Material Design

Disclaimer: Some images are taken from the original documentation (www.google.com/design) © Google

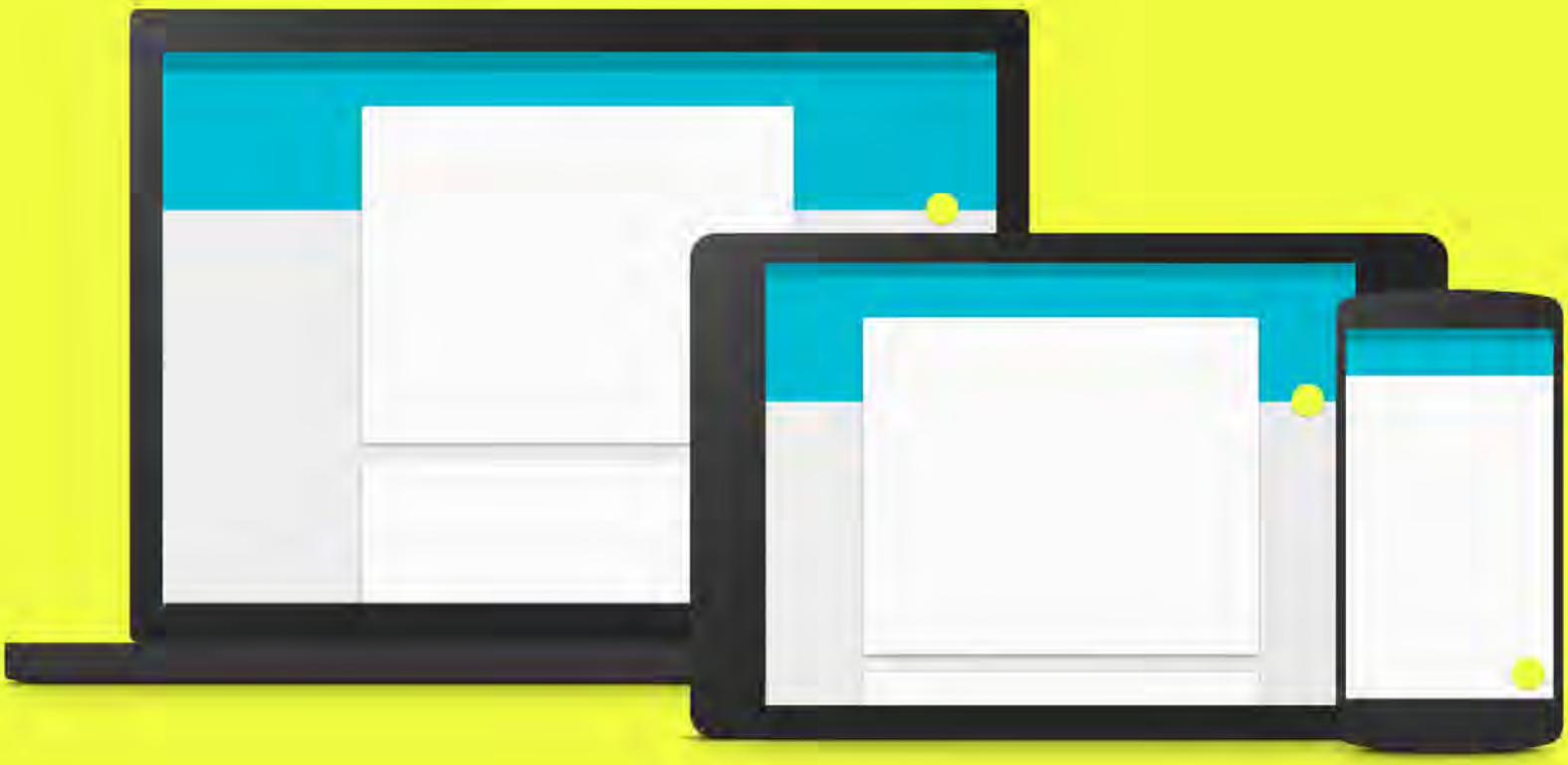
Tim Roes

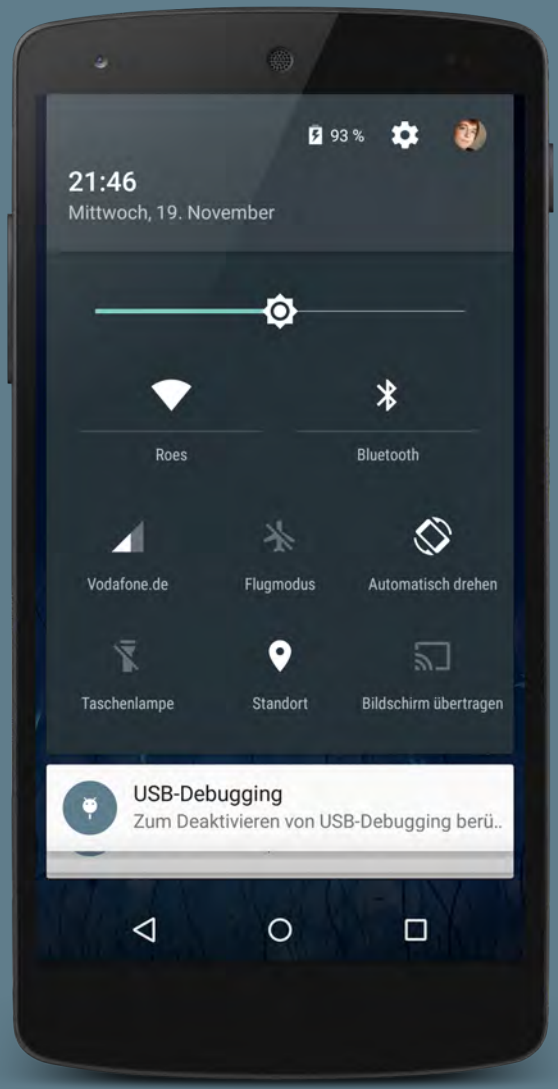
Android- & Web-Developer
@ inovex in Karlsruhe

GDG Karlsruhe Co-Organizer

www.timroes.de/+

November 1, 2009
Android
Notifications
Twitter
New mentions
24 new messages
You have mail!
Romain Guy
I was lucky to find a Canon 5D
J Planning
The Botcave
Stopwatch PRO
Counting up
Incoming call
Matias Duarte
November 1, 2010
Android
Notifications
Mike Cleron
File Upload
Incoming call
Matias Duarte
Stopwatch PRO
Counting up
J Planning
