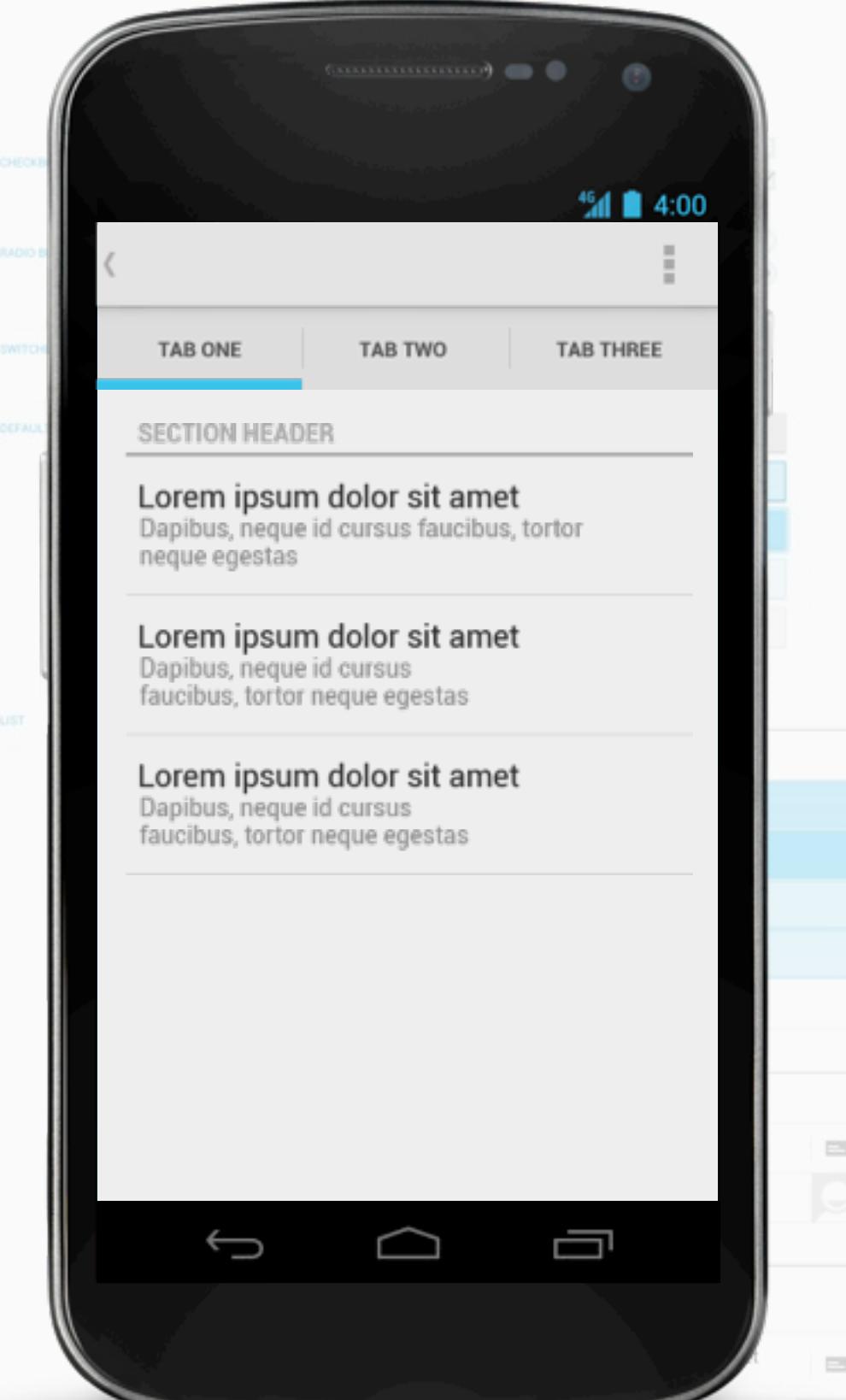
CONTEXTUAL SPLIT ACTION BAR



LANDSCAPE HEIGHT



TABLET HEIGHT



TEXTFIELD

DISABLED

NORMAL

ACTIVATED

PROGRESS BAR

PROGRESS SCRUBBERS

DISABLED

PRESSED

FOCUSSED

NORMAL

INDETERMINATE PROGRESS BAR & SPINNER

SPINNERS

NORMAL

FOCUSSED

PRESSED

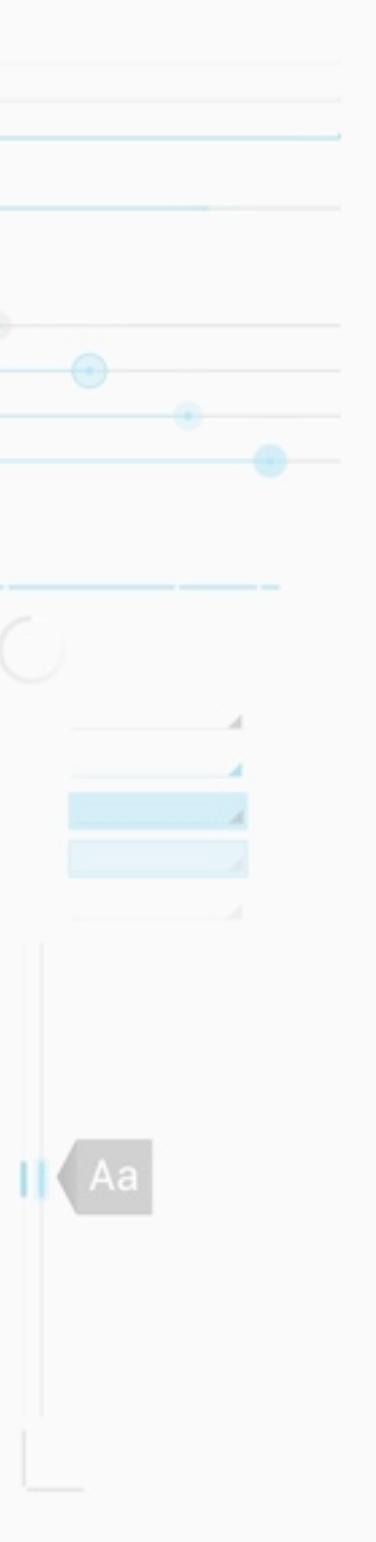
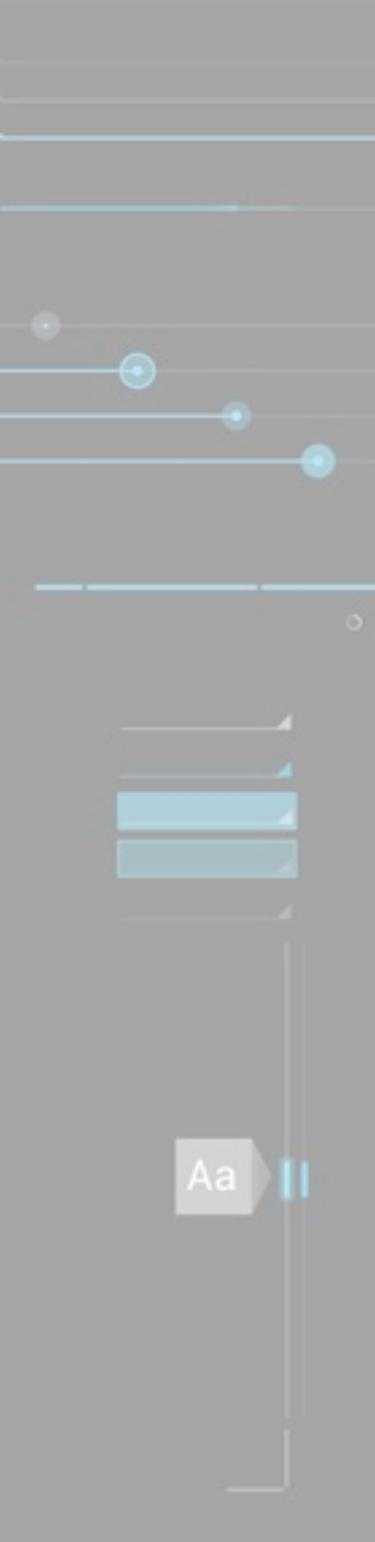
DISABLED FOCUSSED

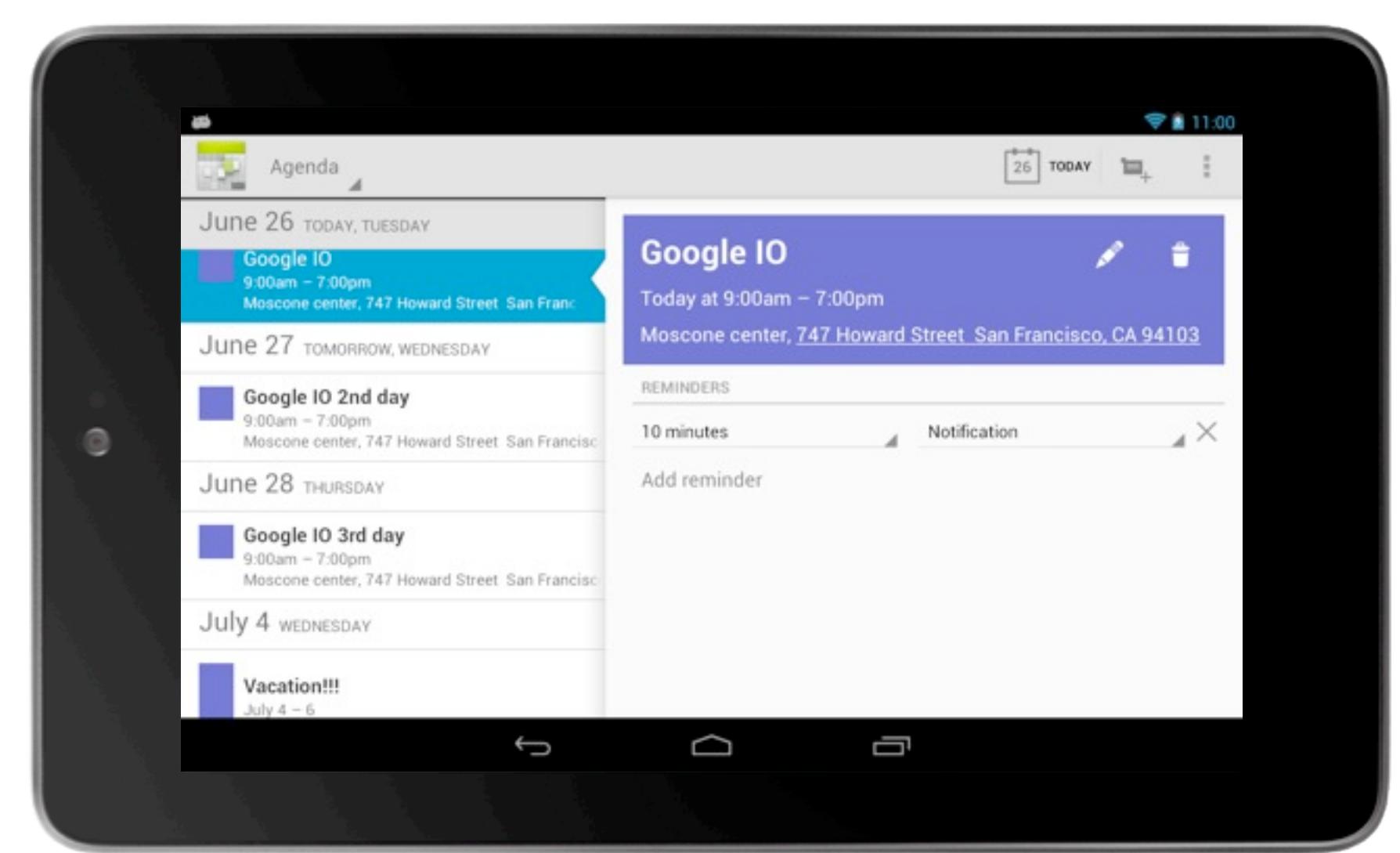
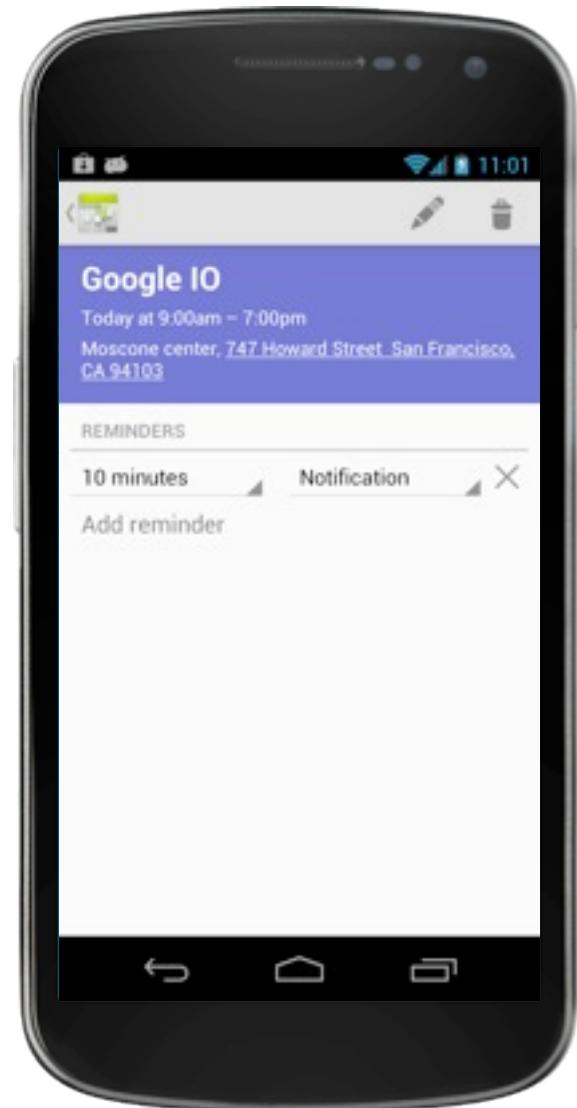
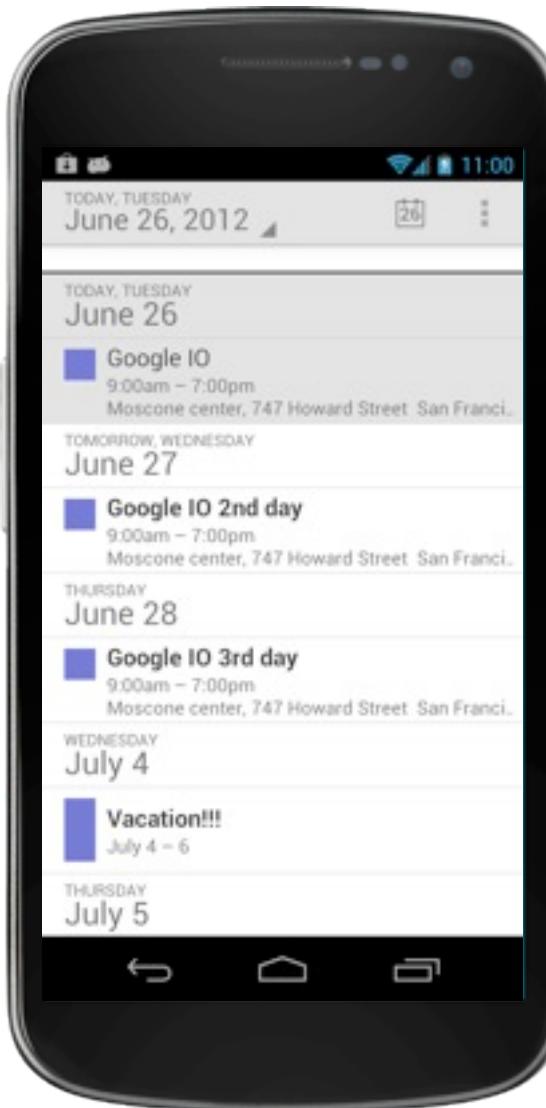
DISABLED

QUICKSCROLL

SCROLLBARS

MENU

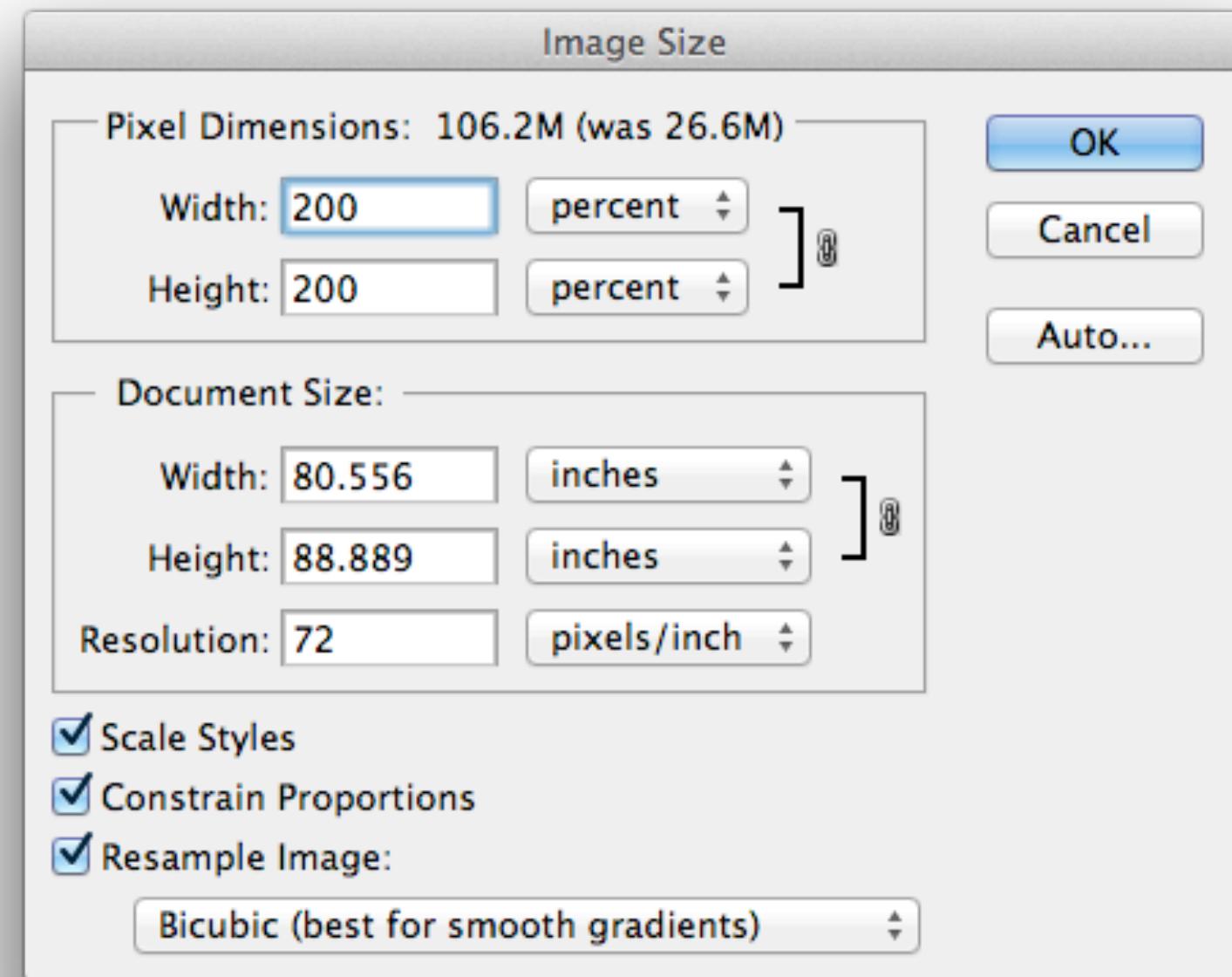






But how do I look at my mockups on my device?

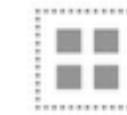




48DP



1 selected



1 selected

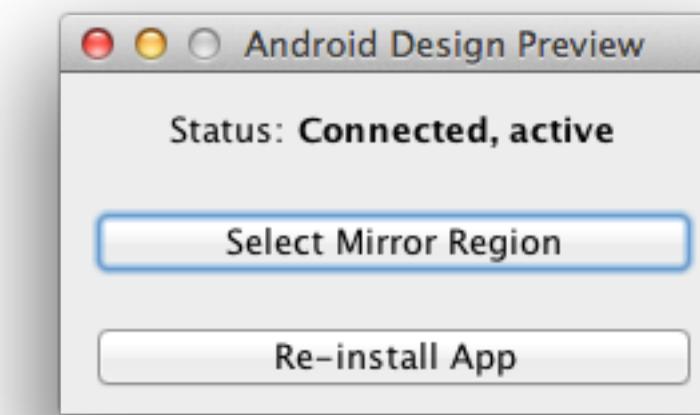
Android Design Preview



<http://code.google.com/p/android-ui-utils/>

Thanks Amith and Roman

**480 x 800
(Double-click or ESC to hide)**



Android Design Stencil

Holo Light & Dark

All elements are standardized in MDPI and created with vector shapes.