The Botcave
Romain Guy
October 19, 2011
Twitter
New mentions
Google+
Kanye West has added you
24 new messages
J Planning
The Botcave
Andy Rubin
Drinks tonight?
Larry Page
Screenshot captured
Touch to view your screens
7:18
TUESDAY
JUNE 26, 2012
Missed call
Call Back
Message
4 new messages
Andy Rubin
Alice, Bob
Jim, Leonard
Colin McMillen
Google I/O Keynote
Snooze
Email guests
Romain Guy
Ted Powder



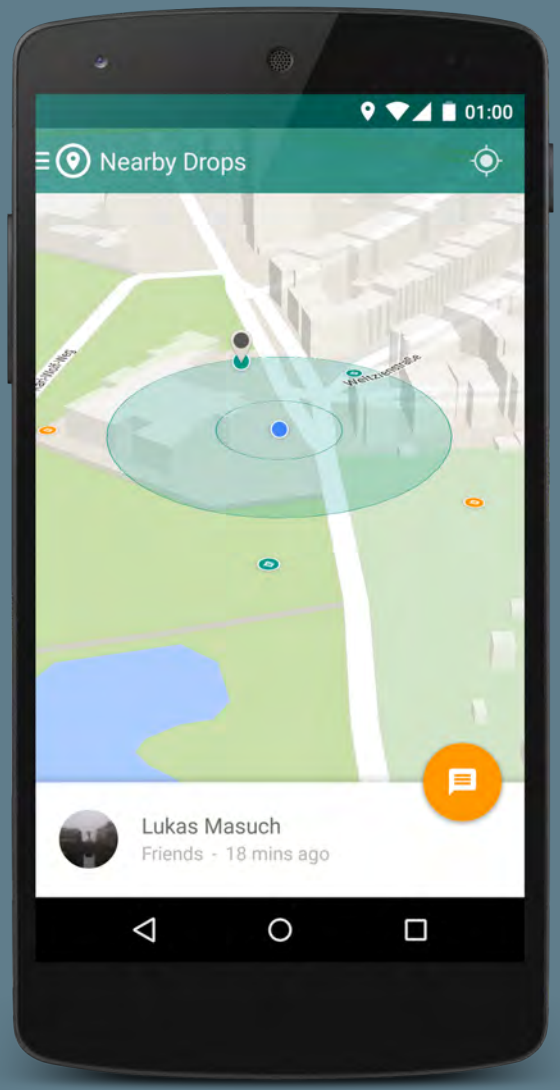

93 %
21:46
Mittwoch, 19. November
Roes
Bluetooth
Vodafone.de
Flugmodus
Automatisch drehen
Taschenlampe
Standort
Bildschirm übertragen
USB-Debugging
Zum Deaktivieren von USB-Debugging berü..

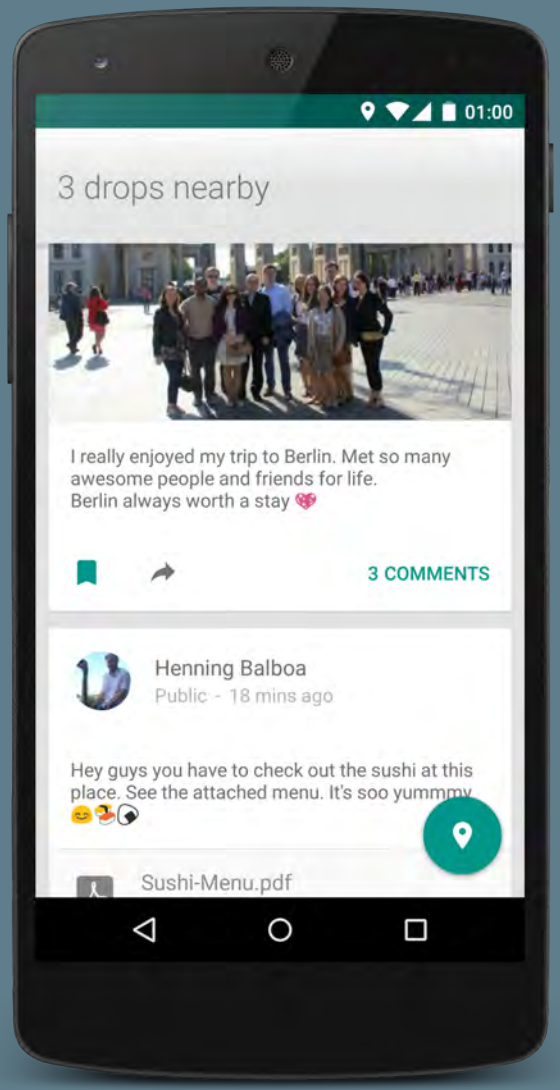
Vodafone.de
95 %
21:55
Mittwoch, 19. November
Screenshot aufgenommen
21:55
Zum Ansehen berühren
1 Datei hochgeladen
21:50
392,1 KB
USB-Debugging
Zum Deaktivieren von USB-Debugging berü..
Wird aufgeladen (voll in 16 Min.)