20120229

TYPOGRAPHY

Roboto, text size micro -12sp

Roboto, text size small -14sp

Roboto, text size medium -18sp

Roboto, text size large -22sp

COLOR

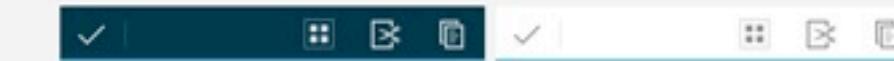


ACTION BAR

PORTRAIT HEIGHT



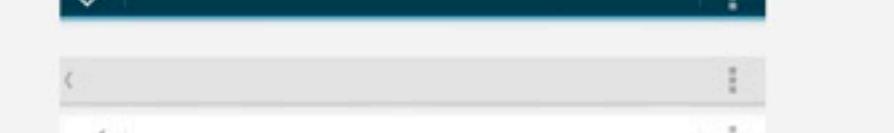
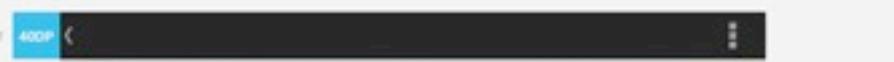
CONTEXTUAL ACTION BAR



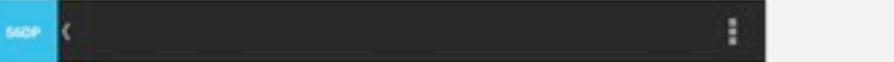
CONTEXTUAL SPLIT ACTION BAR



LANDSCAPE HEIGHT



TABLET HEIGHT



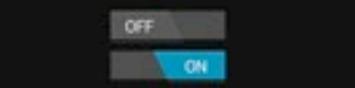
CHECKBOX



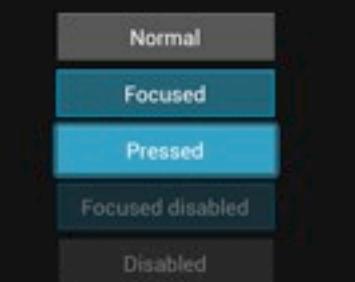
RADIO BUTTON



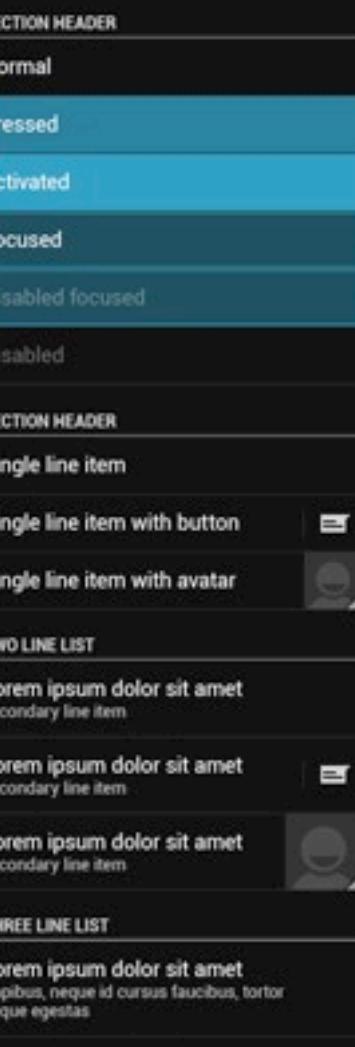
SWITCHES



DEFAULT BUTTONS



LIST



TEXTFIELD

DISABLED

NORMAL

ACTIVATED

PROGRESS BAR

PROGRESS SCRUBBERS

DISABLED

PRESSED

FOCUSSED

NORMAL

INDETERMINATE PROGRESS BAR & SPINNER

SPINNERS

NORMAL

FOCUSSED

PRESSED

DISABLED FOCUSSED

DISABLED

QUICKSCROLL

Aa

SCROLLBARS

MENU

Menu item 1

Menu item 2

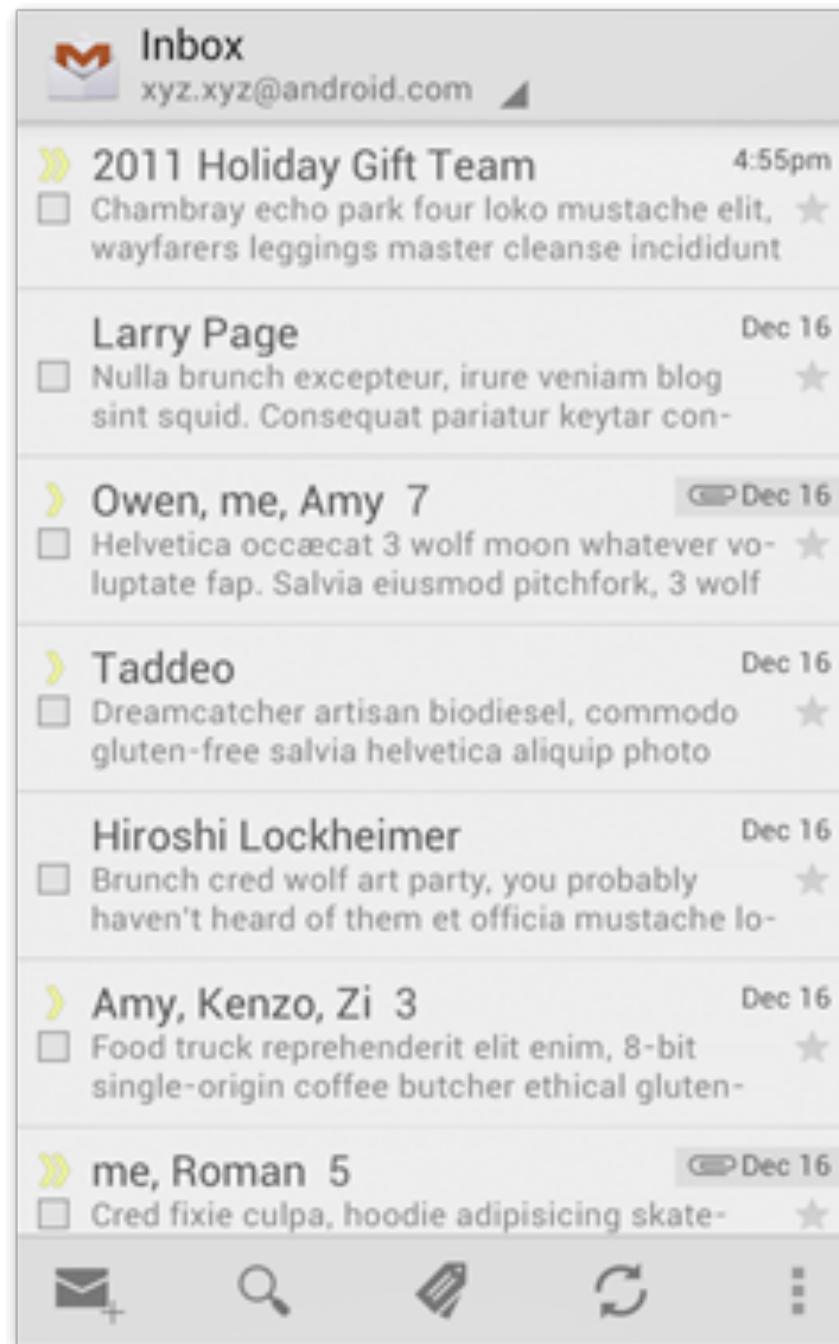
Menu item 3

Menu item 1

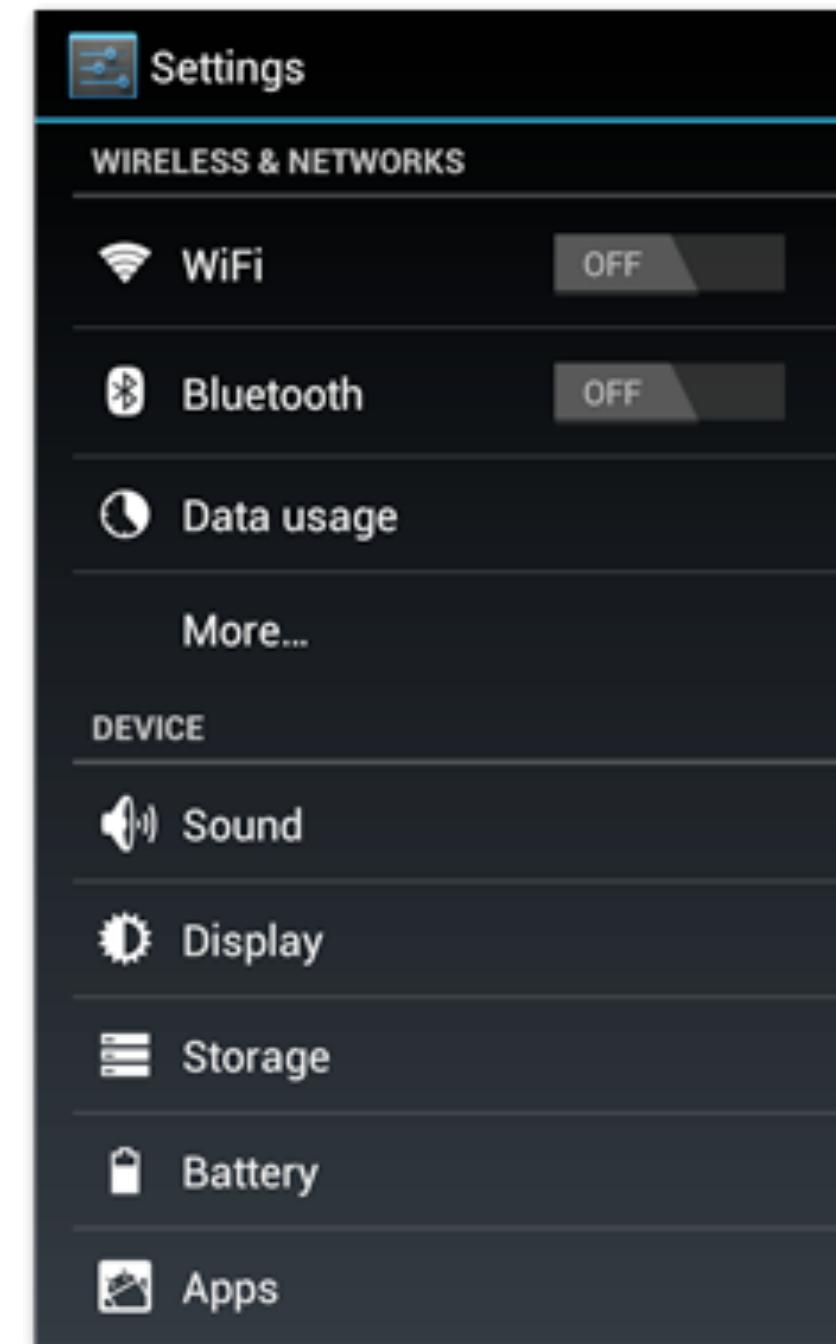
Menu item 2

Menu item 3

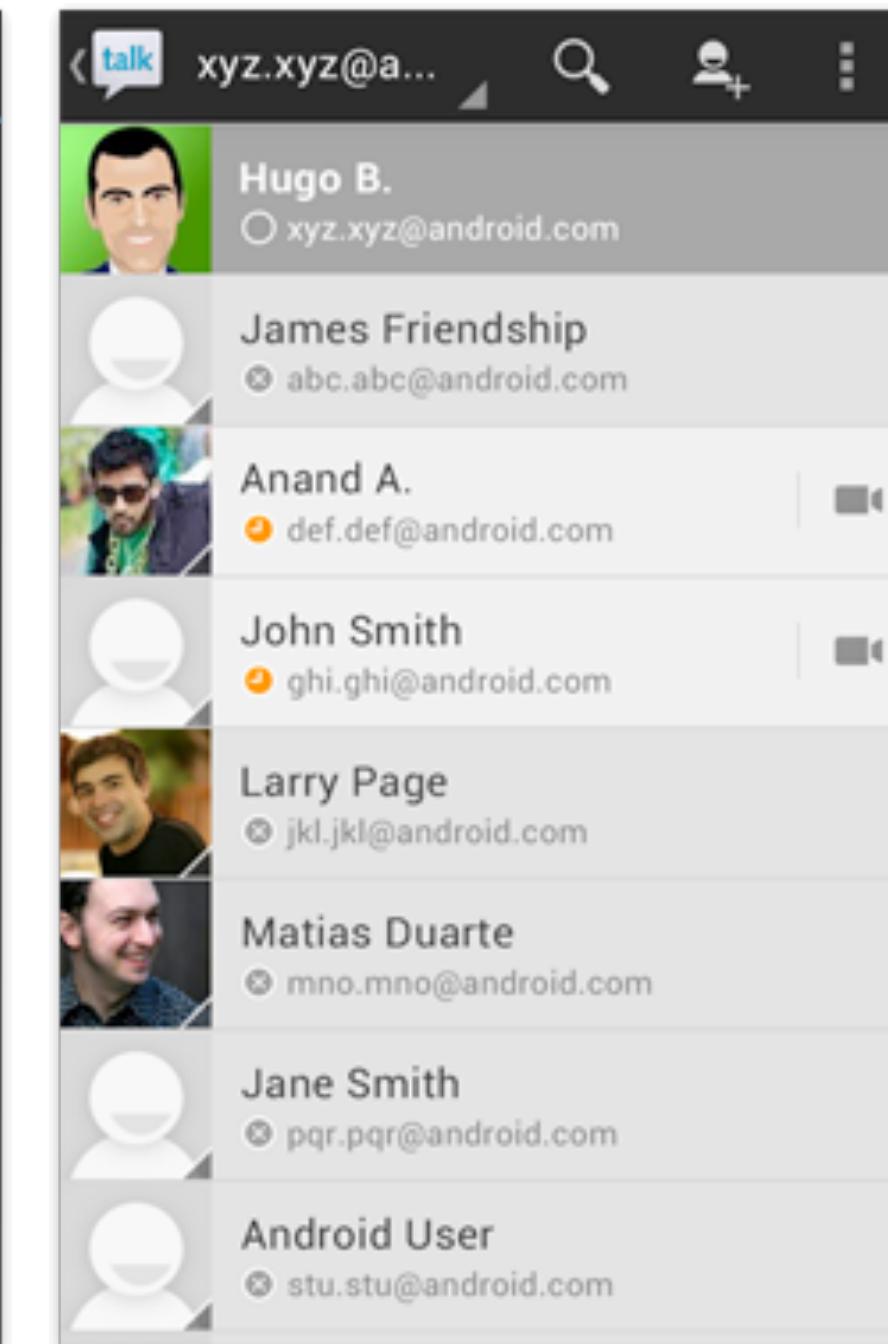
Pick a theme



Light



Dark

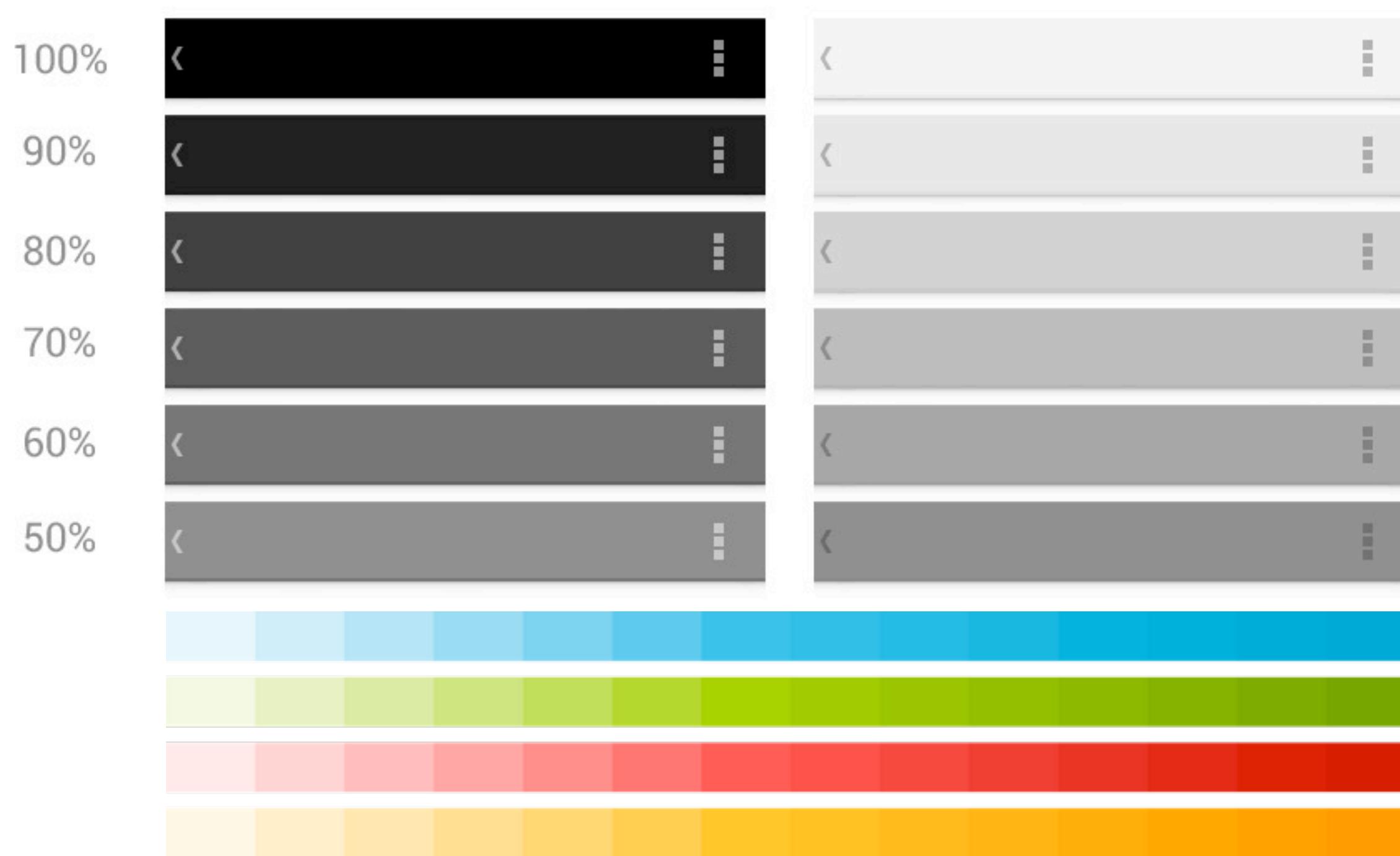


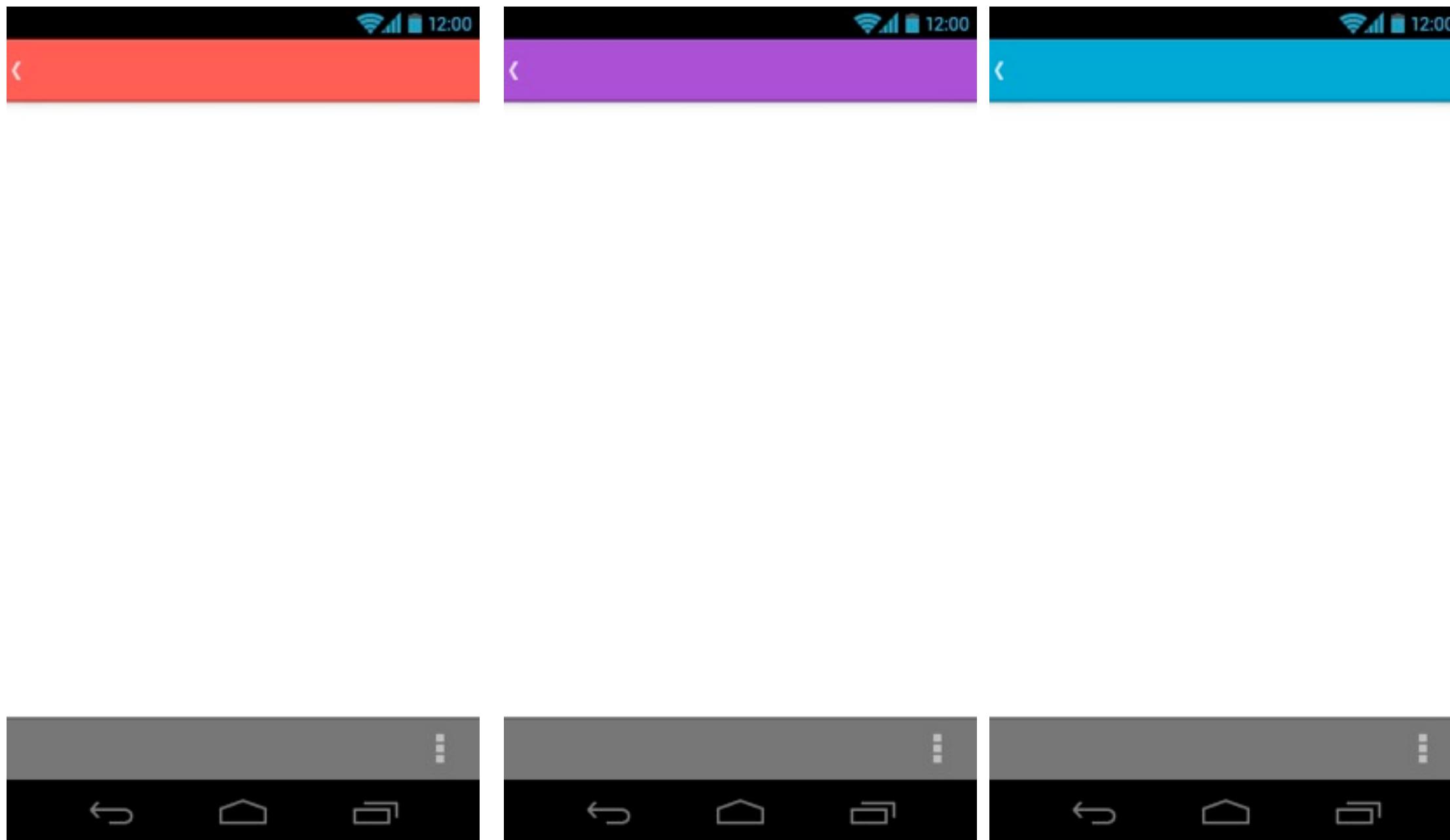
Light
with dark actionBar

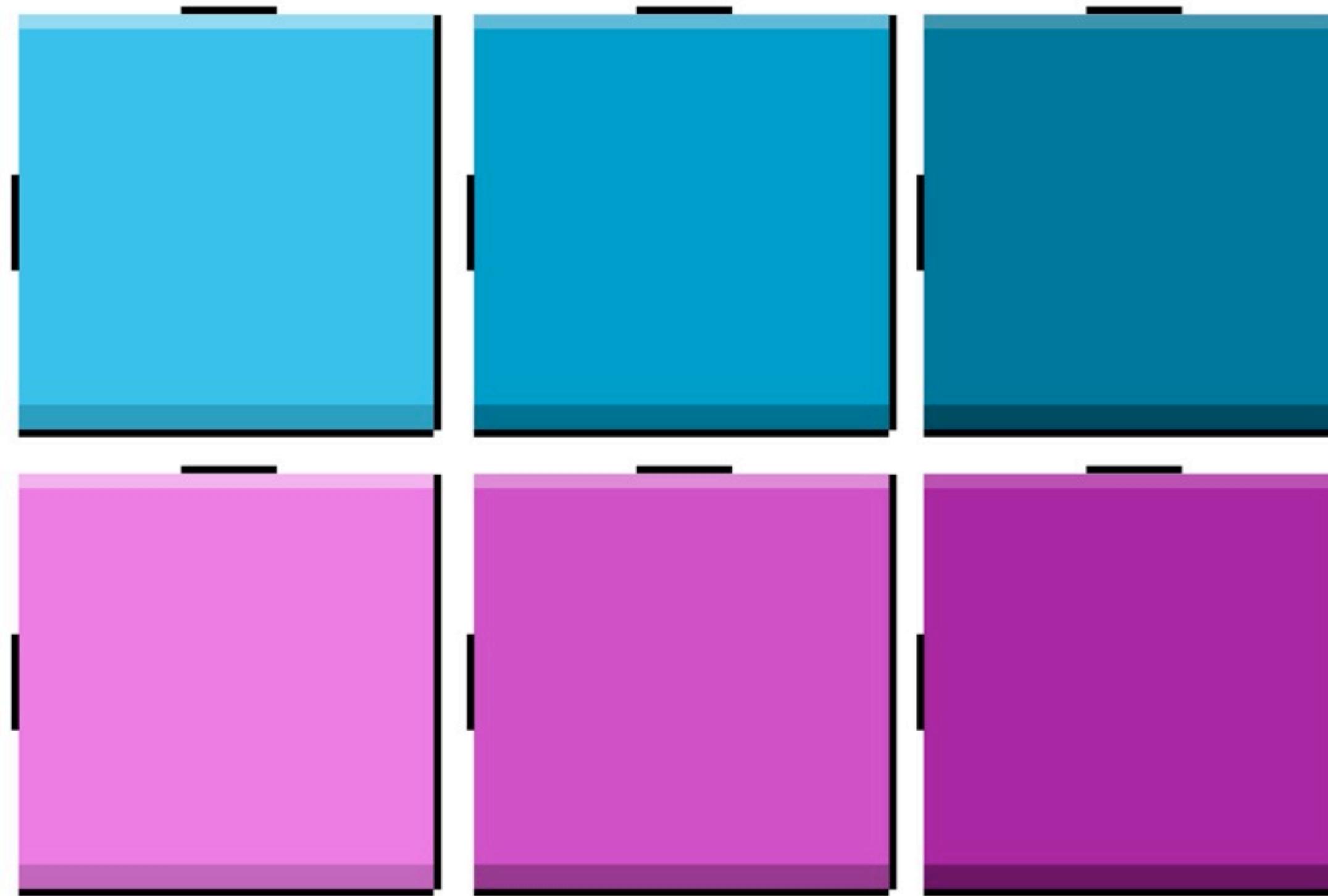


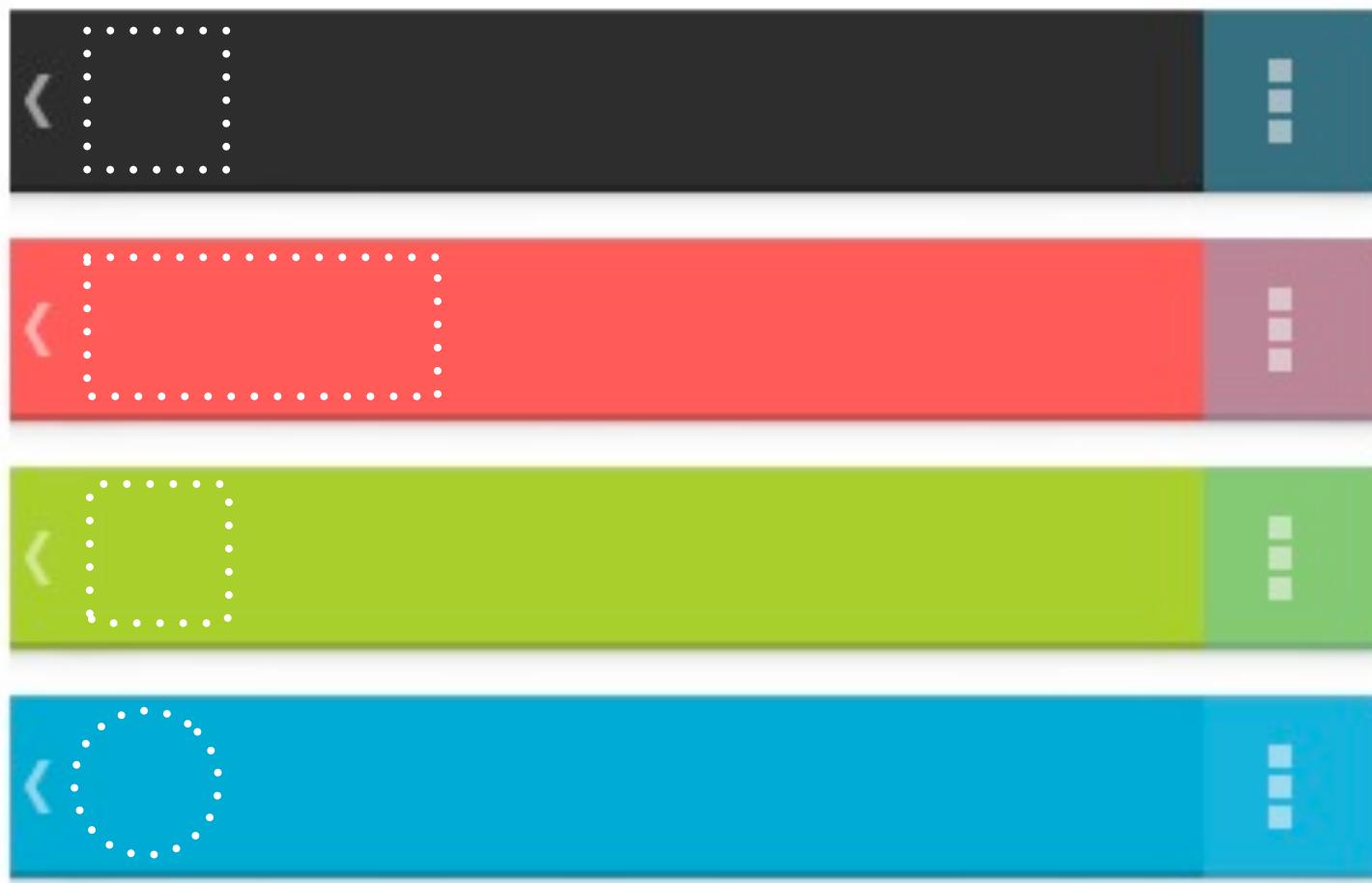
DARK

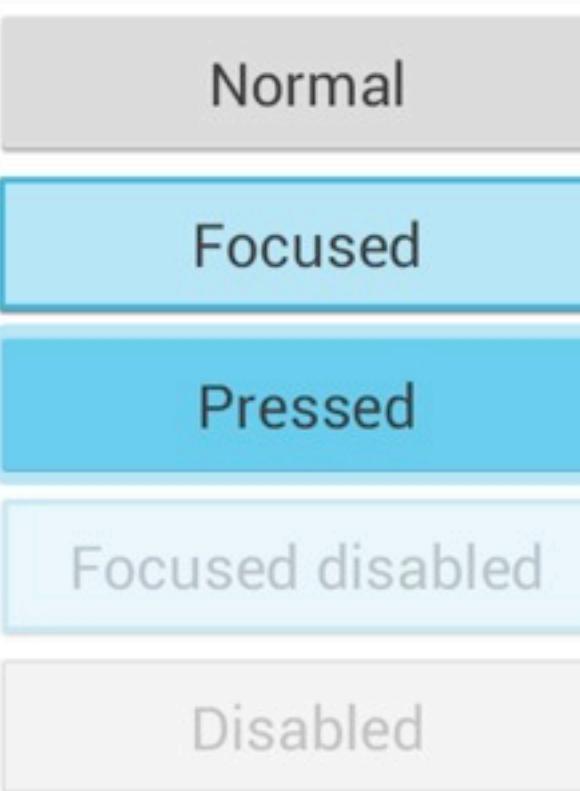
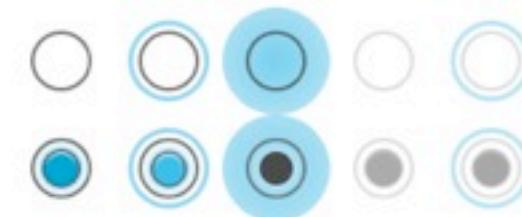
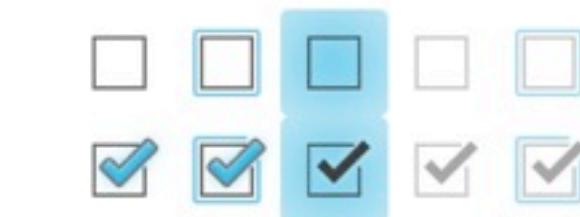
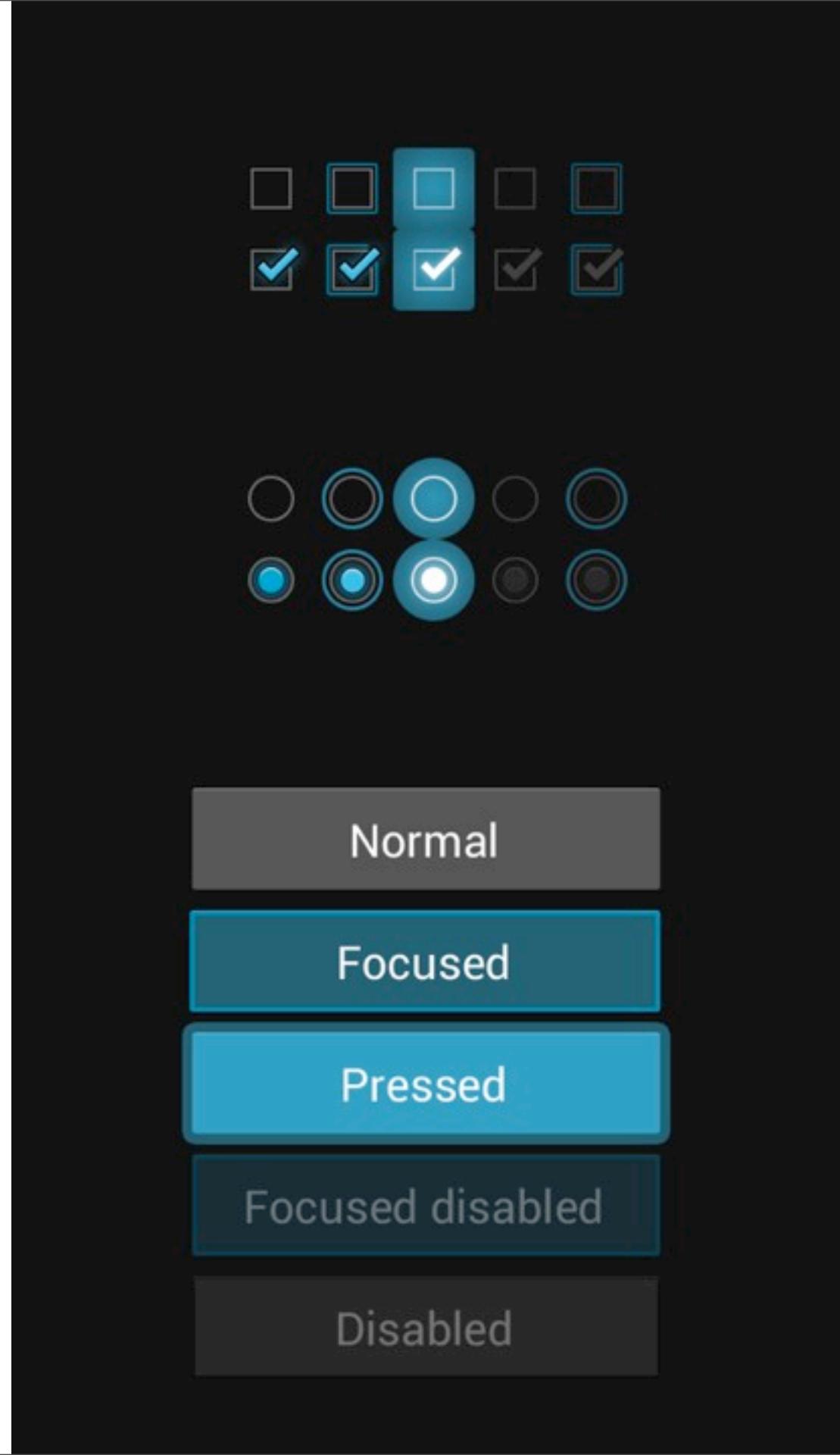
LIGHT