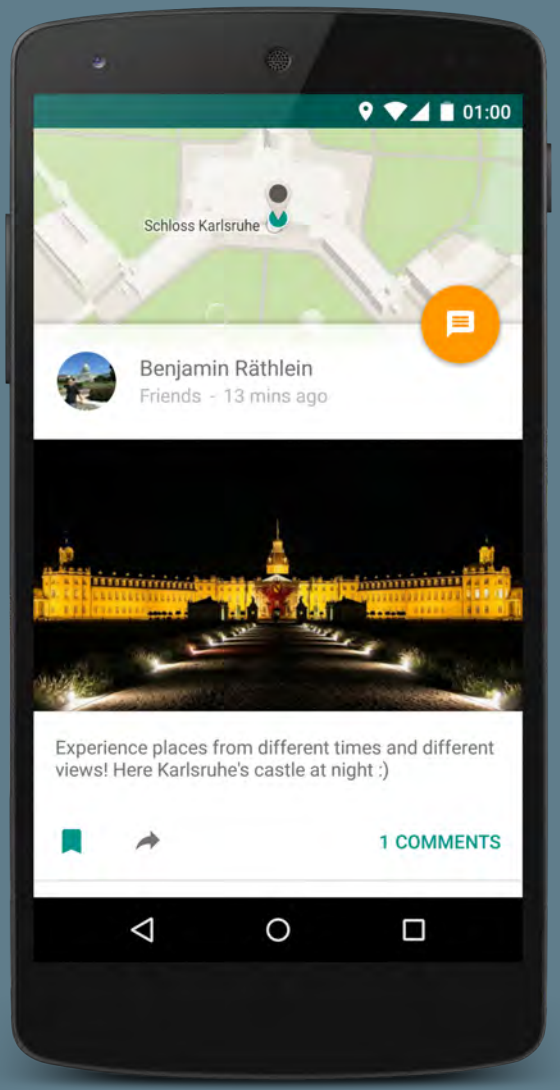
Drop

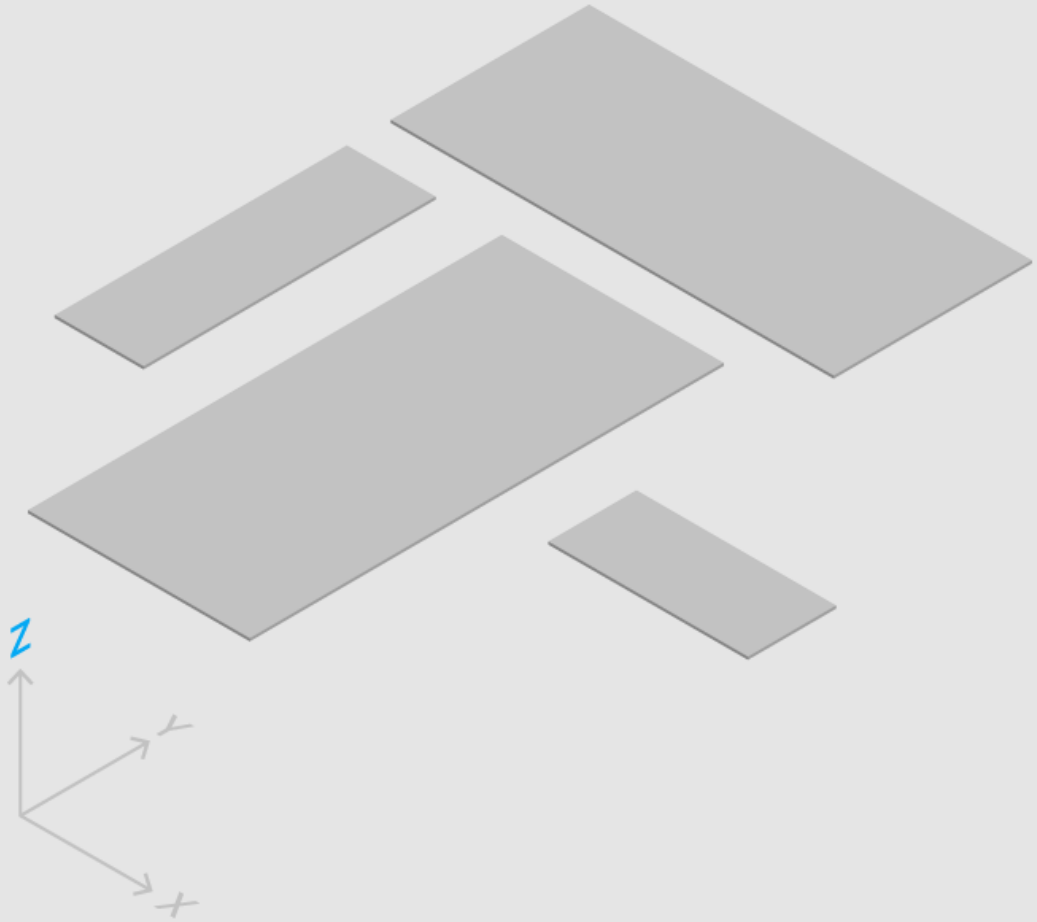
bit.ly/12PX9ih

Invite Code:
INOVEX

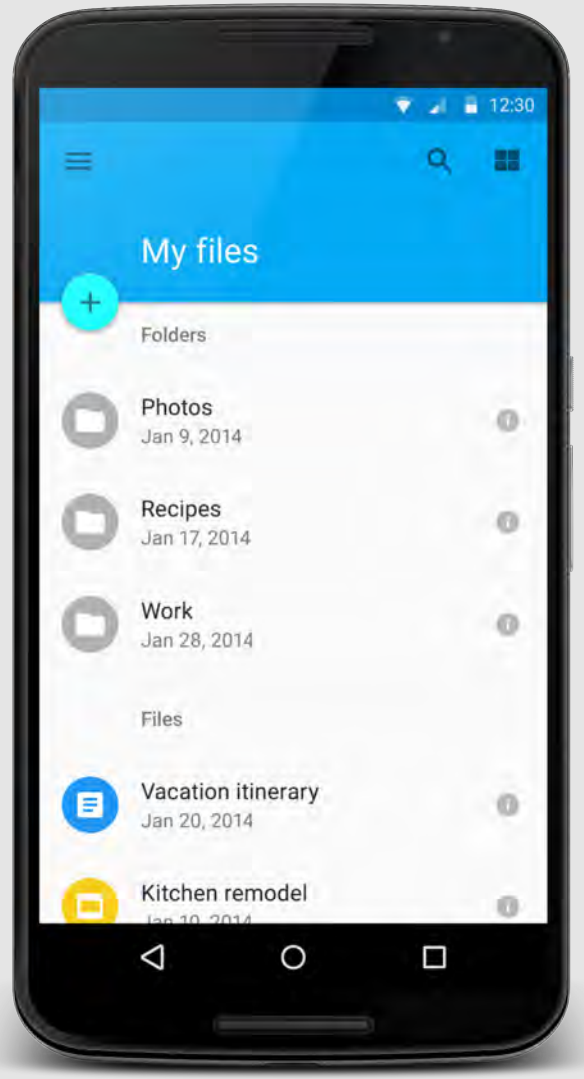



01:00
3 drops nearby
I really enjoyed my trip to Berlin. Met so many awesome people and friends for life.
Berlin always worth a stay
3 COMMENTS
Henning Balboa
Public - 18 mins ago
Hey guys you have to check out the sushi at this place. See the attached menu. It's soo yummmy
Sushi-Menu.pdf