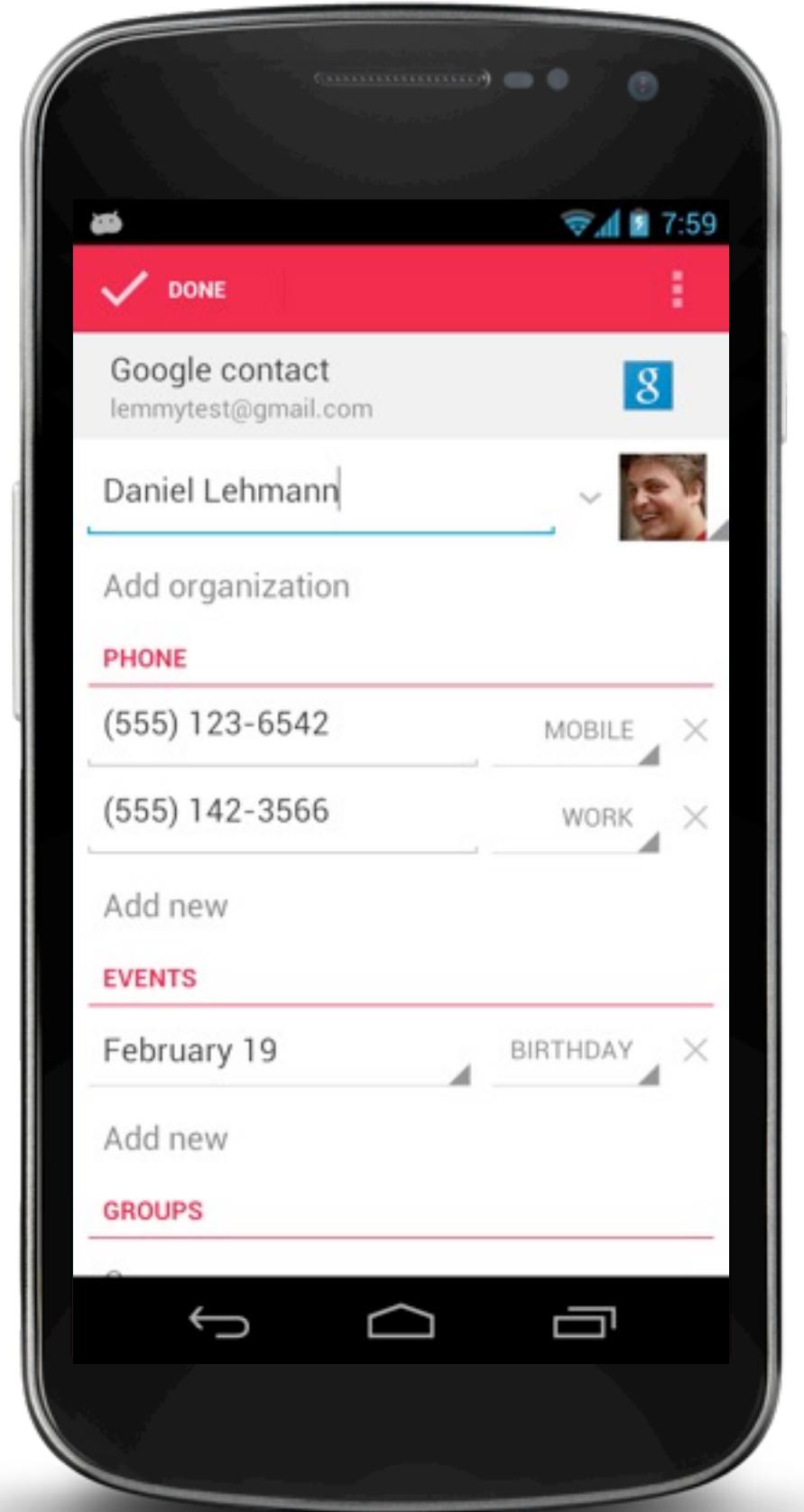


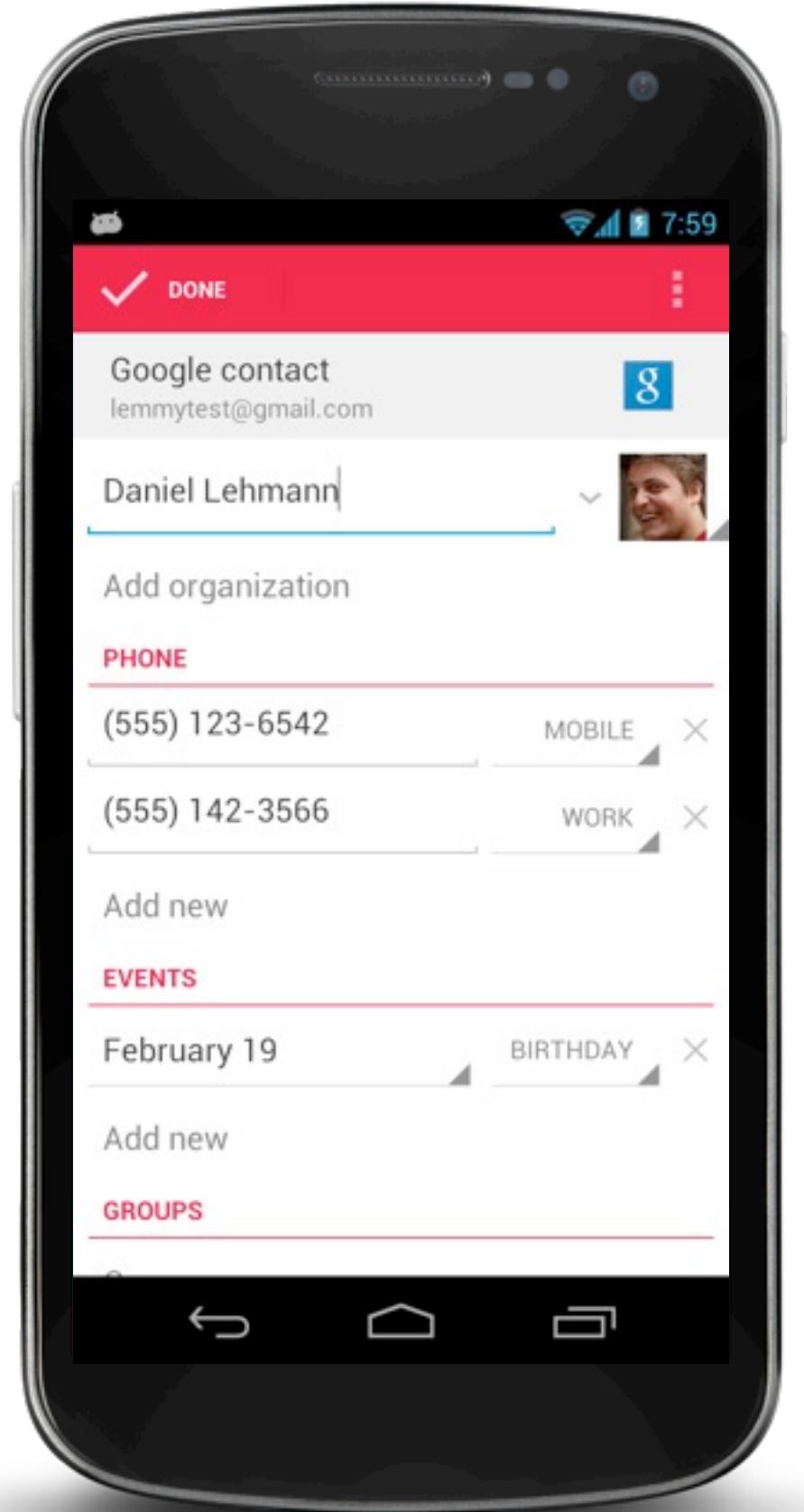












CHECKBOX



RADIO BUTTON



SWITCHES

OFF

ON

DEFAULT BUTTONS

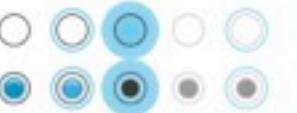
Normal

Focused

Pressed

Focused disabled

Disabled



OFF

ON

Normal

Focused

Pressed

Focused disabled

Disabled

TEXTFIELD

DISABLED

NORMAL

ACTIVATED

PROGRESS BAR

PROGRESS SCRUBBERS

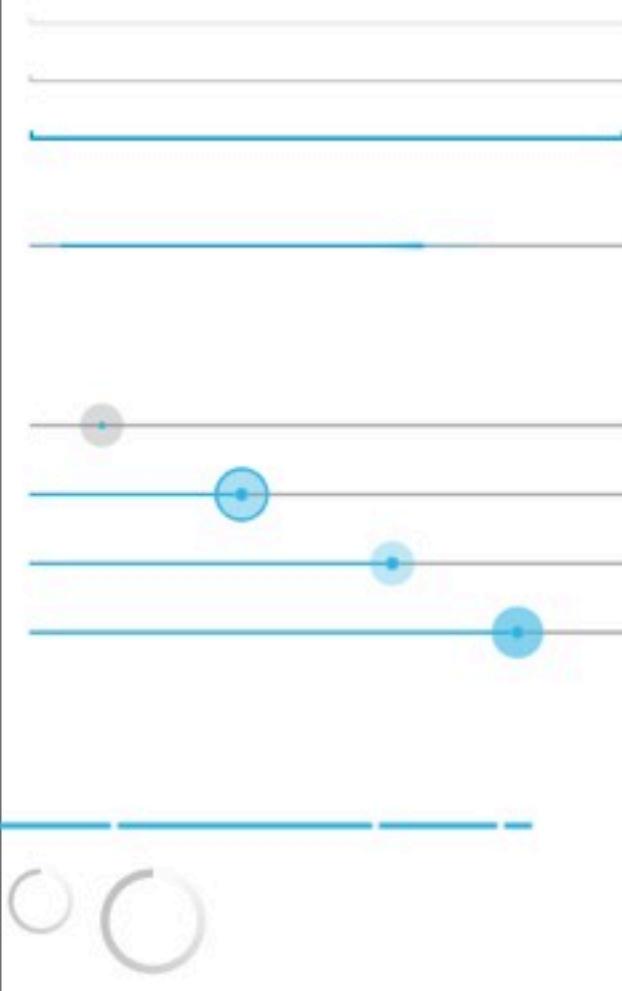
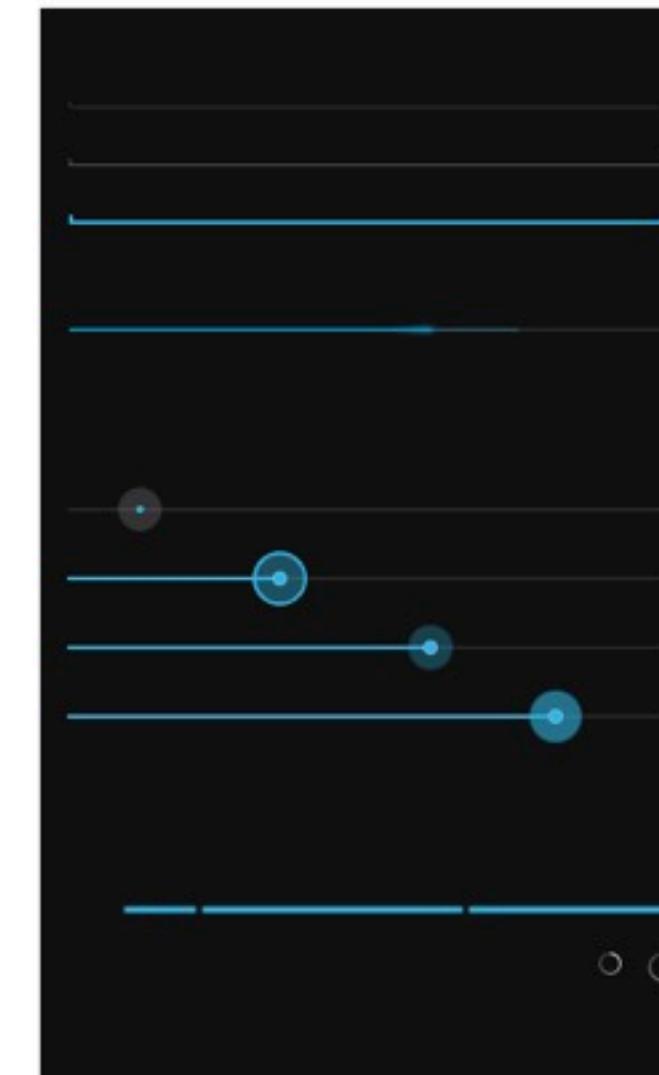
DISABLED

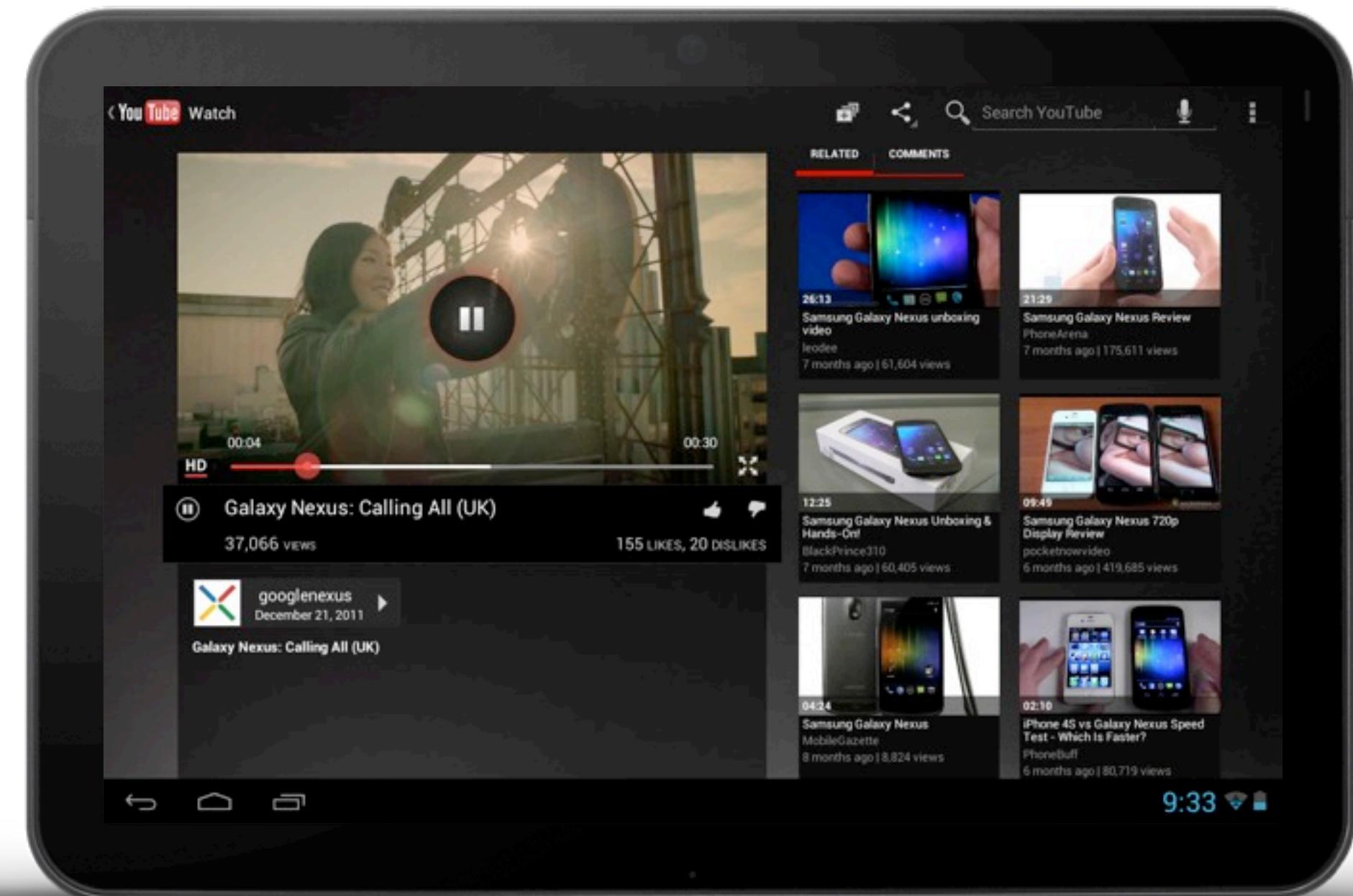
PRESSED

FOCUSED

NORMAL

INDETERMINATE PROGRESS BAR & SPINNER







SELECTED



UNSELECTED

`Normal`
`android:state_pressed="true" android:state_selected="true"`

`android:state_pressed="true"`

`Focused`
`android:state_focused="true" android:state_selected="true"`

`android:state_focused="true"`

`Pressed`
`android:state_selected="true"`



```
<selector xmlns:android="http://schemas.android.com/apk/res/android">  
    <item  
        android:state_pressed="true" android:state_selected="true"  
        android:drawable="@drawable/my_item_selected_pressed"/>  
    <item  
        android:drawable="@drawable/my_item_unselected_pressed"/>  
    <item  
        android:drawable="@drawable/my_item_selected_focused"/>  
    <item  
        android:state_focused="true" android:state_selected="true"  
        android:drawable="@drawable/my_item_unselected_focused"/>  
    <item  
        android:state_focused="true"  
        android:drawable="@drawable/my_item_selected"/>  
    <item  
        android:state_selected="true"  
        android:drawable="@drawable/my_item_unselected"/>  
</selector>
```



2:53 PM

Wednesday, June 20

 Set alarm

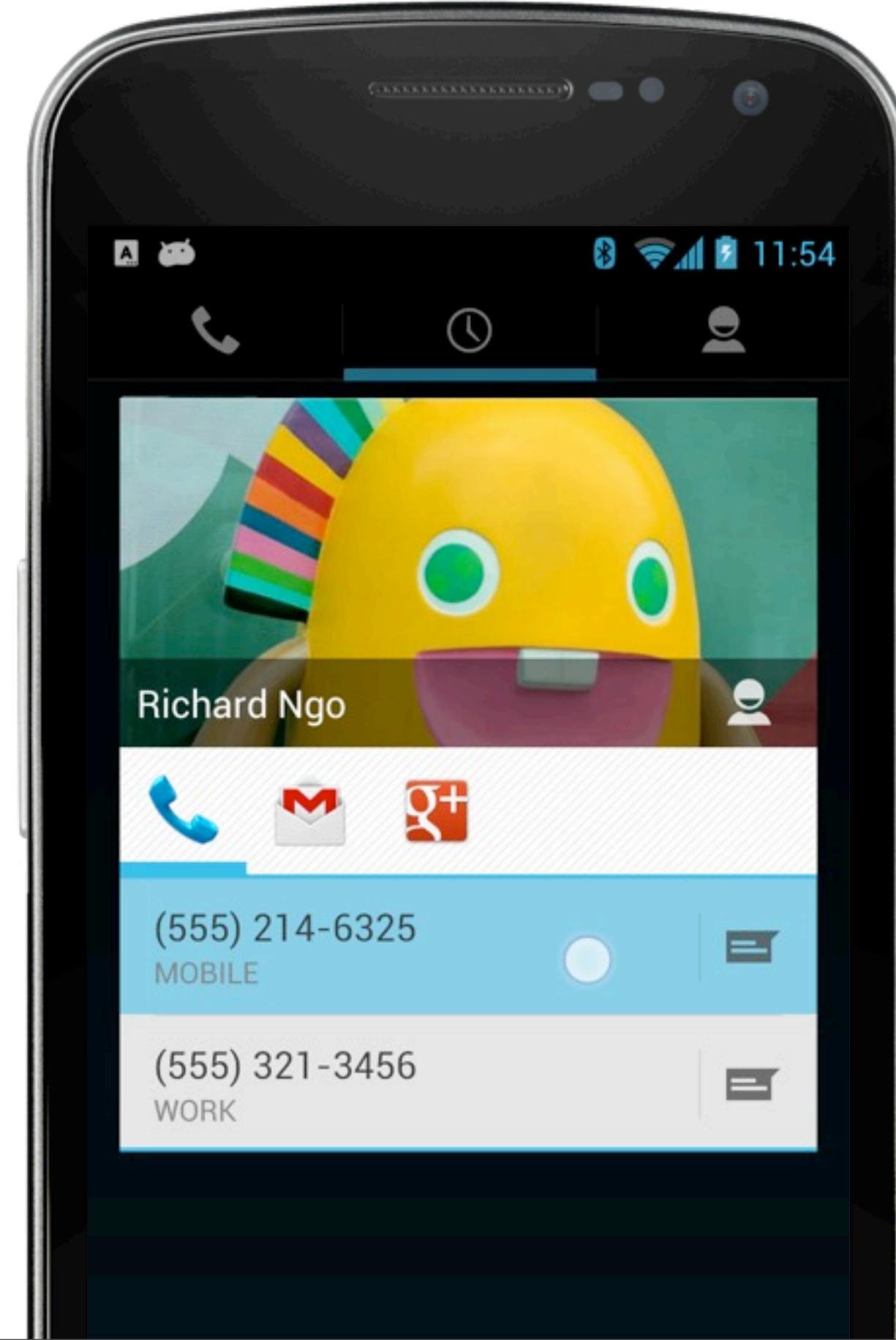
Standard Selector

android:background="?android:attr/selectableItemBackground"



How to test?

- Touch and hold

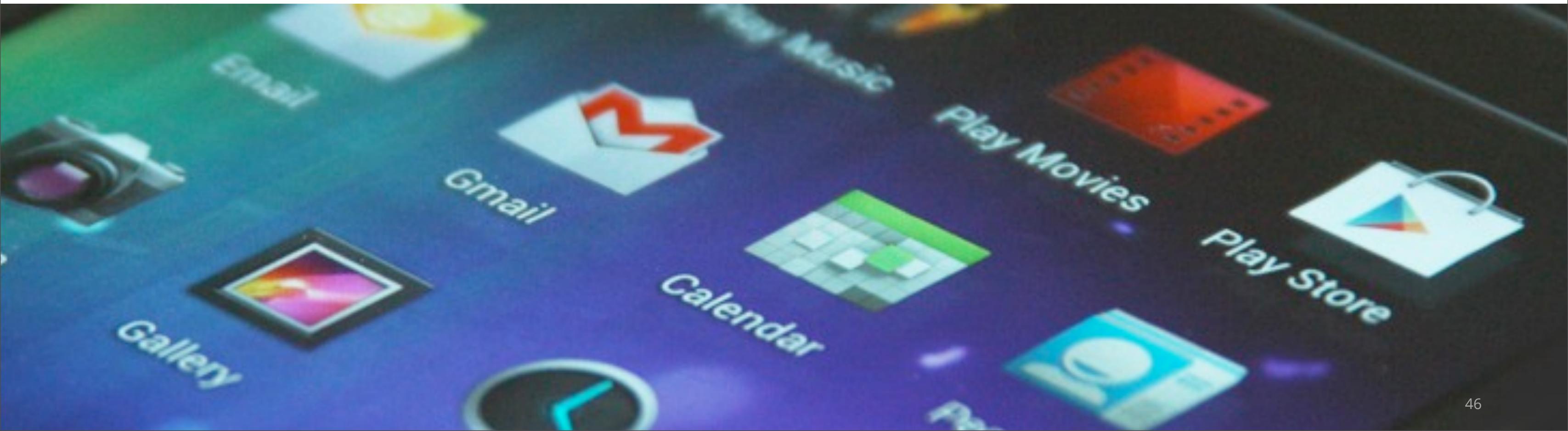


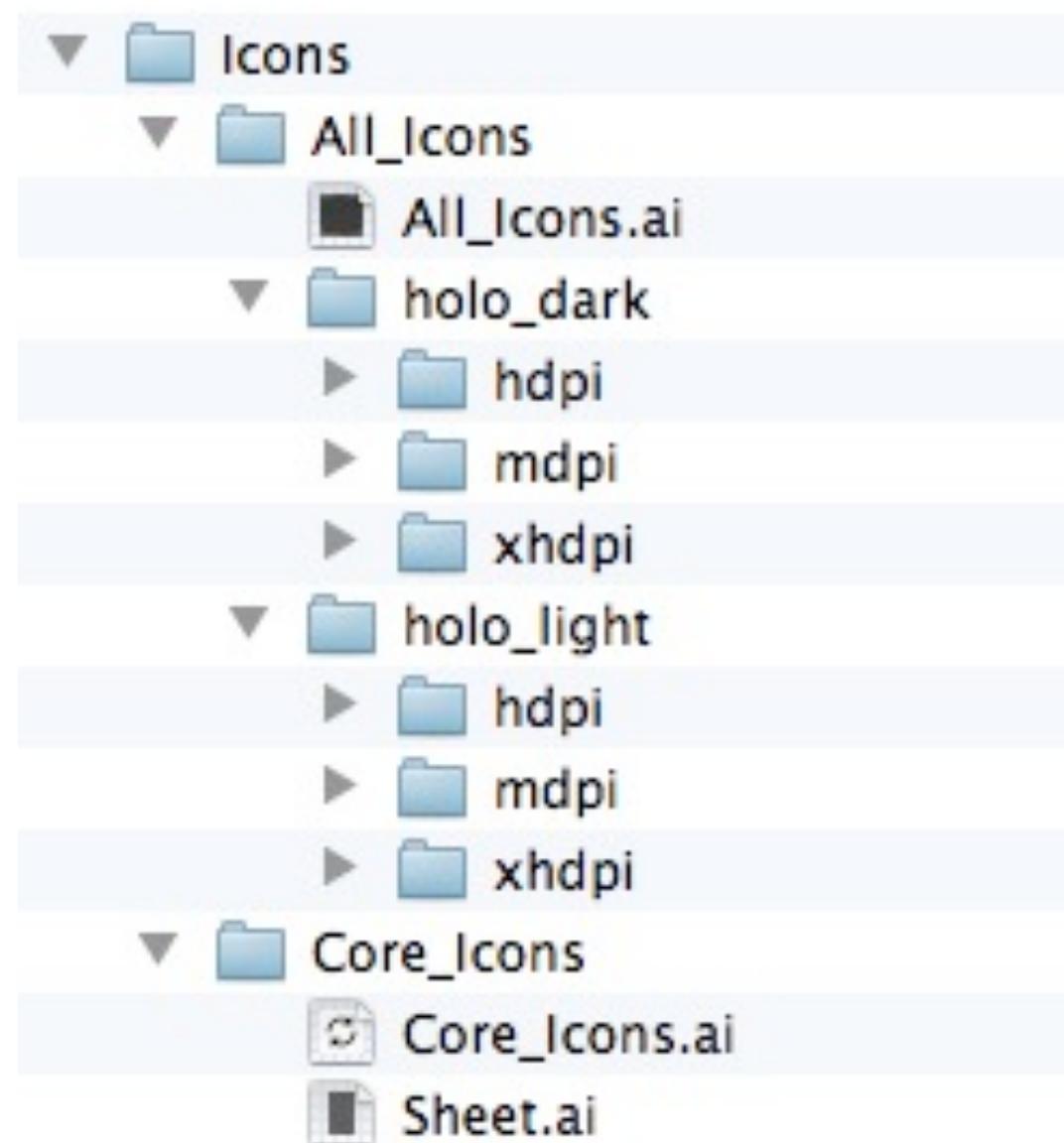
How to test?