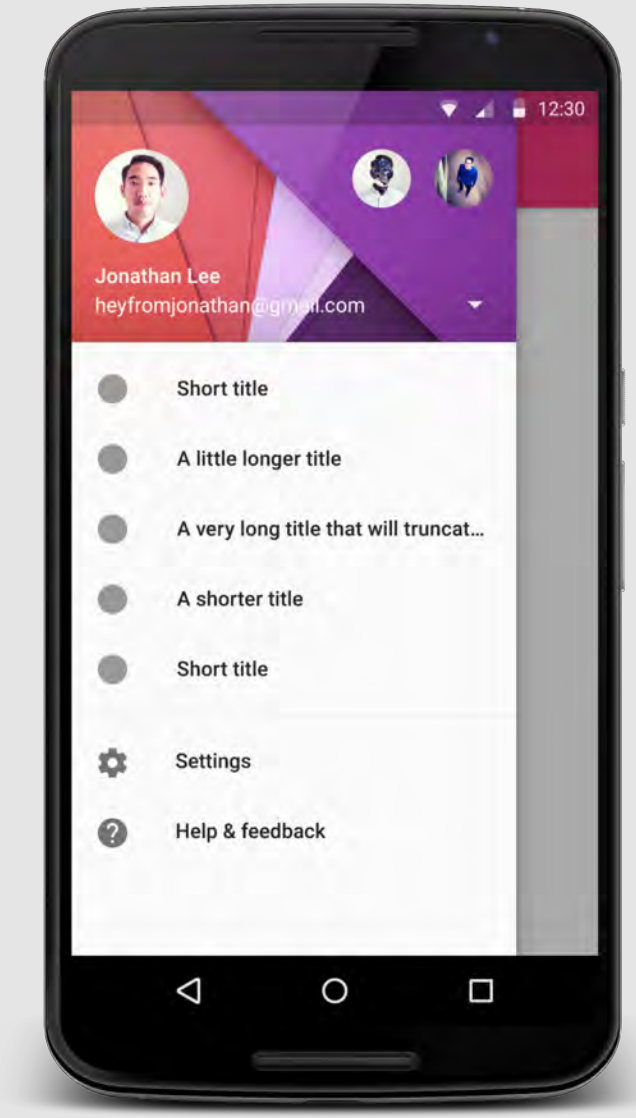

01:00
Schloss Karlsruhe
Benjamin Räthlein
Friends - 13 mins ago
Experience places from different times and different views! Here Karlsruhe's castle at night :)
1 COMMENTS



Paper


12:30
My files
Folders
Photos
Jan 9, 2014
Recipes
Jan 17, 2014
Work
Jan 28, 2014
Files
Vacation itinerary
Jan 20, 2014
Kitchen remodel

Ink



Settings, Help & Feedback

now in the Navigation Drawer

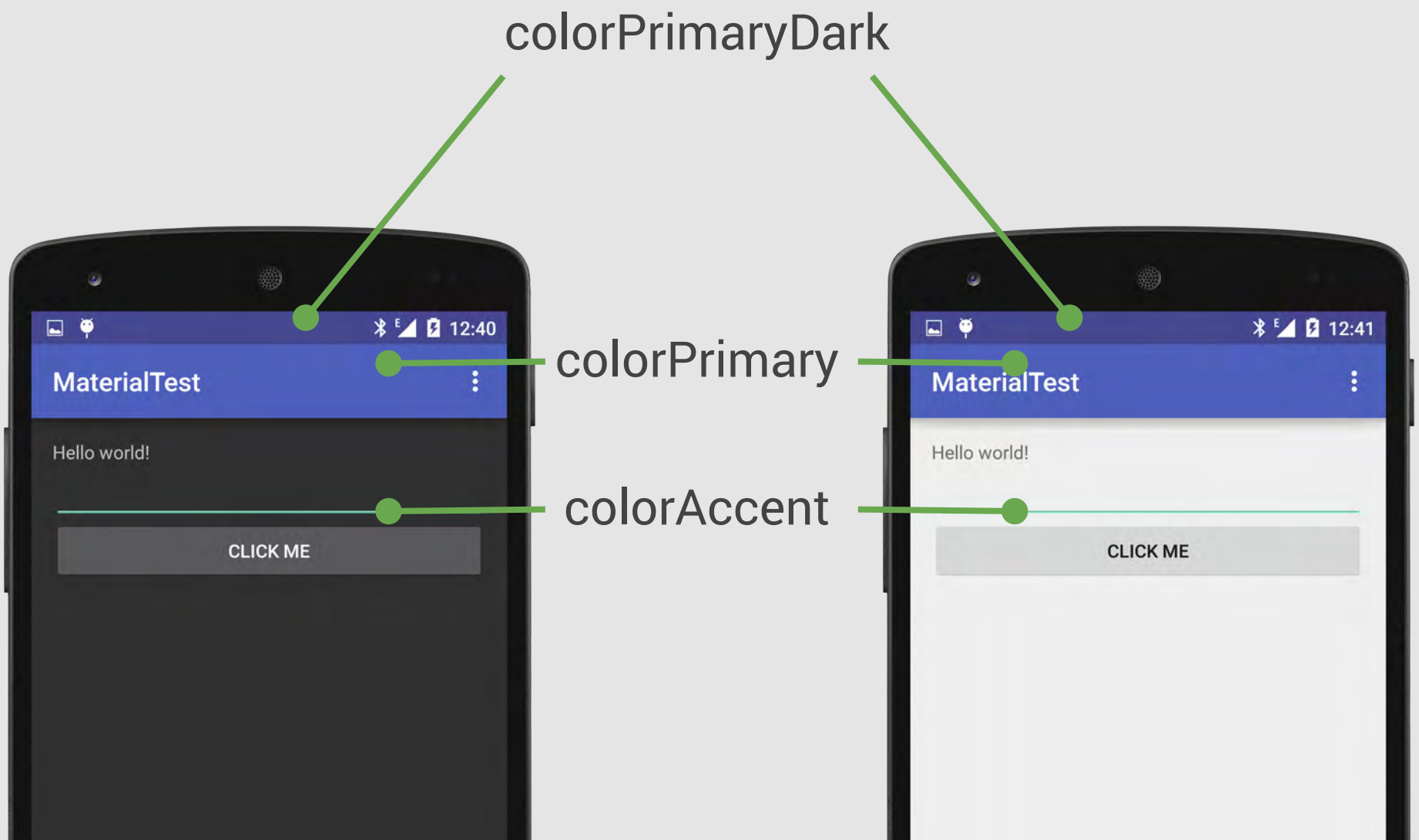
Theme.Material.Light

```
<style name="MyTheme" parent="android:Theme.Material">

    <item name="android:colorPrimary">...</item>
    <item name="android:colorPrimaryDark">...</item>
    <item name="android:colorAccent">...</item>

</style>
```