- Device with hardware keyboard
- Bluetooth keyboard

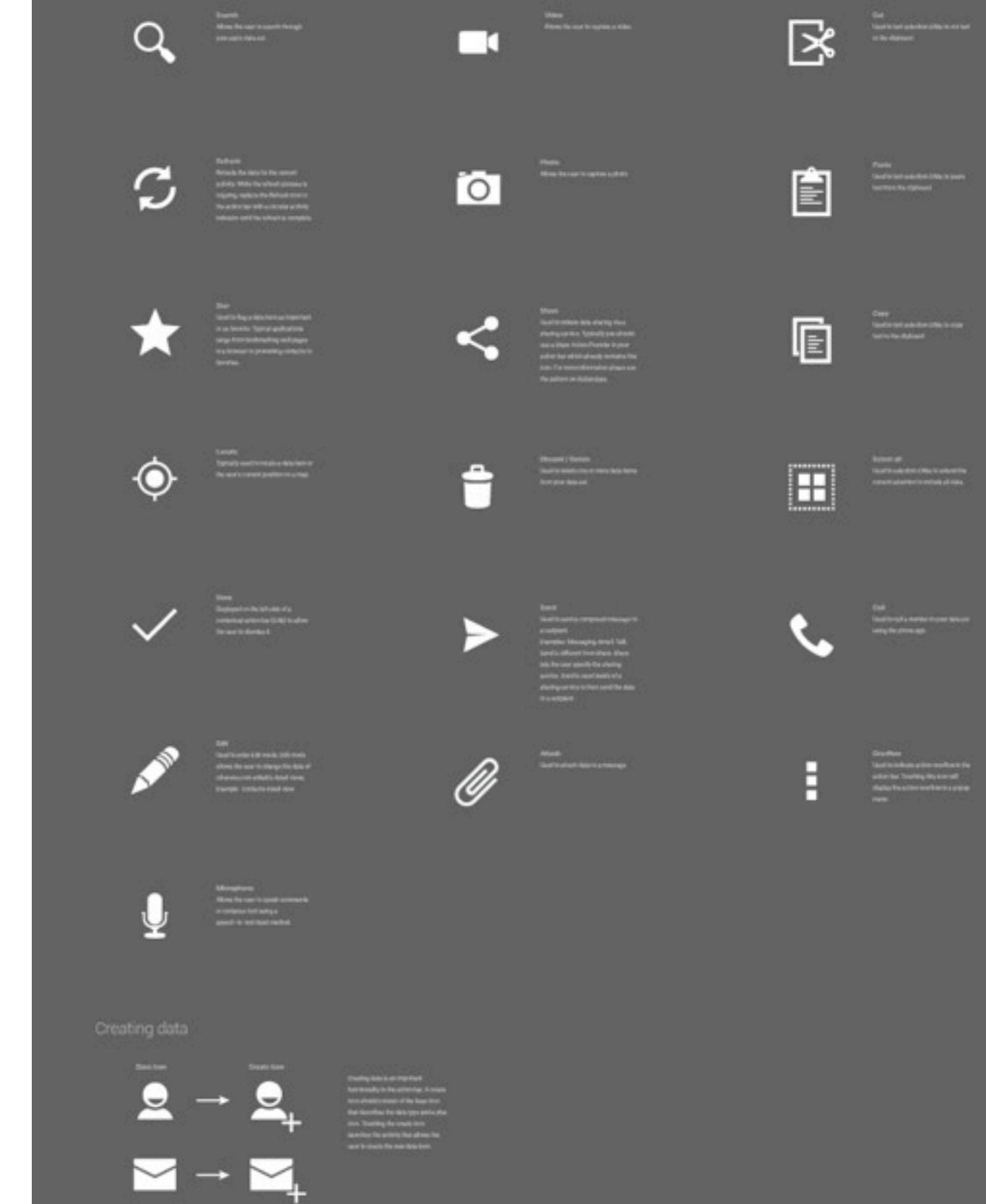


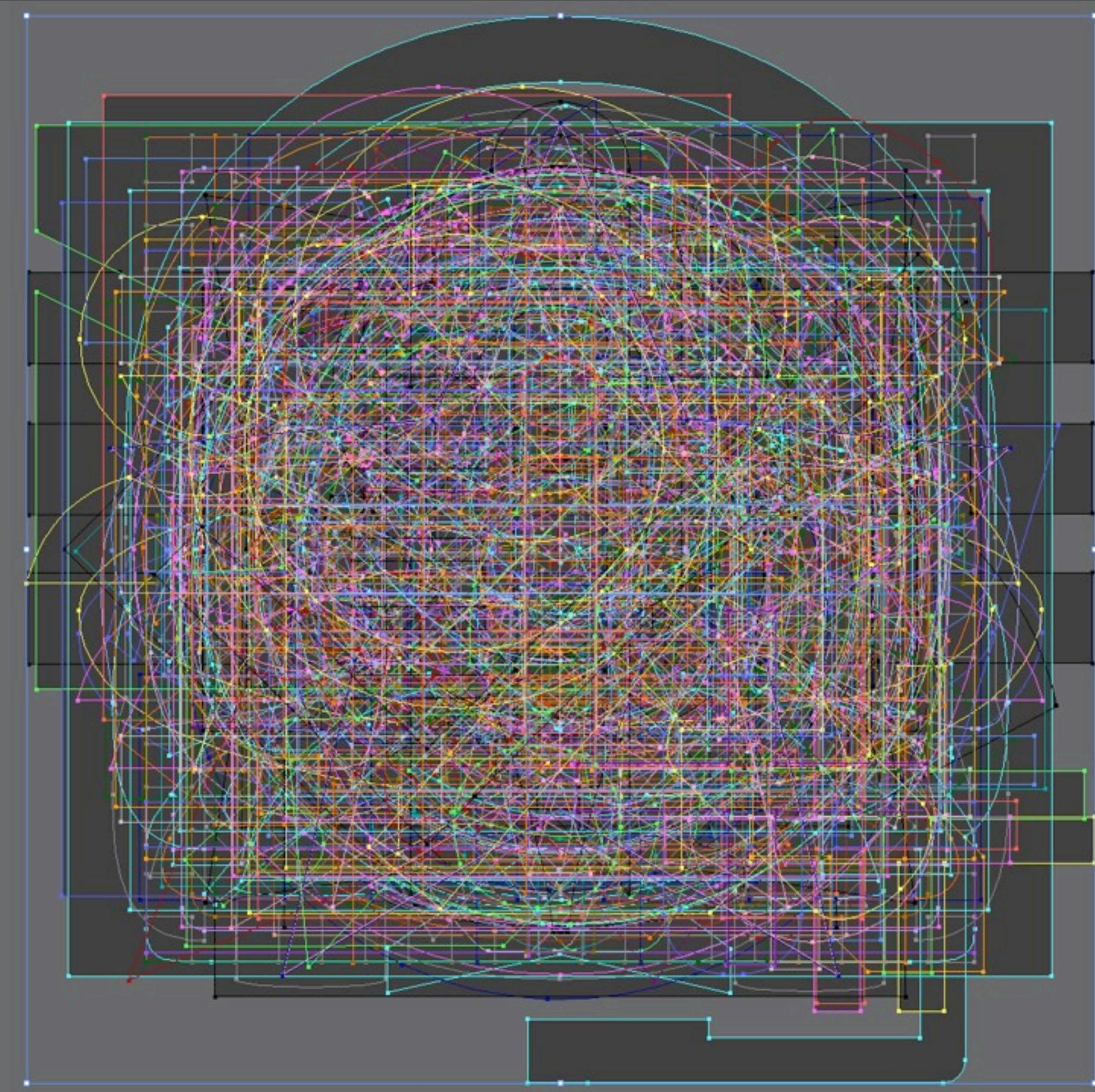
Iconography

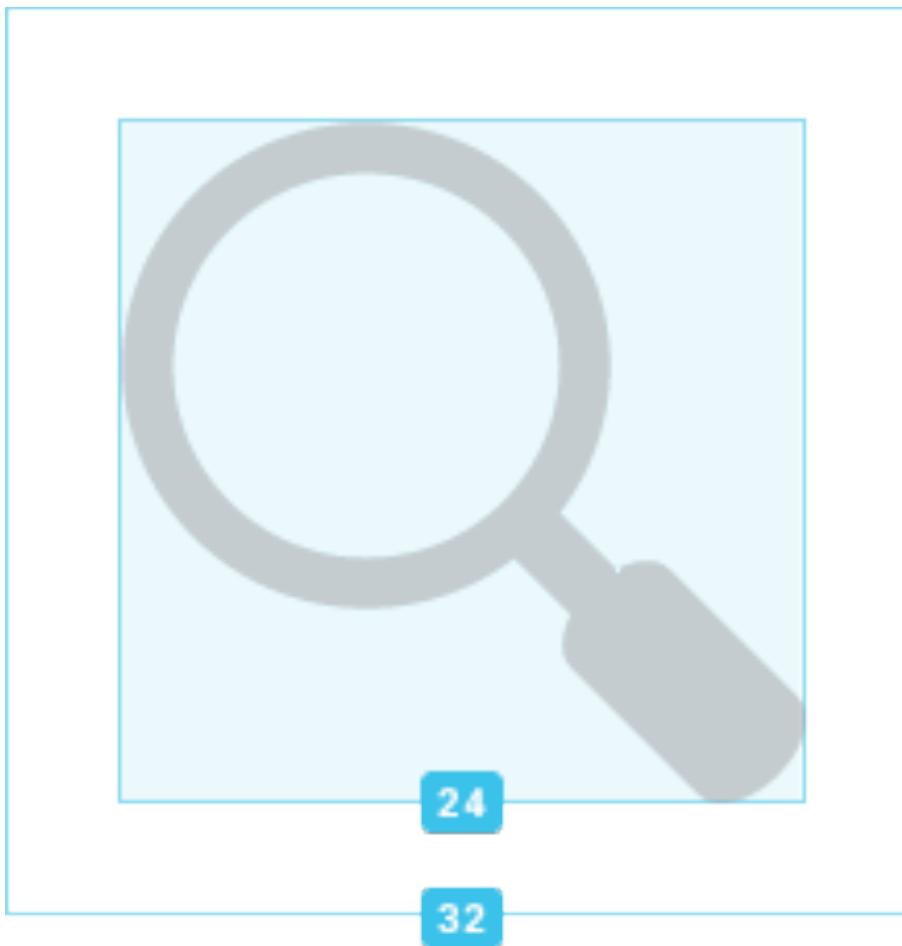


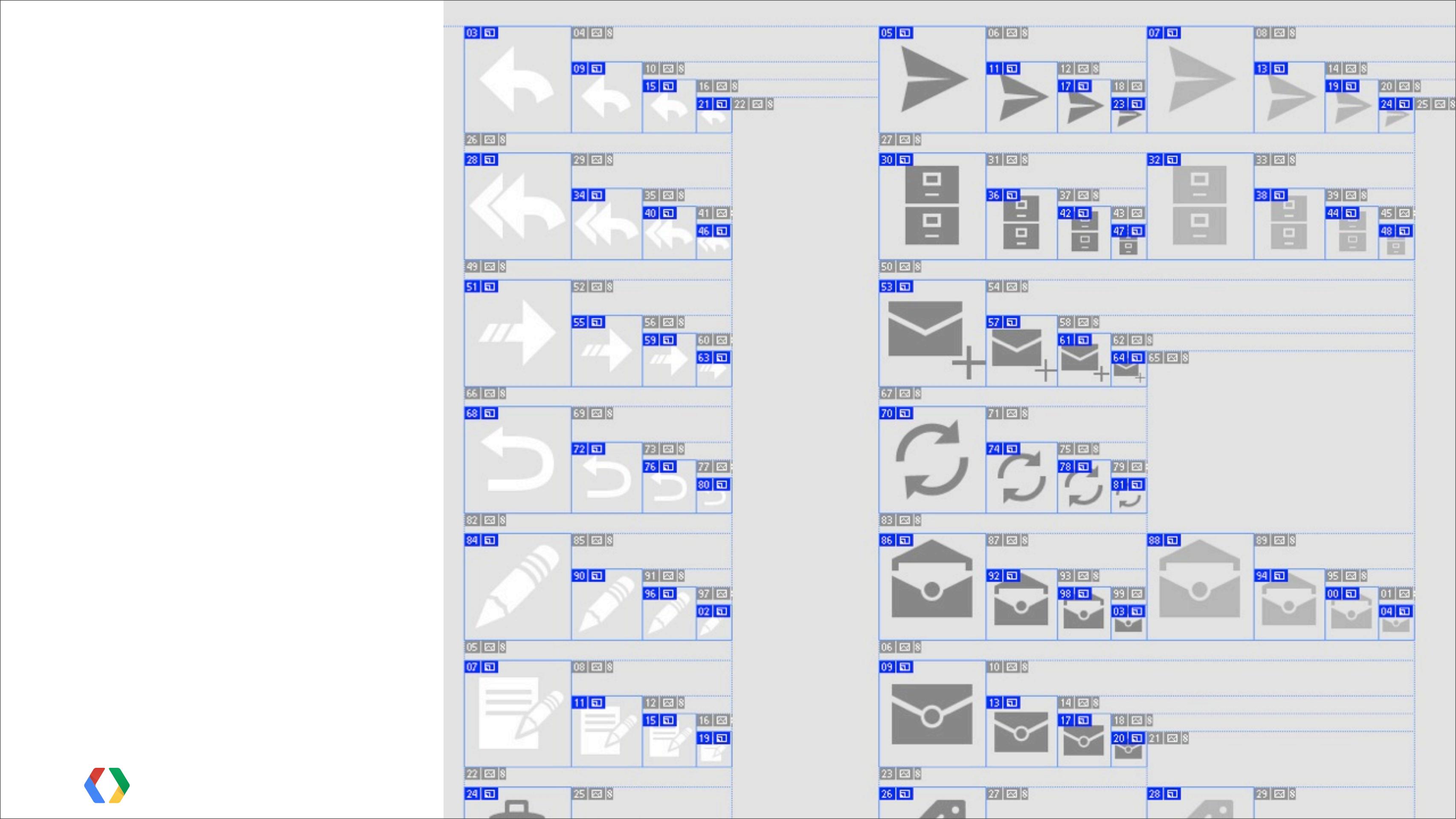


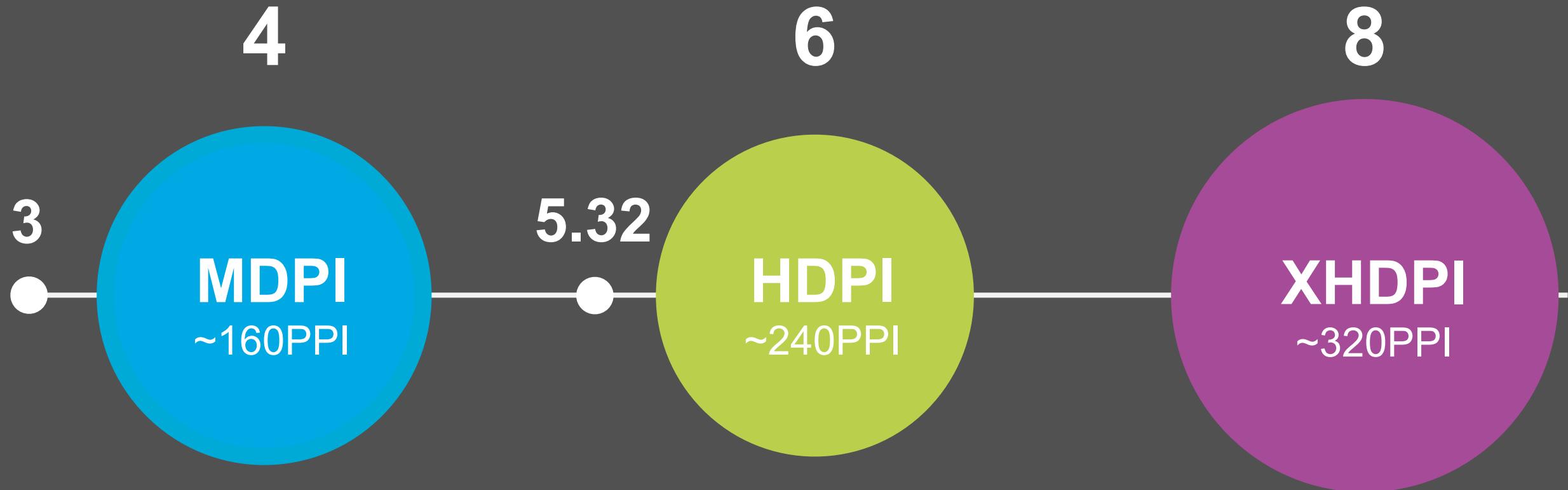
Be aware of system icons











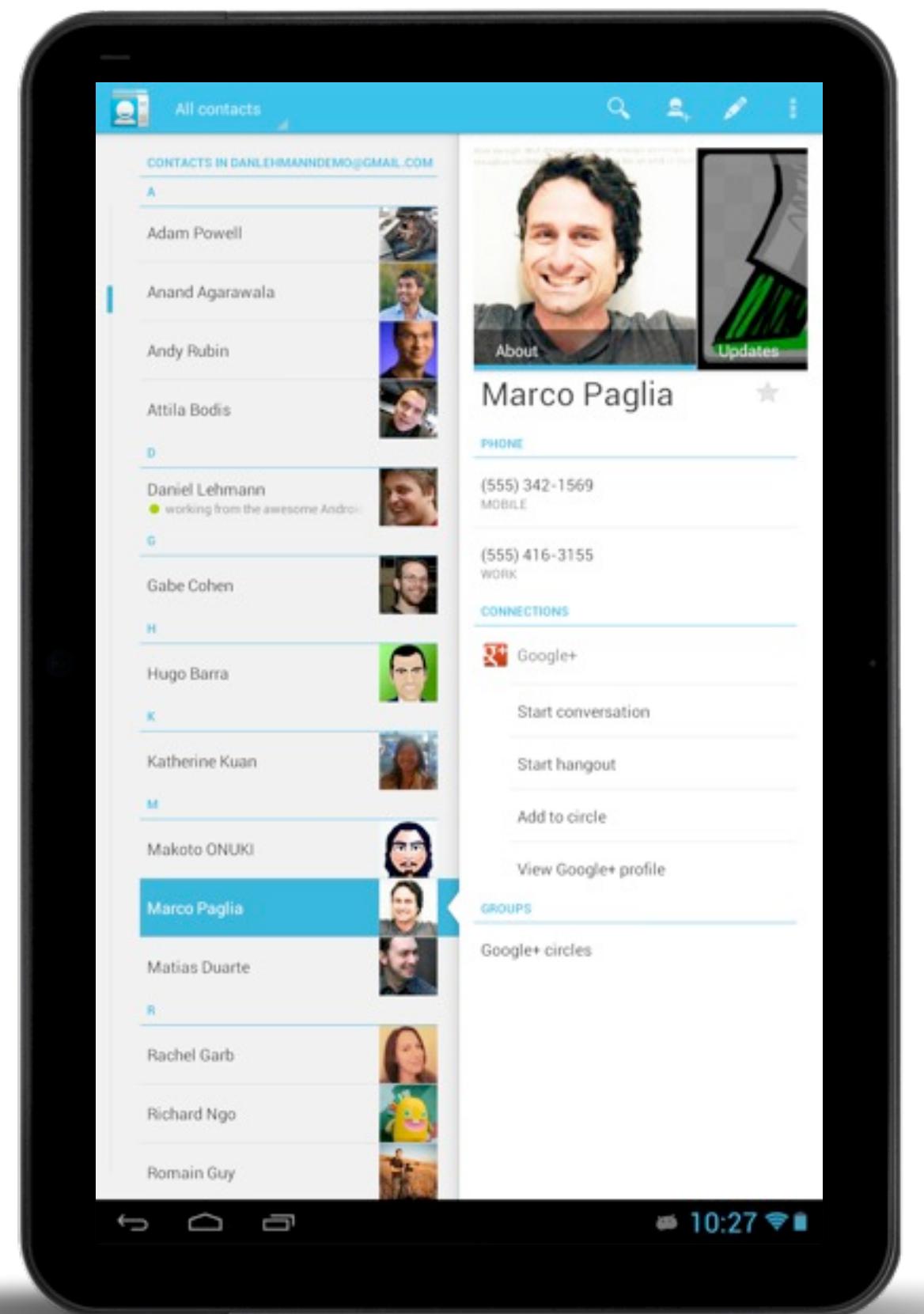
Fragments

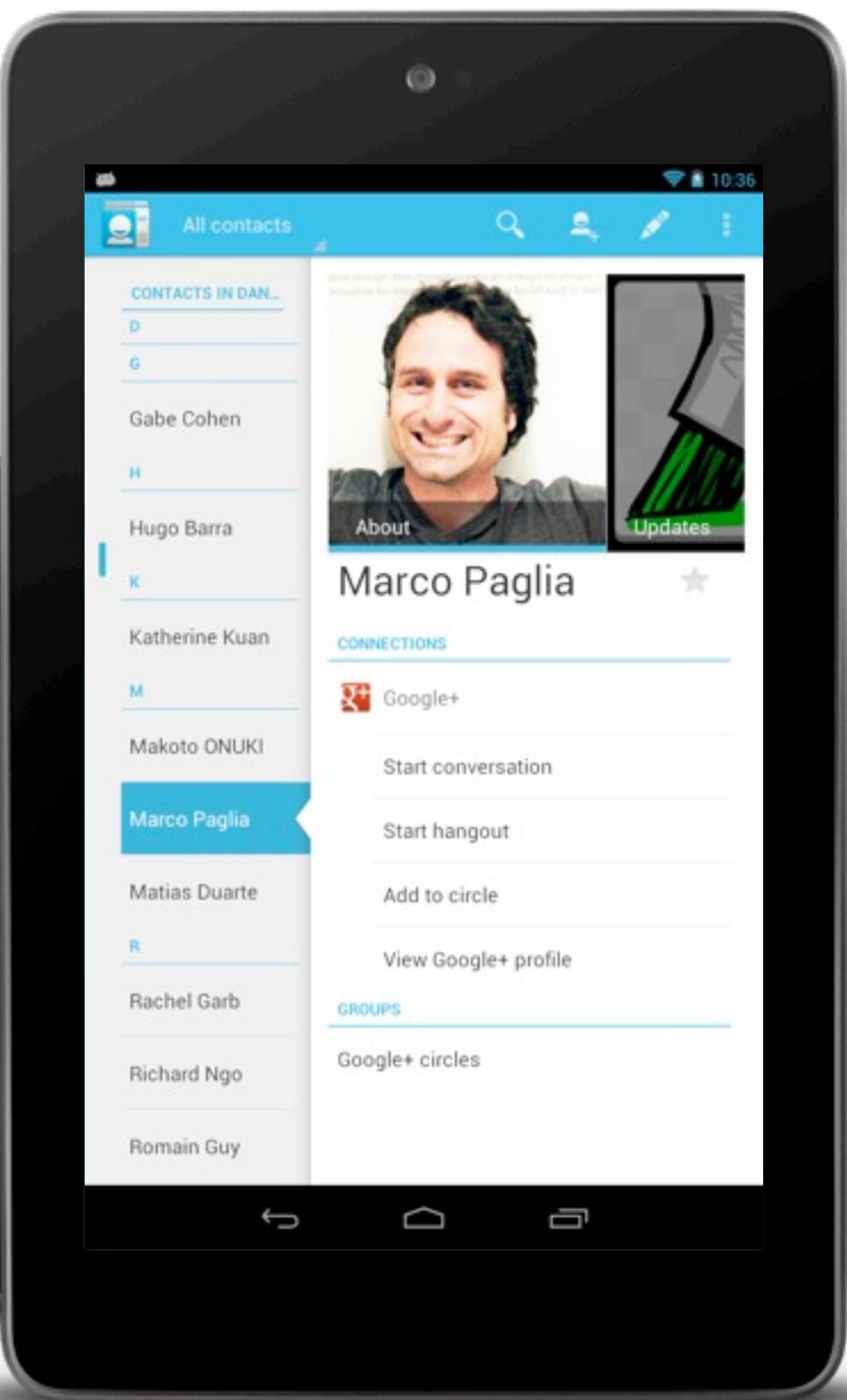
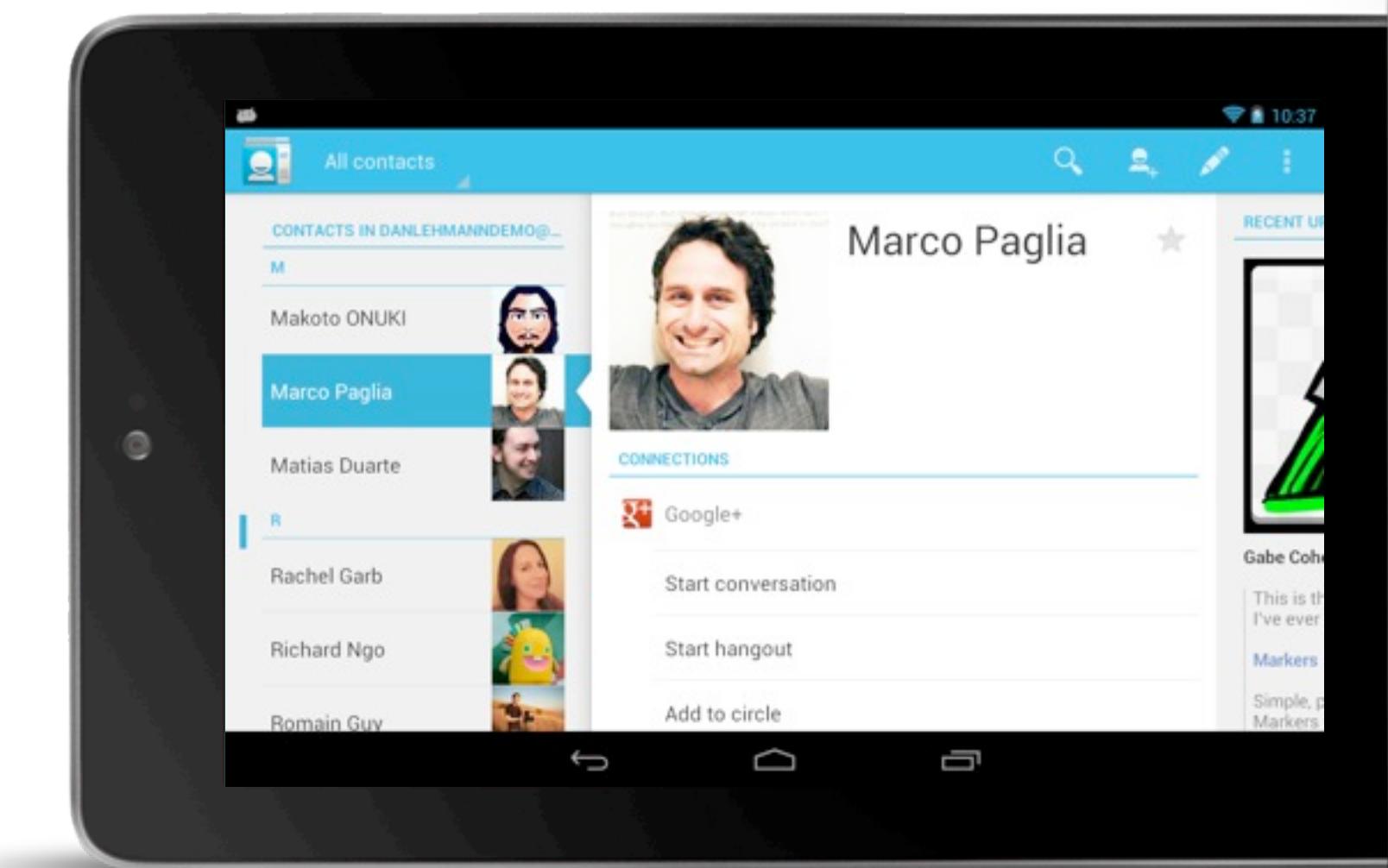