* Compatibility with AppCompat v7


colorPrimaryDark
colorPrimary
colorAccent
12:40
MaterialTest
Hello world!
CLICK ME
12:41
MaterialTest
Hello world!
CLICK ME

android:TextAppearance.Material.Display4

Display3

Display2

Display1

Headline

Title

Subhead

Body2

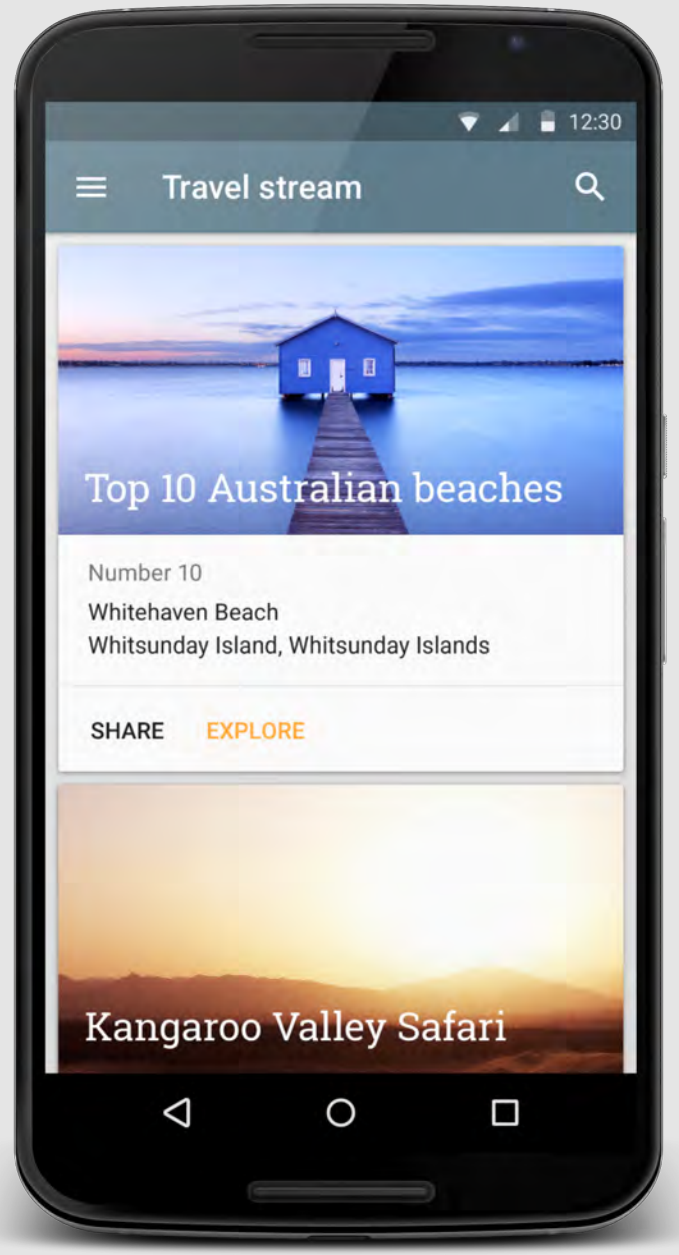