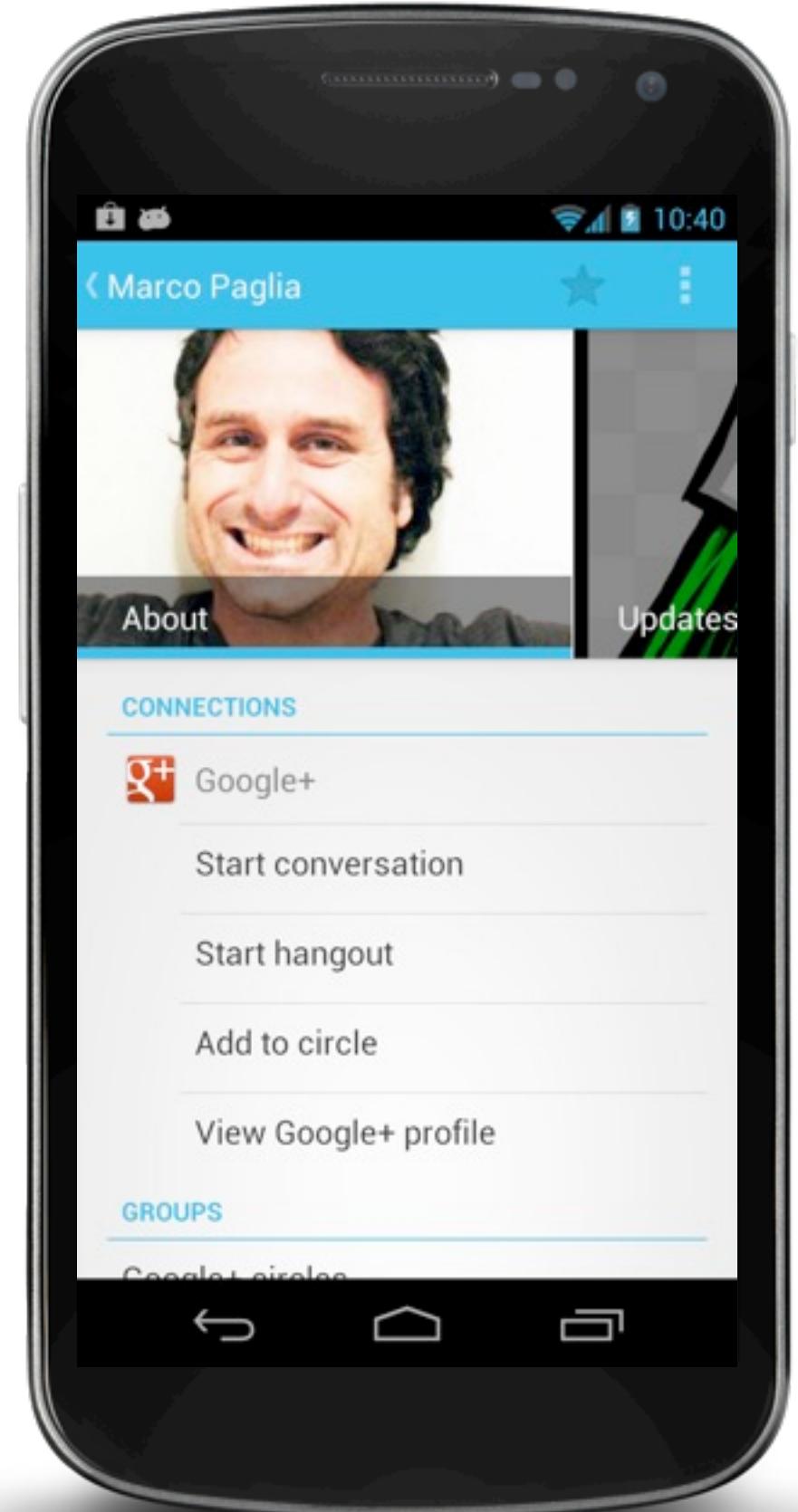
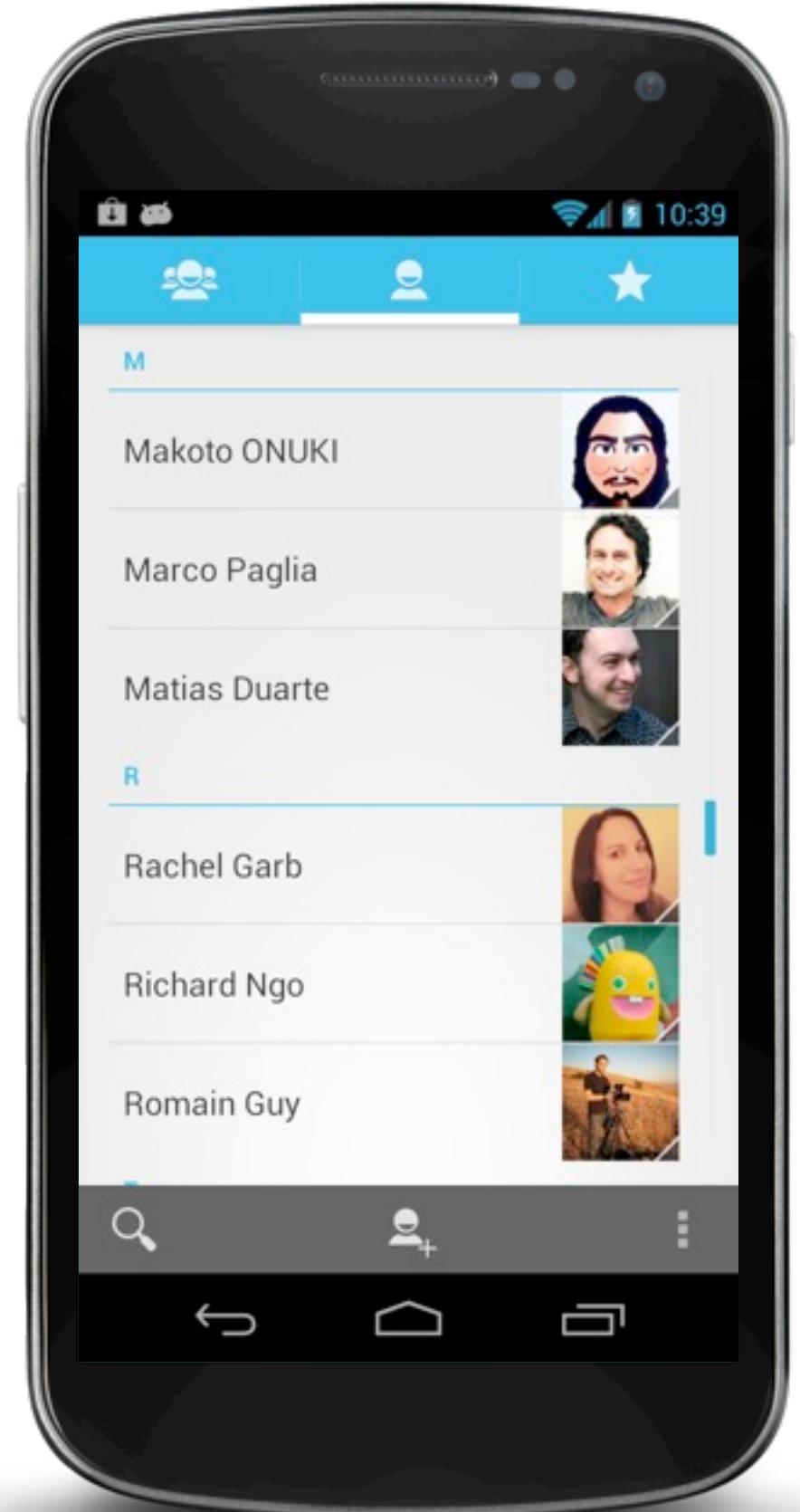
Motivation

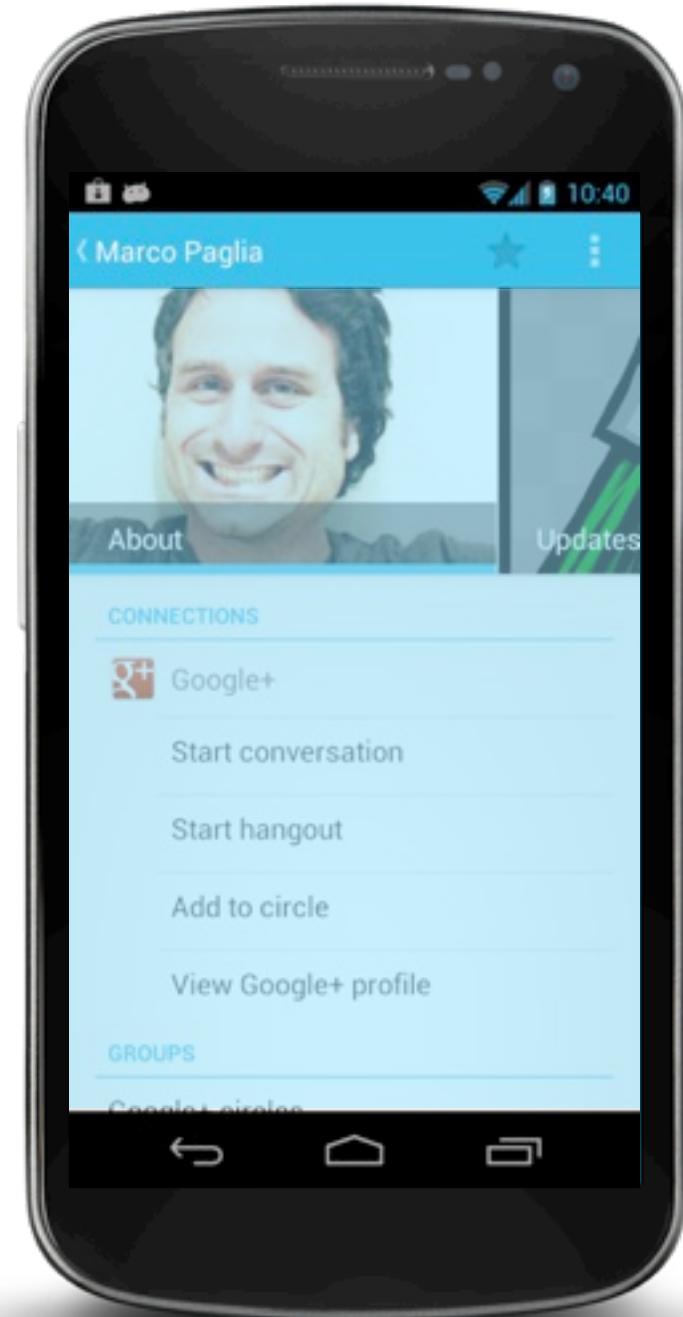
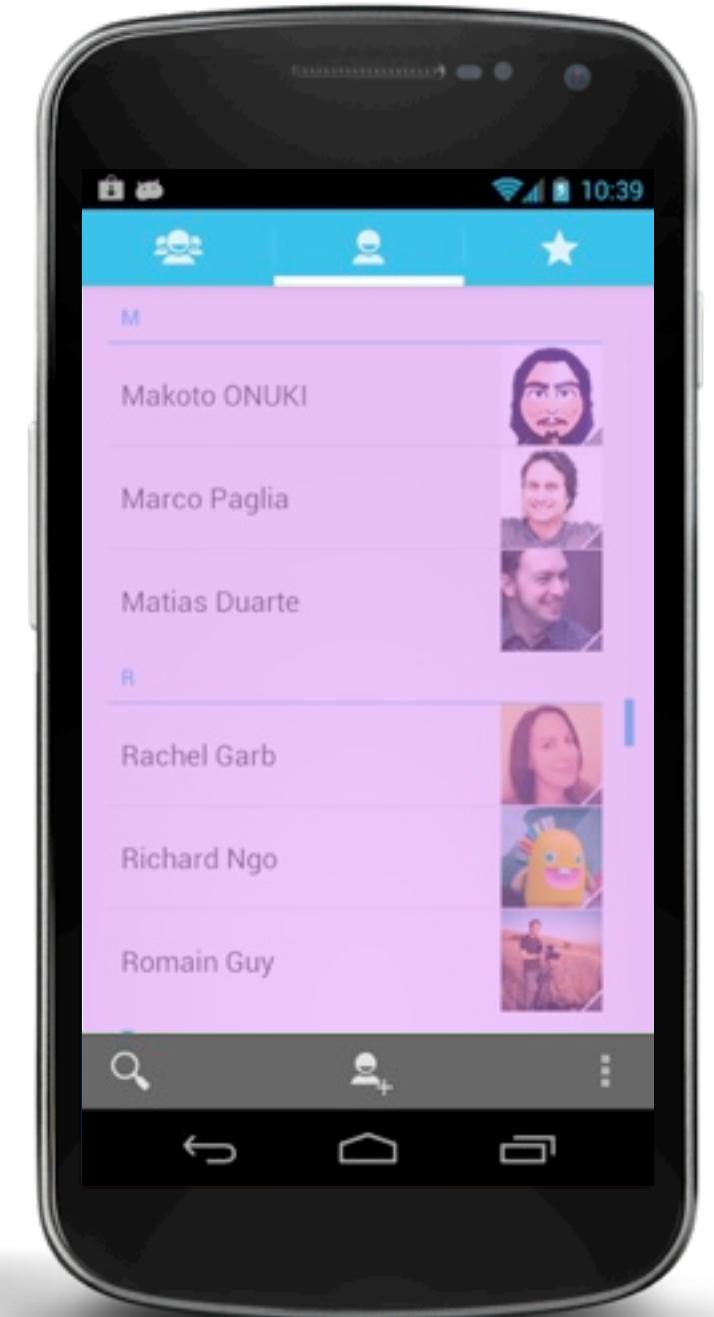
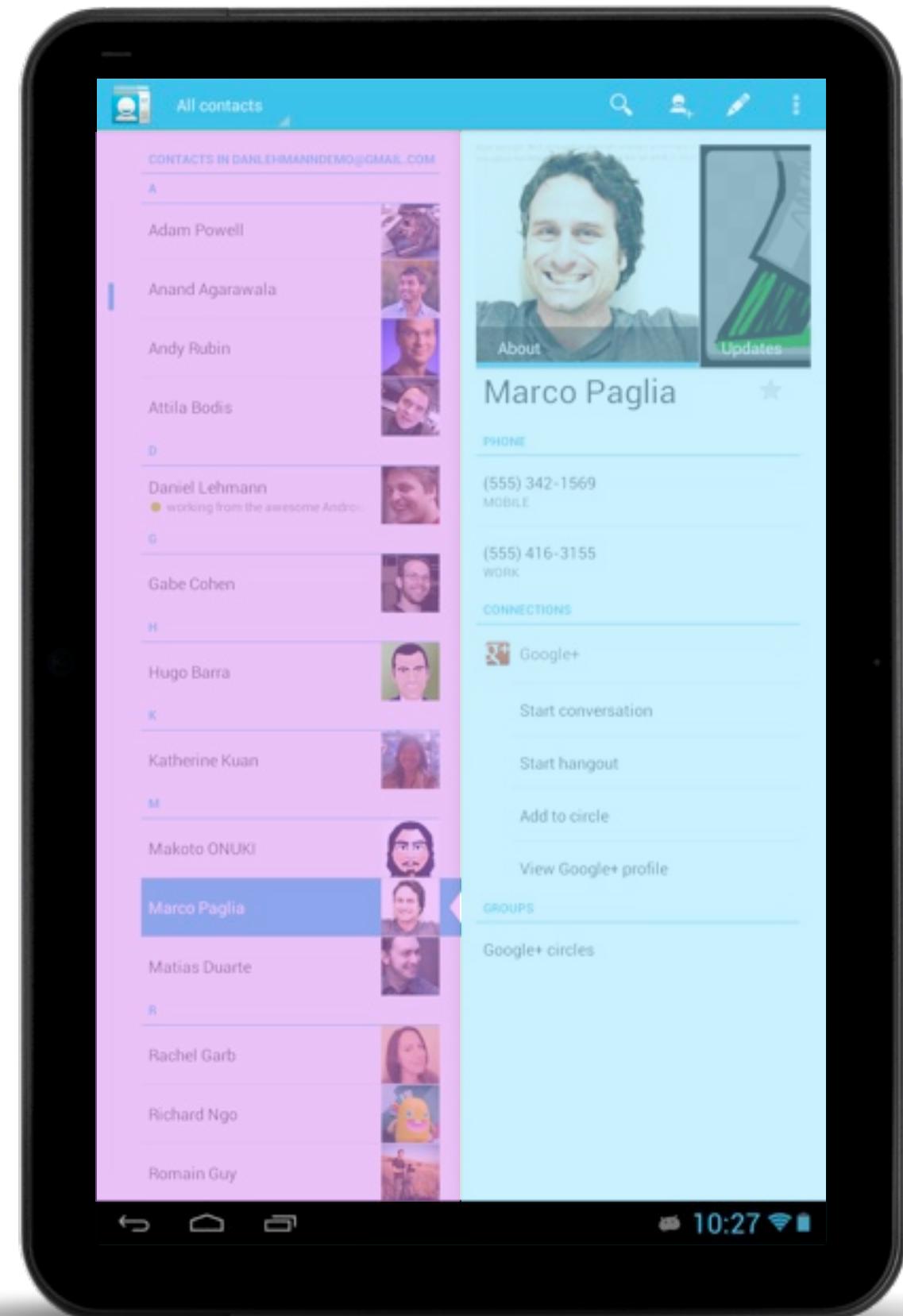
Why use Fragments instead of container views?



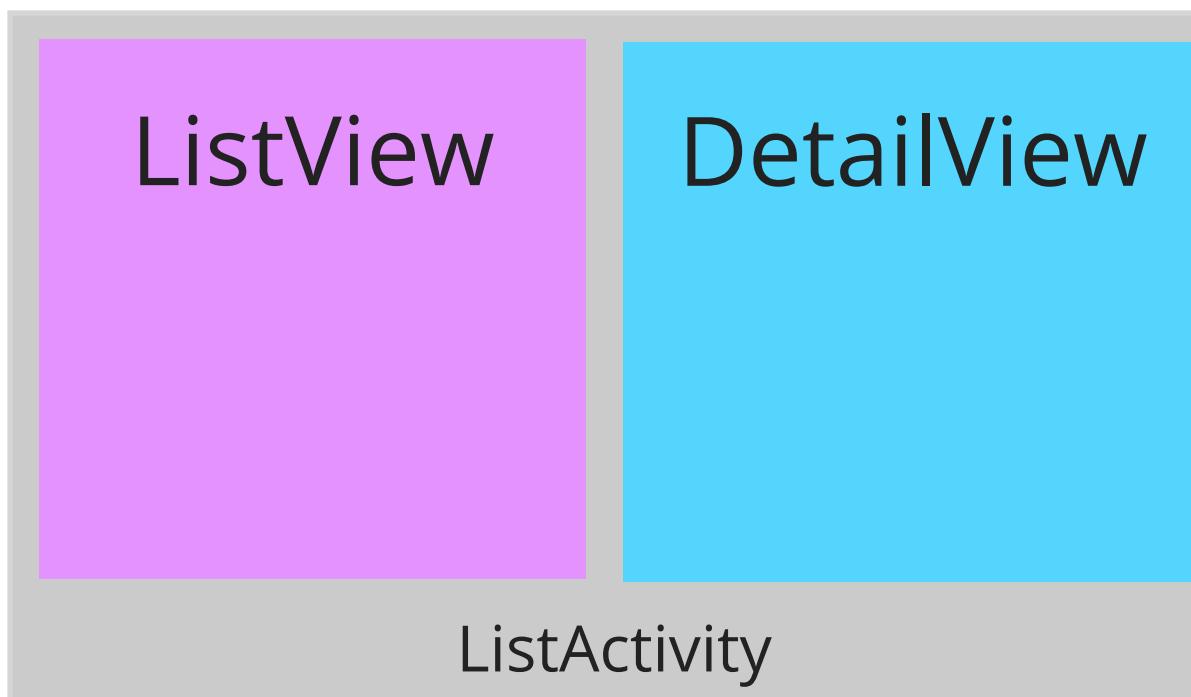
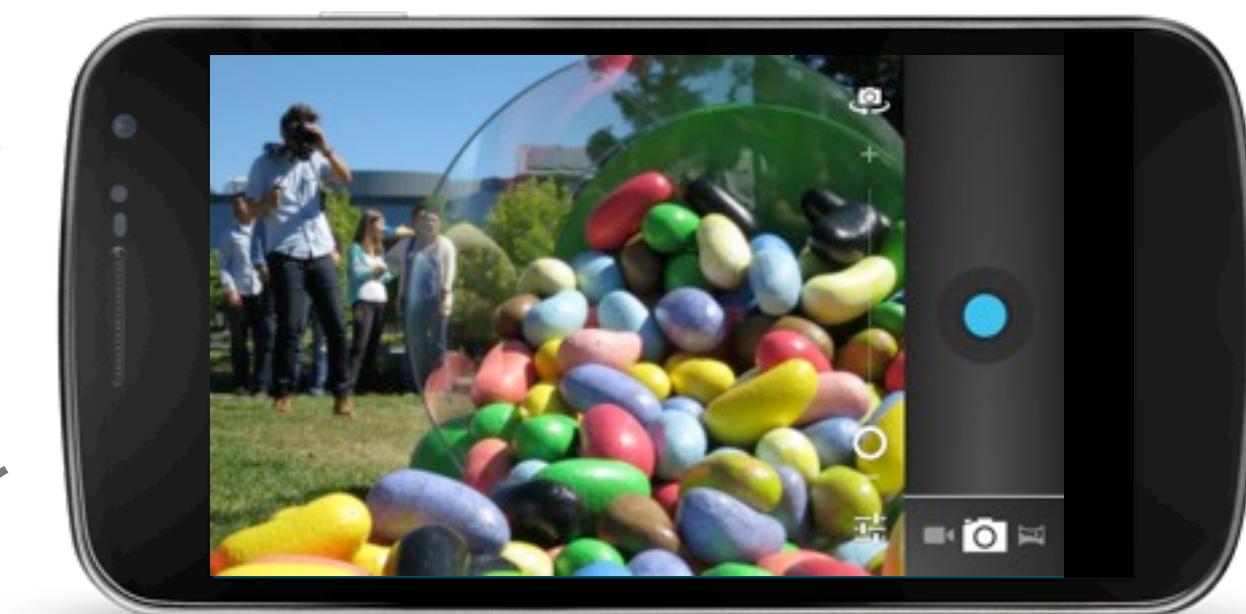
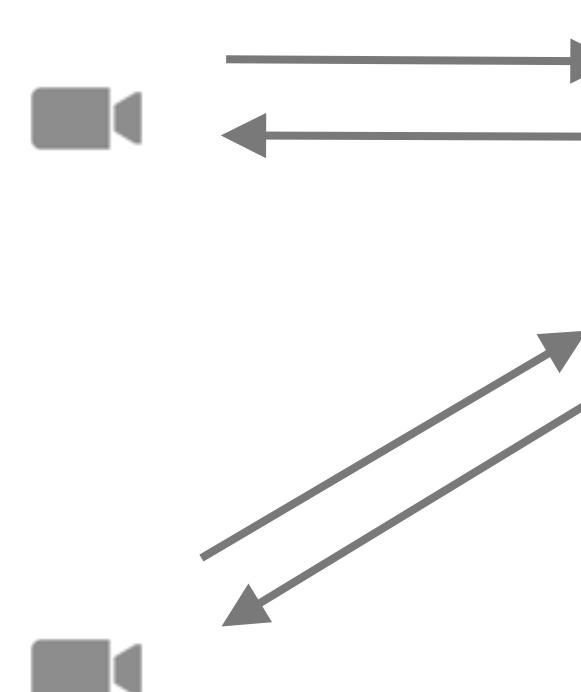
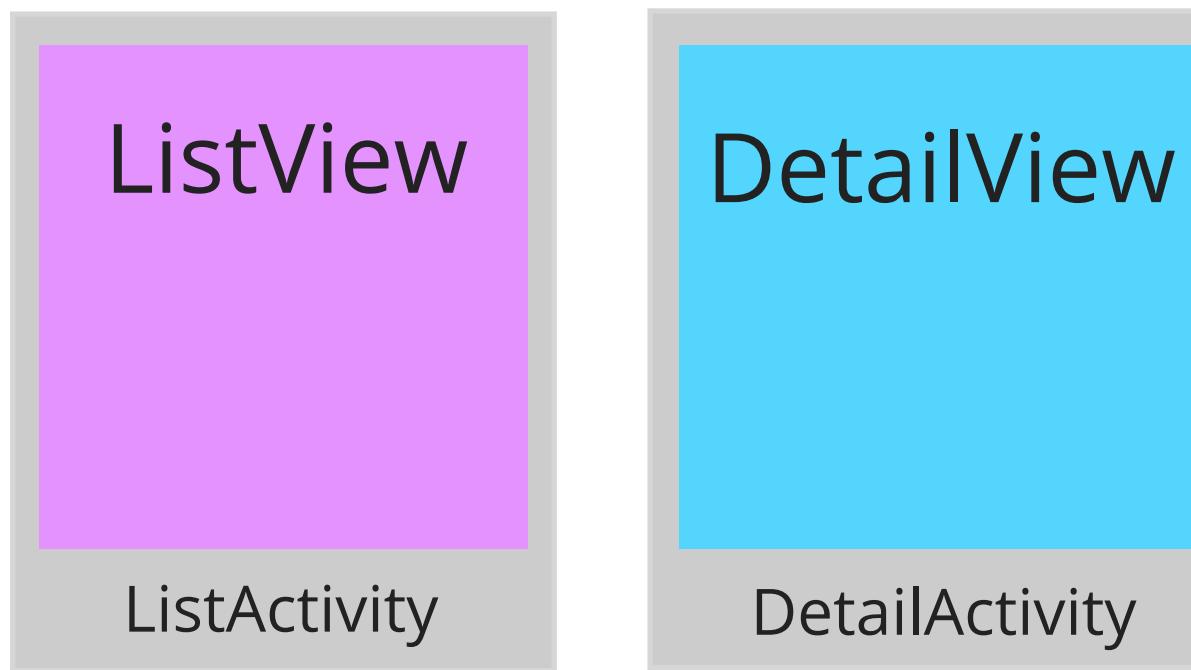






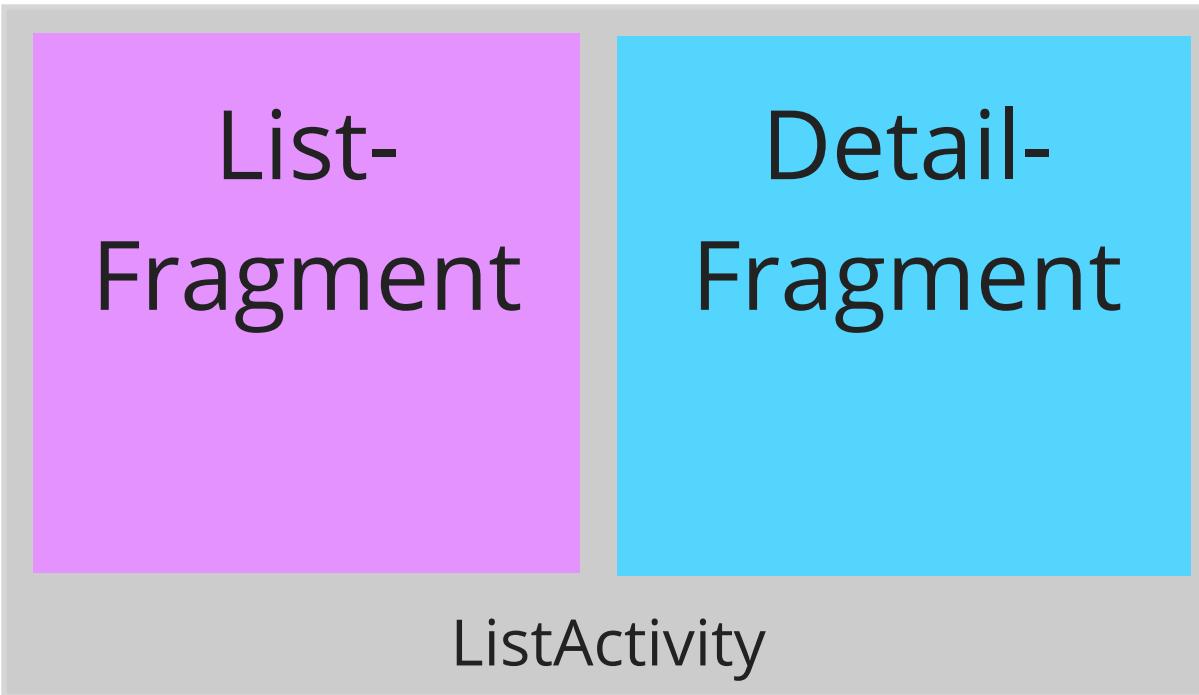


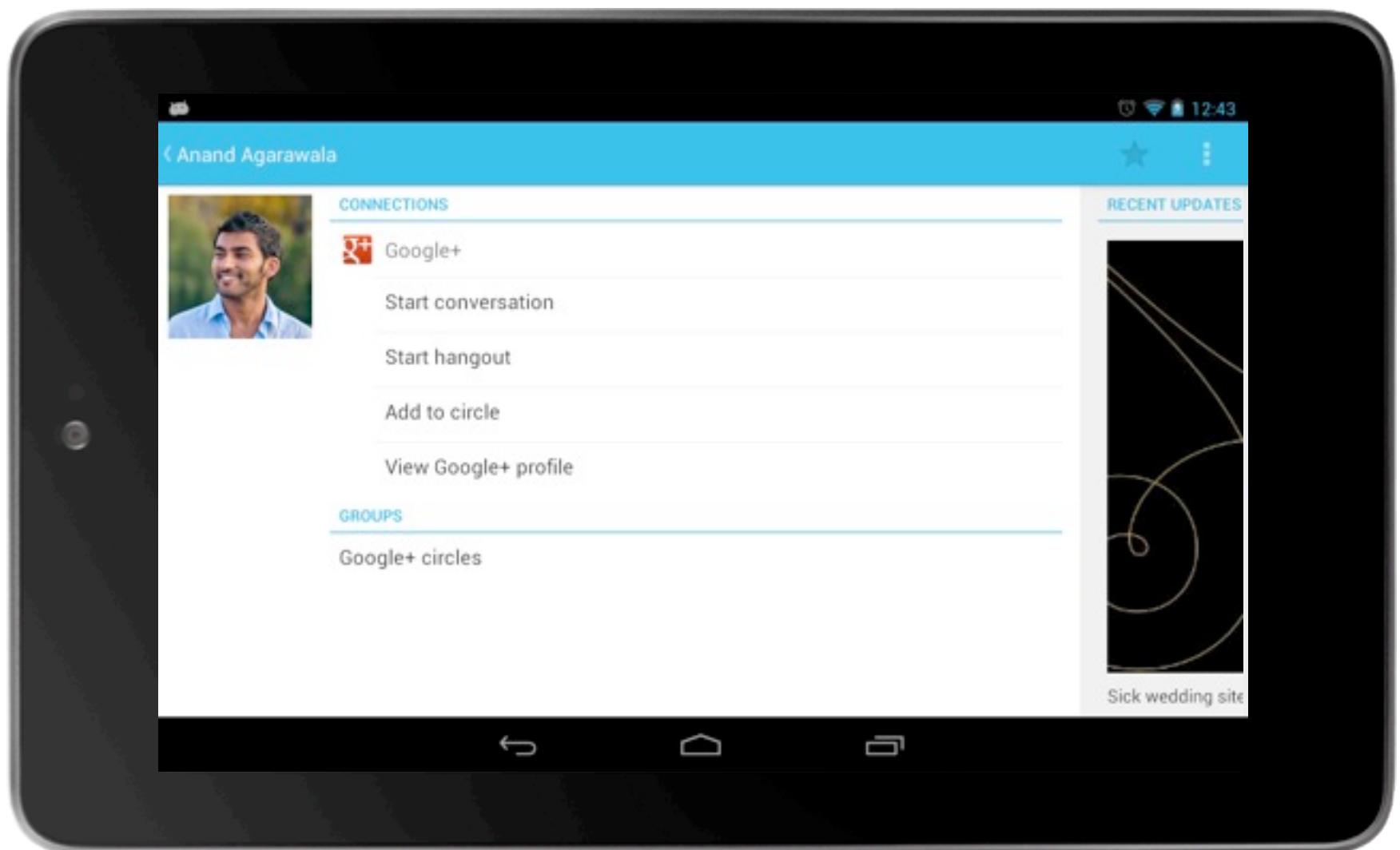
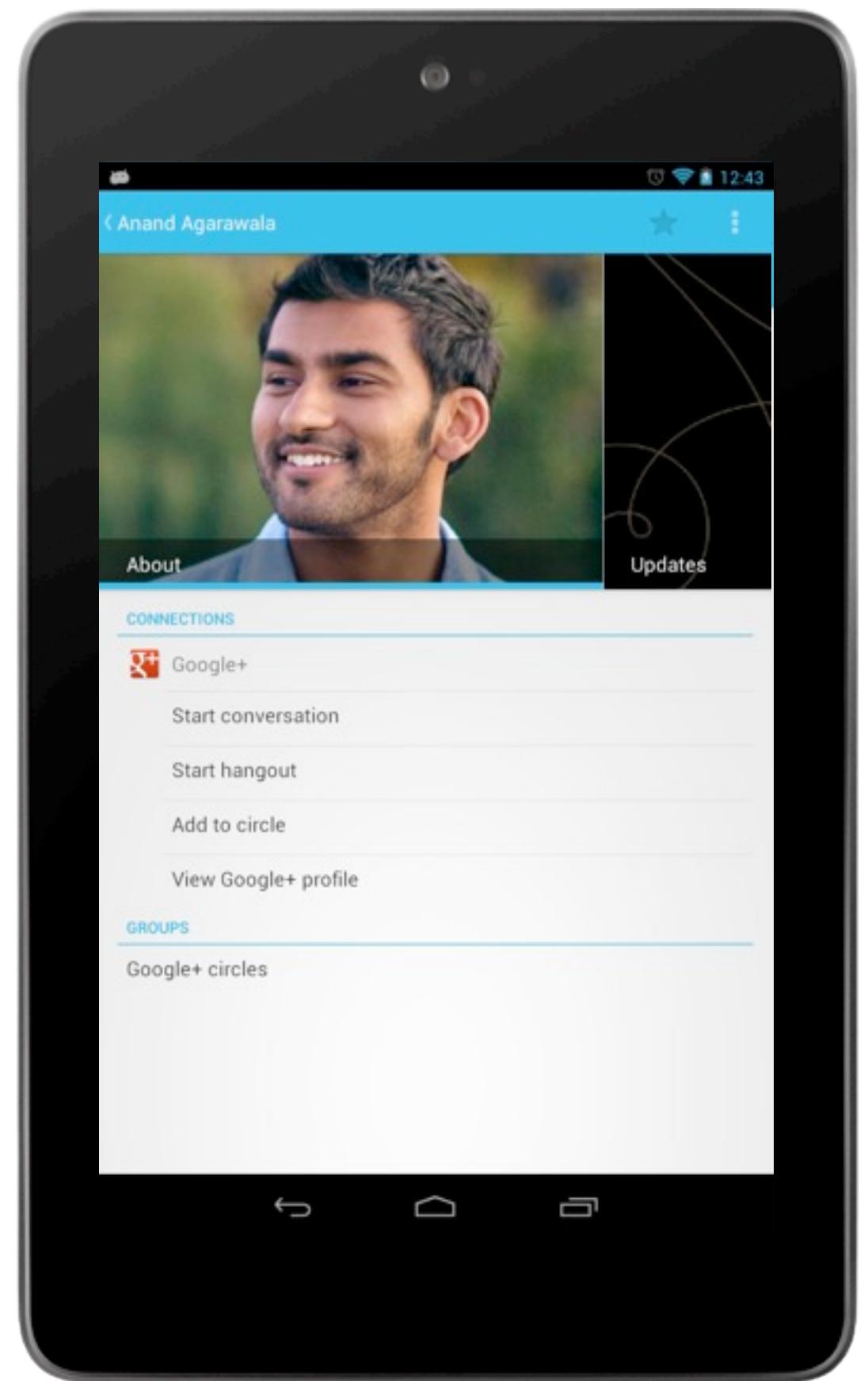
Implementation using Activity+View

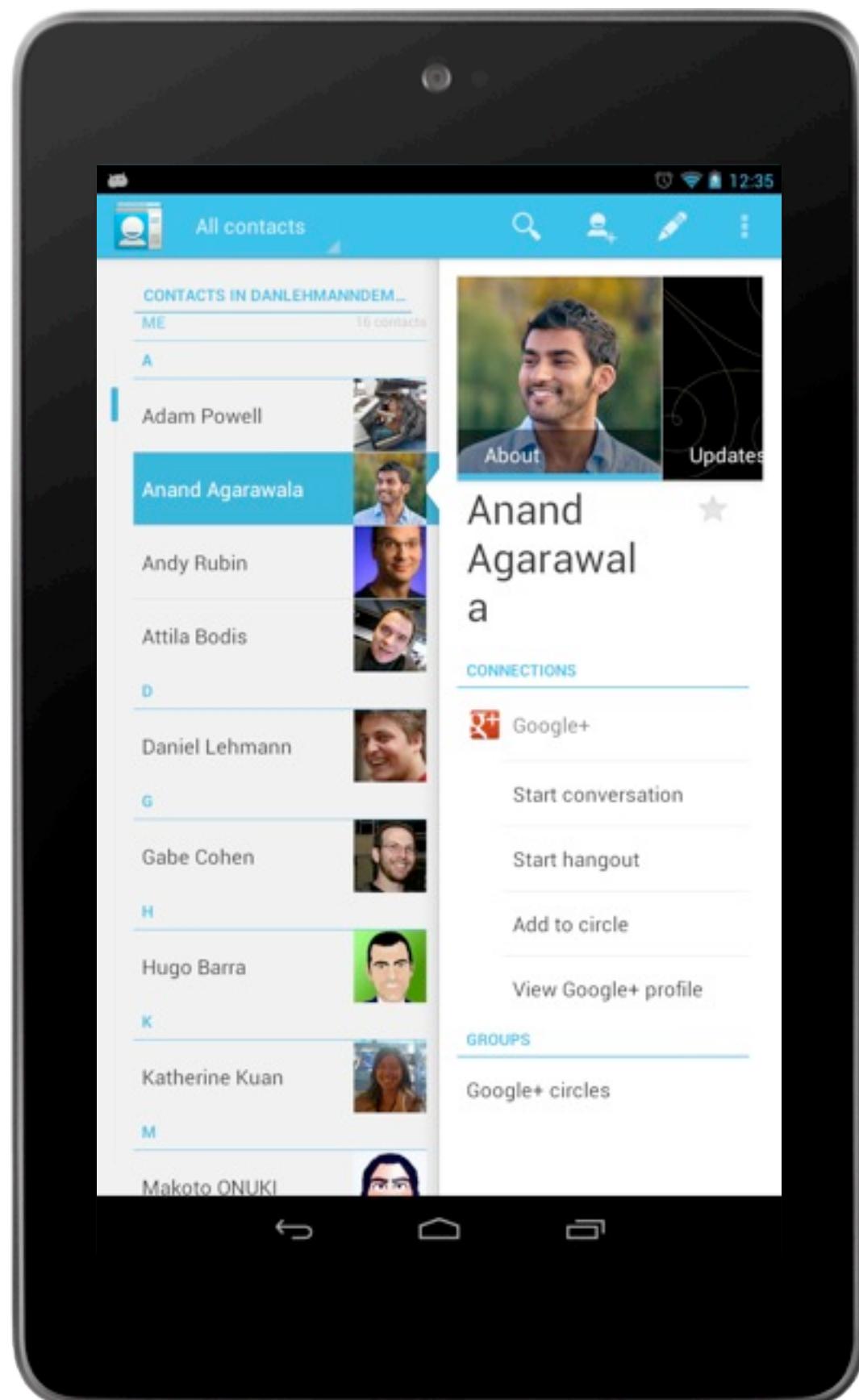
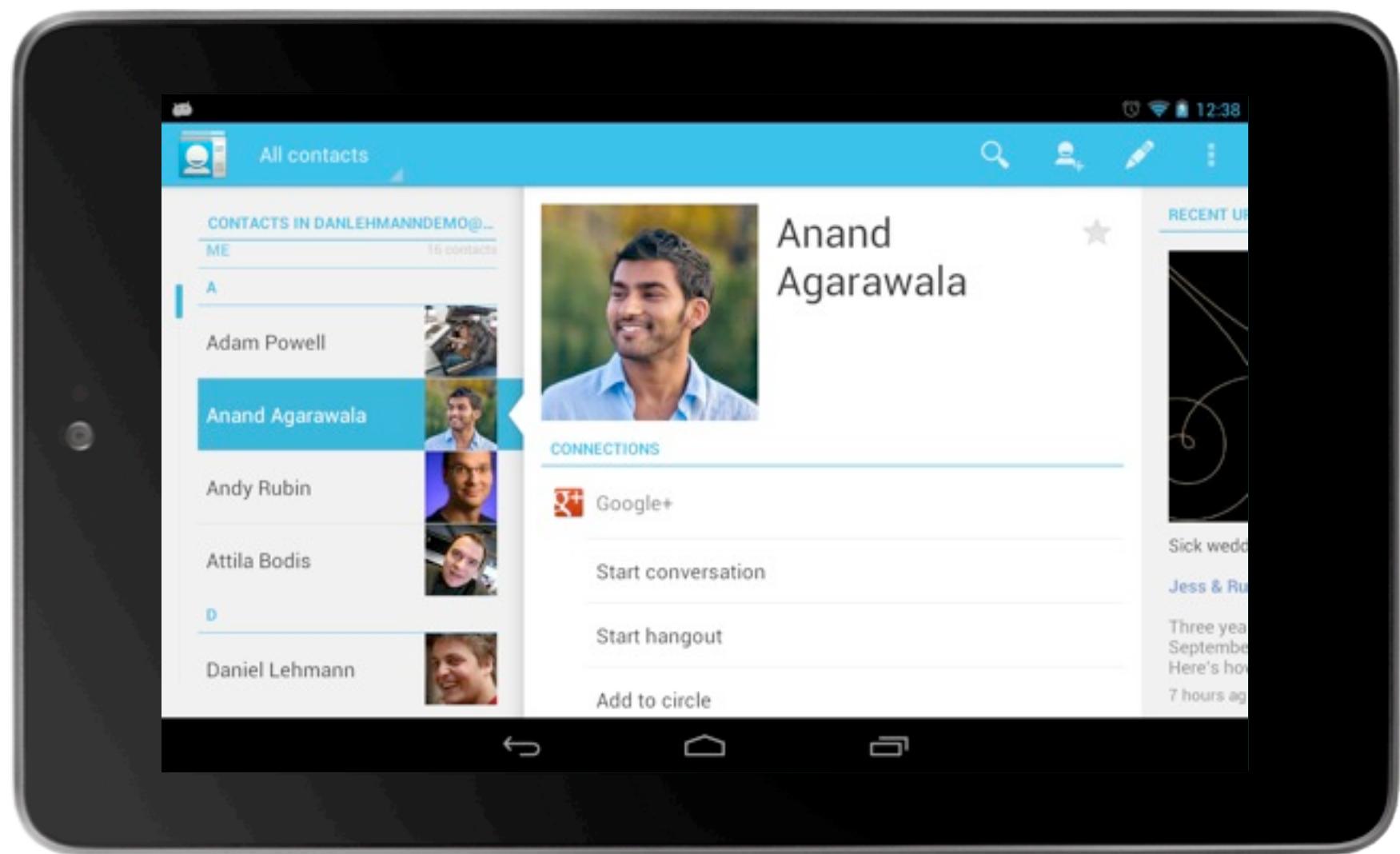