Body1

Caption

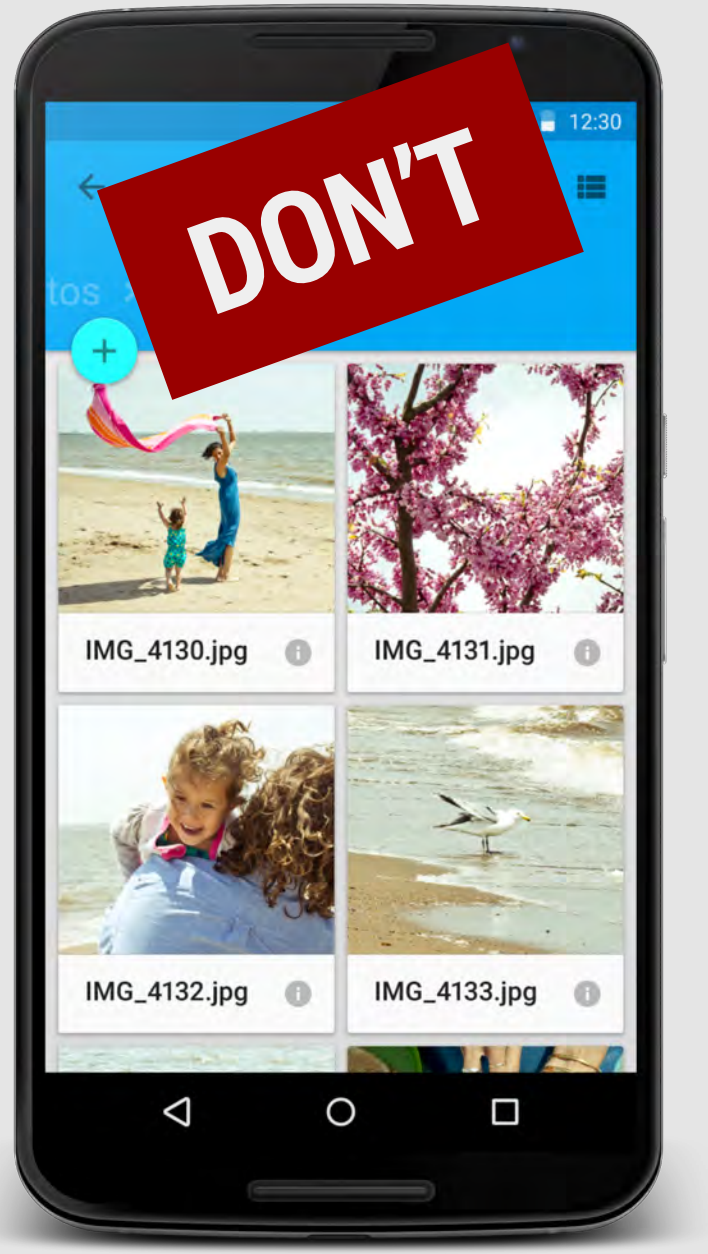
Menu

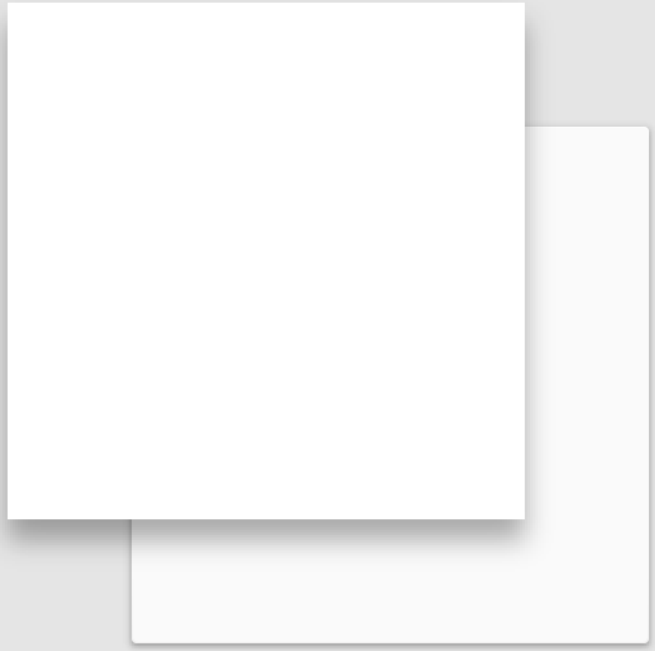
Button

Cards


12:30
Travel stream
Top 10 Australian beaches
Number 10
Whitehaven Beach
Whitsunday Island, Whitsunday Islands
SHARE
EXPLORE
Kangaroo Valley Safari

Cards





Shadows

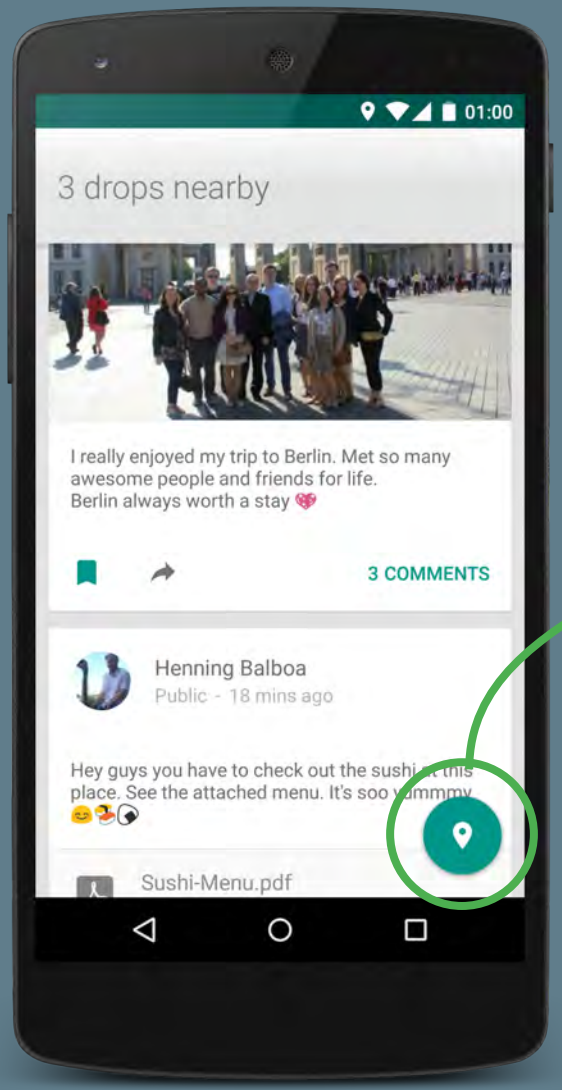
```
android:elevation=”4dp”

View.setElevation(float);
```

Ripples and Translation

```
view.animate()
    .translationZ(float)
    .start();
```

```
<selector>
    ...
    <objectAnimator
        android:property=”translationZ”
        android:valueTo=”8dp”
        android:valueType=”floatType”/>
    ...
</selector>
```



Floating action button

drawable/fab_bg.xml

```
<?xml version="1.0" encoding="utf-8"?>
<ripple android:color="?android:colorControlHighlight"
        xmlns:android="...">
    <item>
        <shape android:shape="oval">
            <solid android:color="?android:colorAccent"/>
        </shape>
    </item>
</ripple>
```

Activity Transitions

1) Enable content transitions

```
<style name=”MyTheme” parent=”android:Theme.Material”>
    <item name="android:windowContentTransitions">true</item>
</style>
```

2) Specify transition element in target activity

```
<ImageView
    ...
    android:transitionName=”someId”/>
```

3) Start transition (with a single element)

```
Intent in = new Intent(this, Activity2.class);
ActivityOptions opts =
    ActivityOptions.makeSceneTransitionAnimation(
        this,     /* start activity */,
        someView, /* the view in the start activity */,
        “someId”  /* the string as specified above */
    );
startActivity(in, opts);
```

1) Enable content transitions

```
<style name=”MyTheme” parent=”android:Theme.Material”>
    <item name="android:windowContentTransitions">true</item>
</style>
```

2) Specify transition element in target activity

```
<ImageView
    ...
    android:transitionName=”someId”/>
```

3) Start transition (with mutiple shared elements)

```
Intent in = new Intent(this, Activity2.class);
ActivityOptions opts =
    ActivityOptions.makeSceneTransitionAnimation(
        this,     /* start activity */,
        Pair.create(view1, “id1”),
        Pair.create(view2, “id2”)
    );
startActivity(in, opts);
```

Palette

```
Palette palette = Palette.generate(bitmap);

palette.getVibrantSwatch();
palette.getMutedSwatch();

palette.getLightVibrantSwatch();
palette.getLightMutedSwatch();

palette.getDarkVibrantSwatch();
palette.getDarkMutedSwatch();
```

* **Attention**: swatches can be `null`

Swatches

```
Swatch swatch = palette.get...Swatch();

swatch.getRgb();

swatch.getTitleTextColor();

swatch.getBodyTextColor();

swatch.getPopulation();

swatch.getHsl();
```

* **Attention**: `IllegalArgumentException` can be thrown

Vibrant

light style

Vibrant

normal style

Vibrant

dark style

Muted

light style

Muted

normal style

Muted

dark style

Palette Viewer

Links:

- www.google.com/design
- d.android.com/training/material

- material.angularjs.org
- polymer-project.org/components/paper-elements