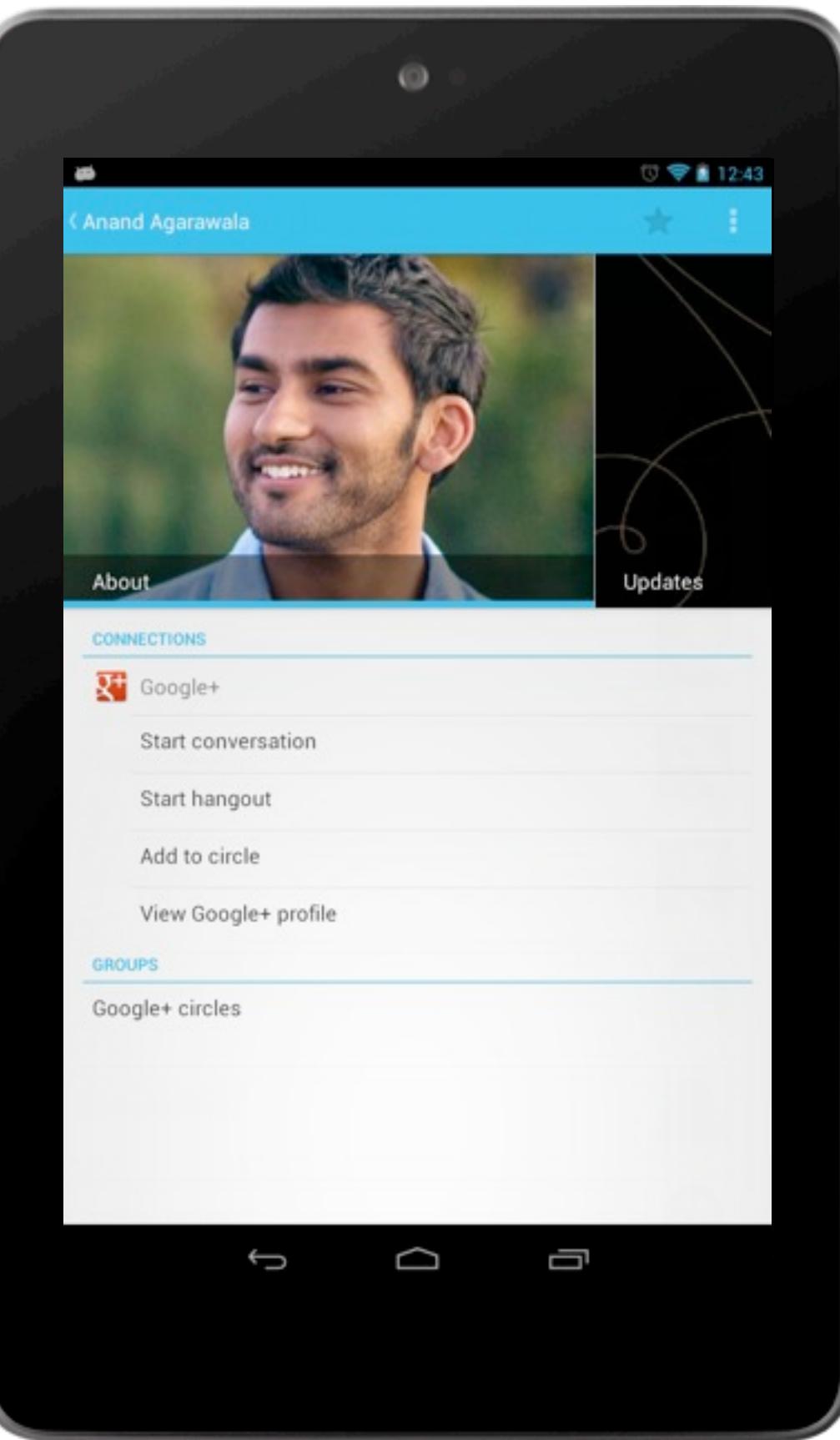
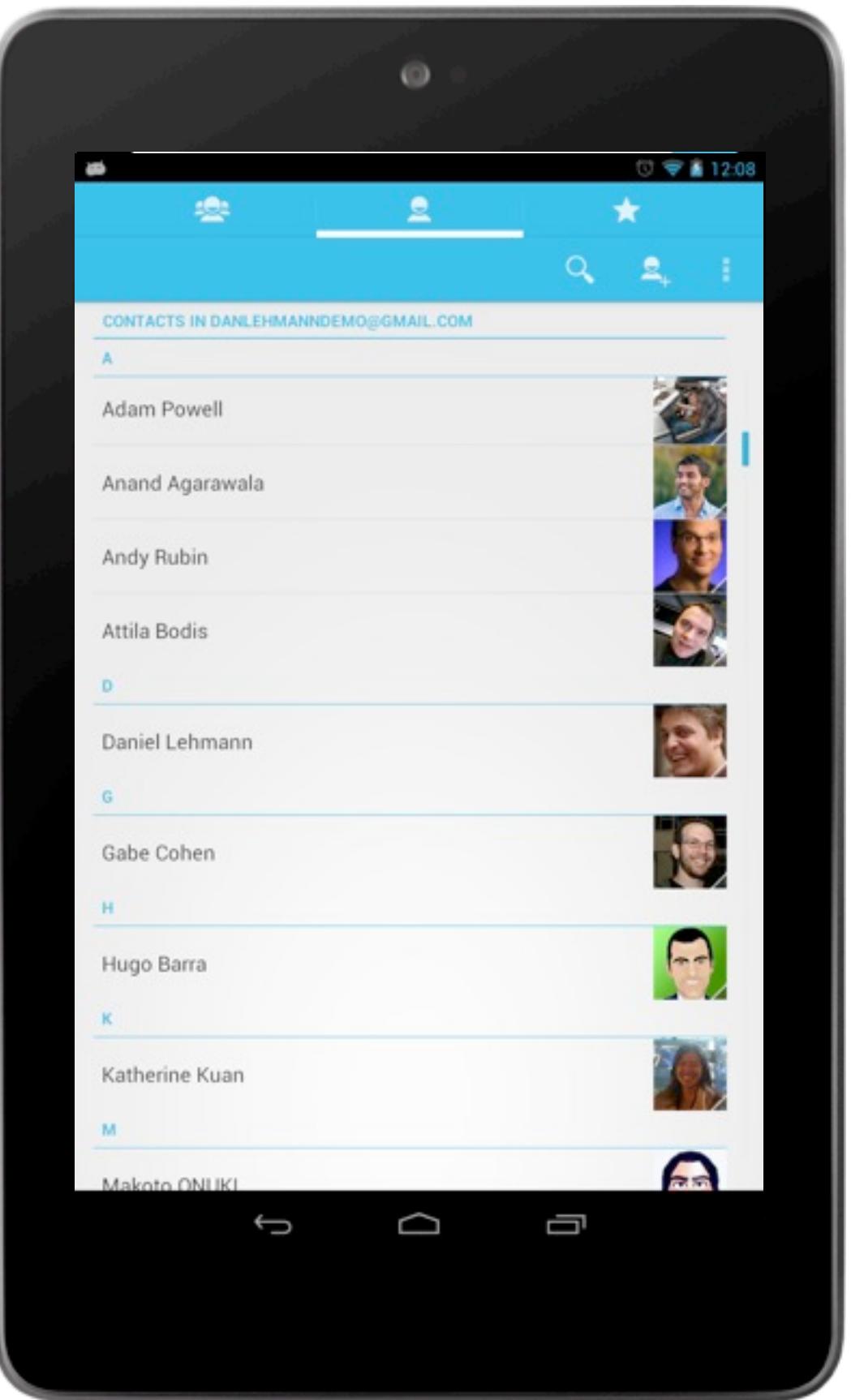
- `onActivityResult`
- Option menus
- Lifecycle
- Data fetching and saving

Fragments









Rotational stability

- Don't change number of panes during runtime



Testing layouts



First option

You might expense a lot of devices ;-)

(thanks)



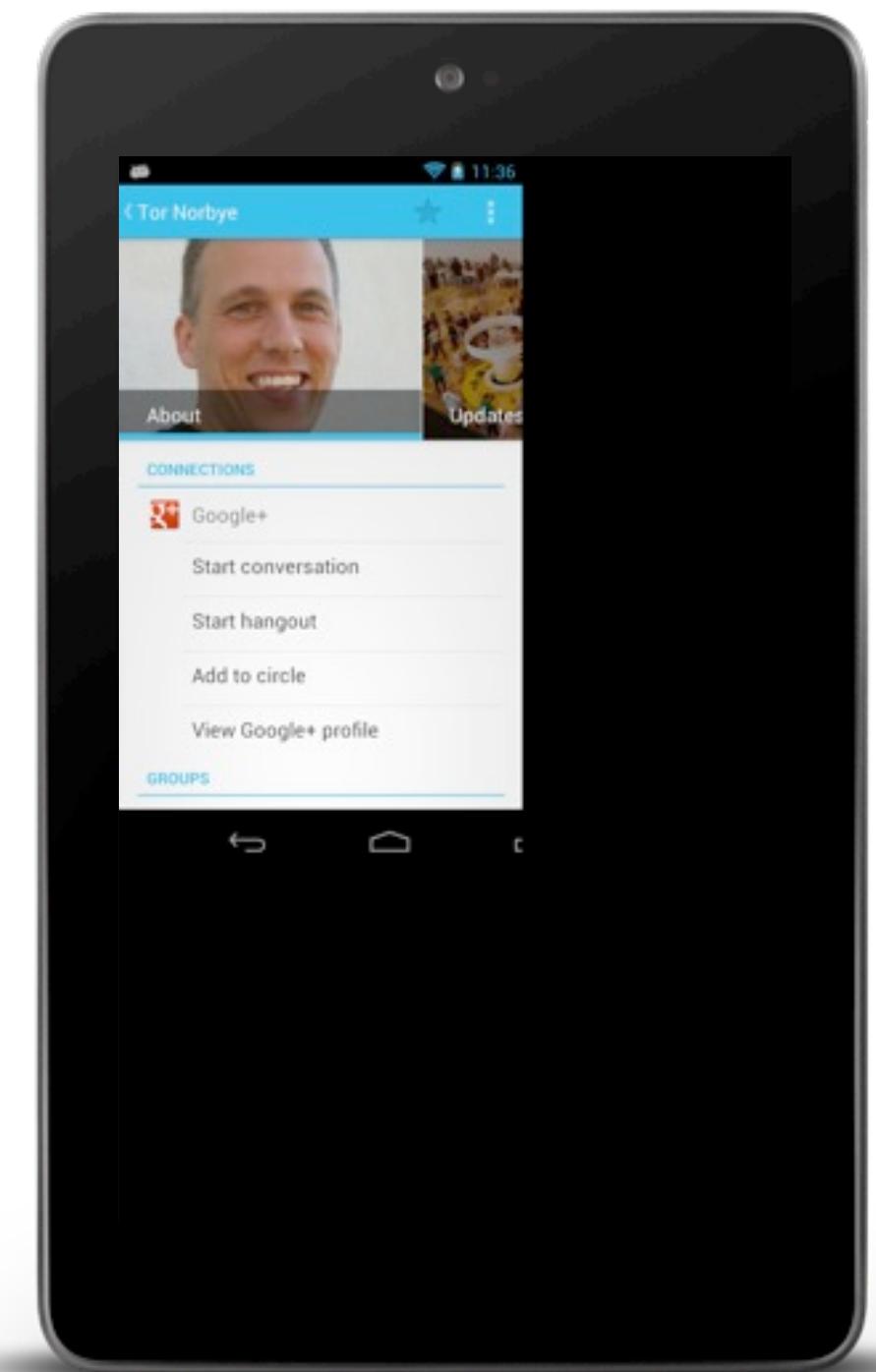
Second option

Simulate a small device in a big device





adb shell am display-size 1024x768



adb shell am display-size 852x480

Small device simulation demo

Limitations

- Can not change density
- Some limitations when crossing device buckets

Reset

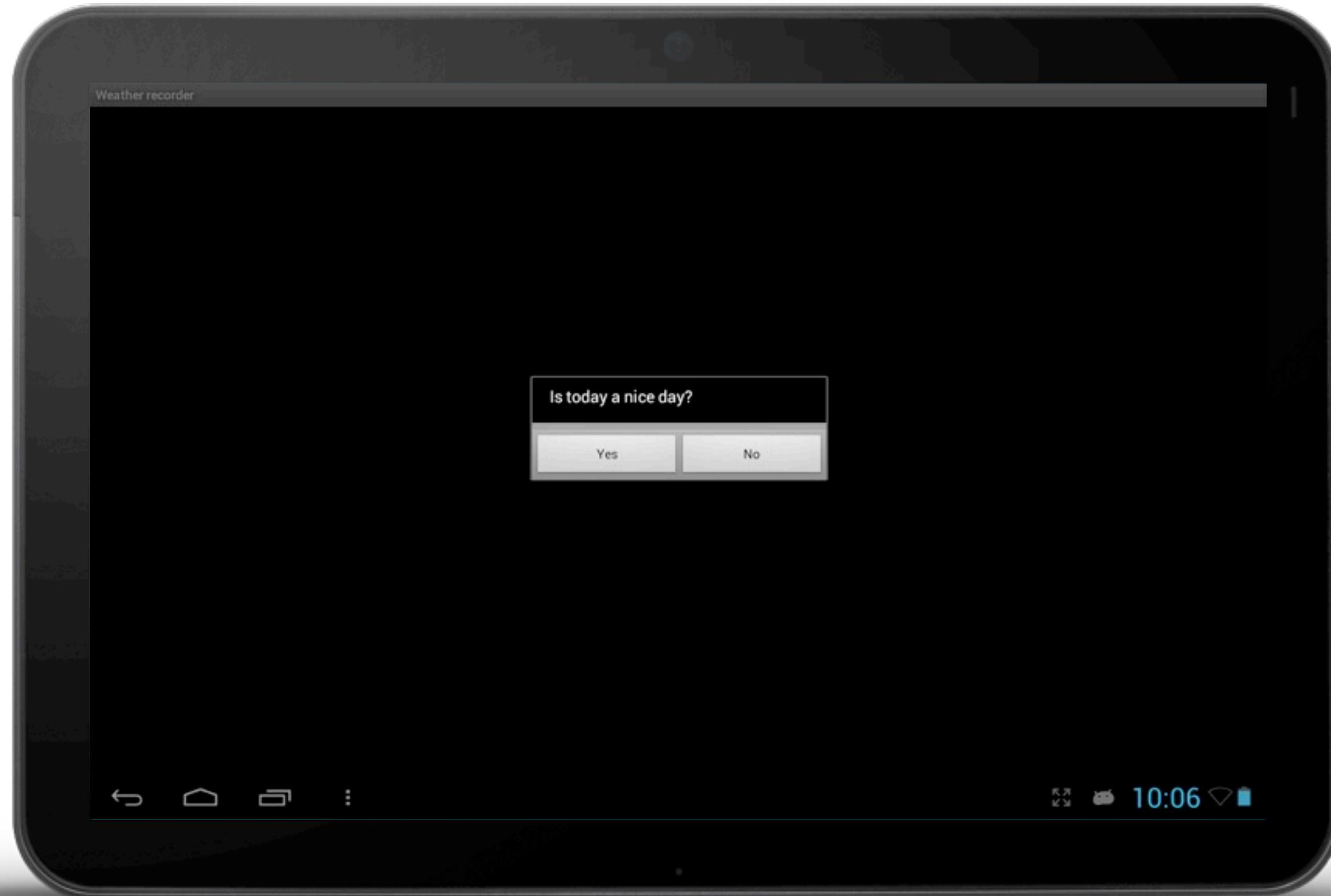
- adb shell am display-size reset

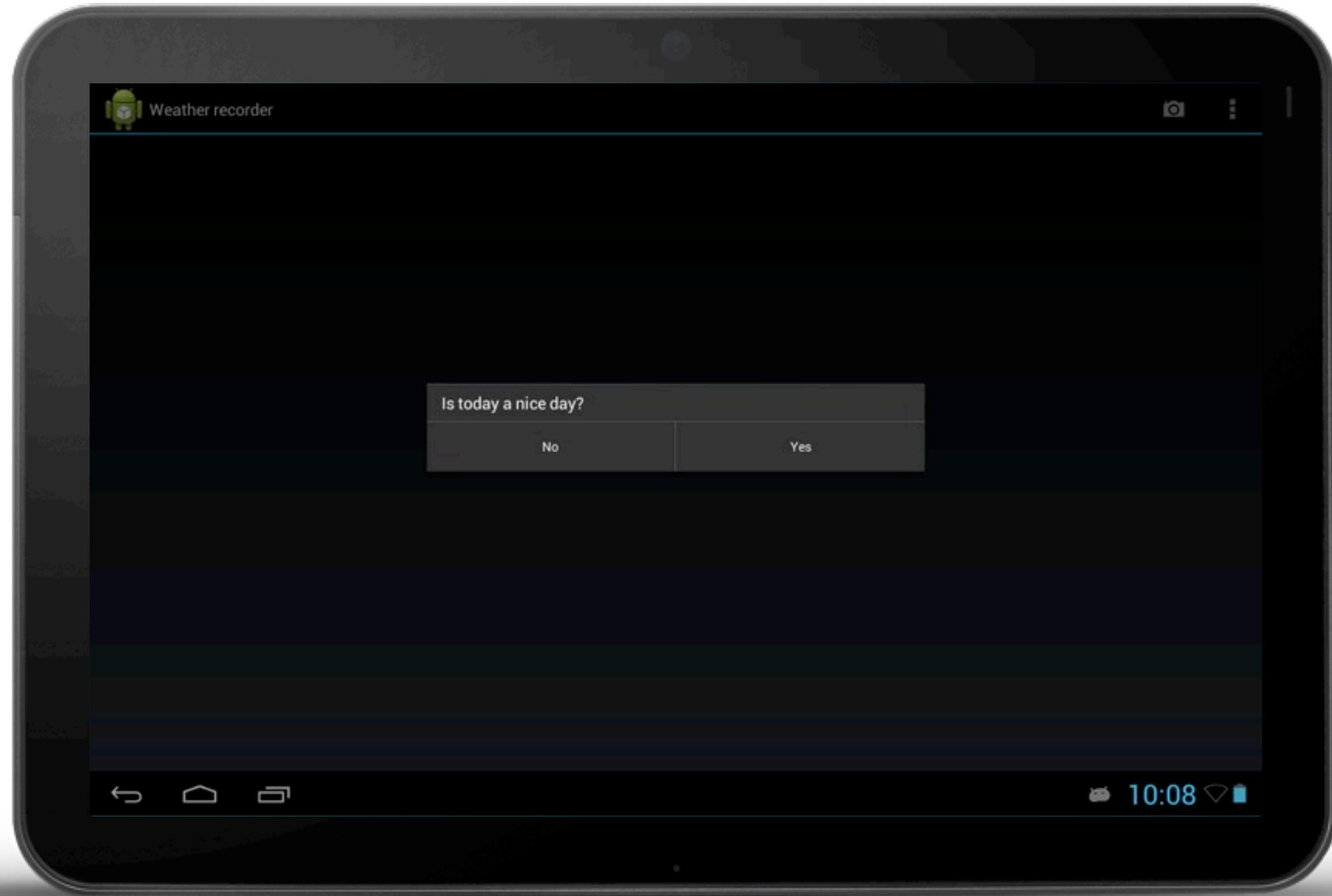


Target SDK Version

Set to the highest targetSdkVersion







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