

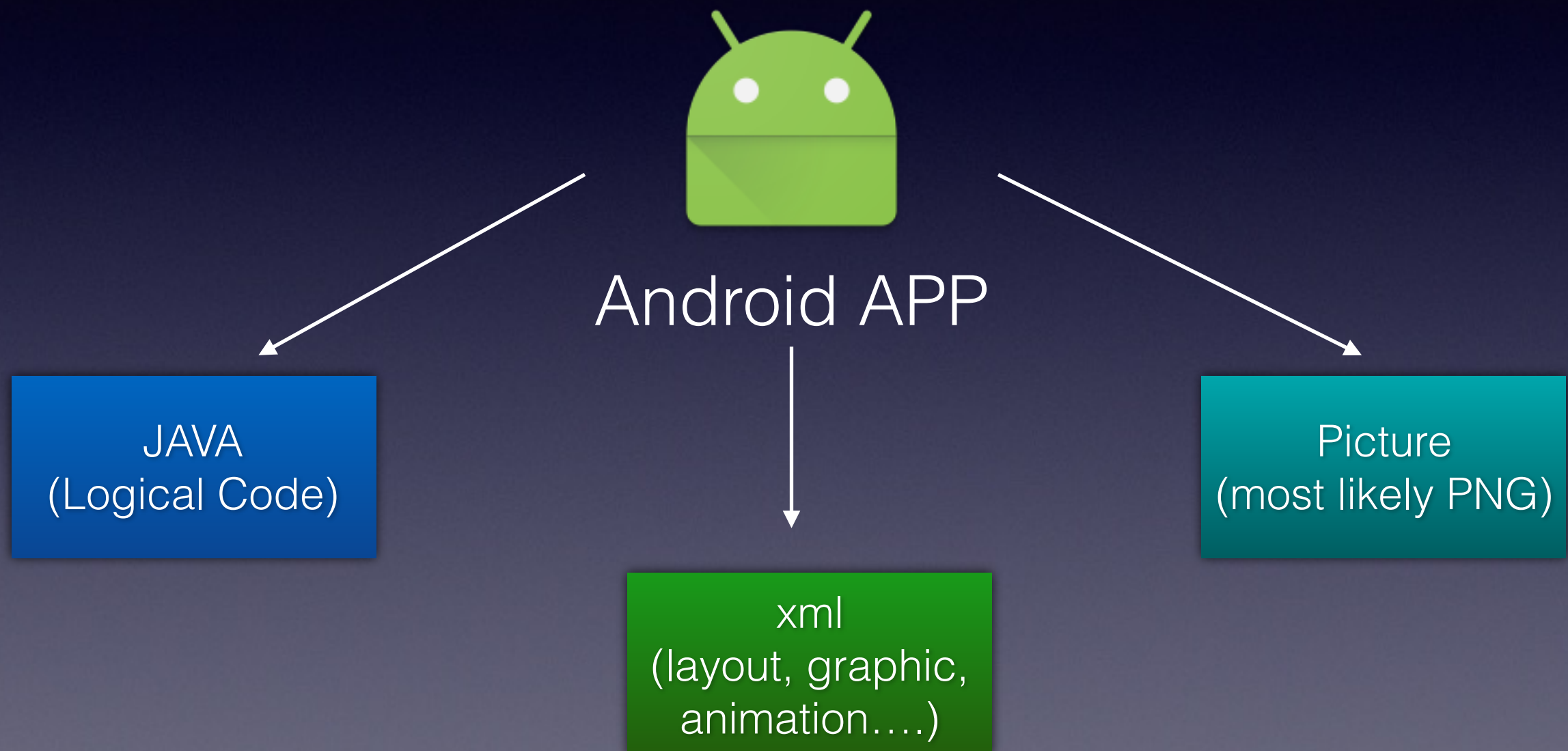
Designer can code

Lecture 2
by Tom Lau

Aims

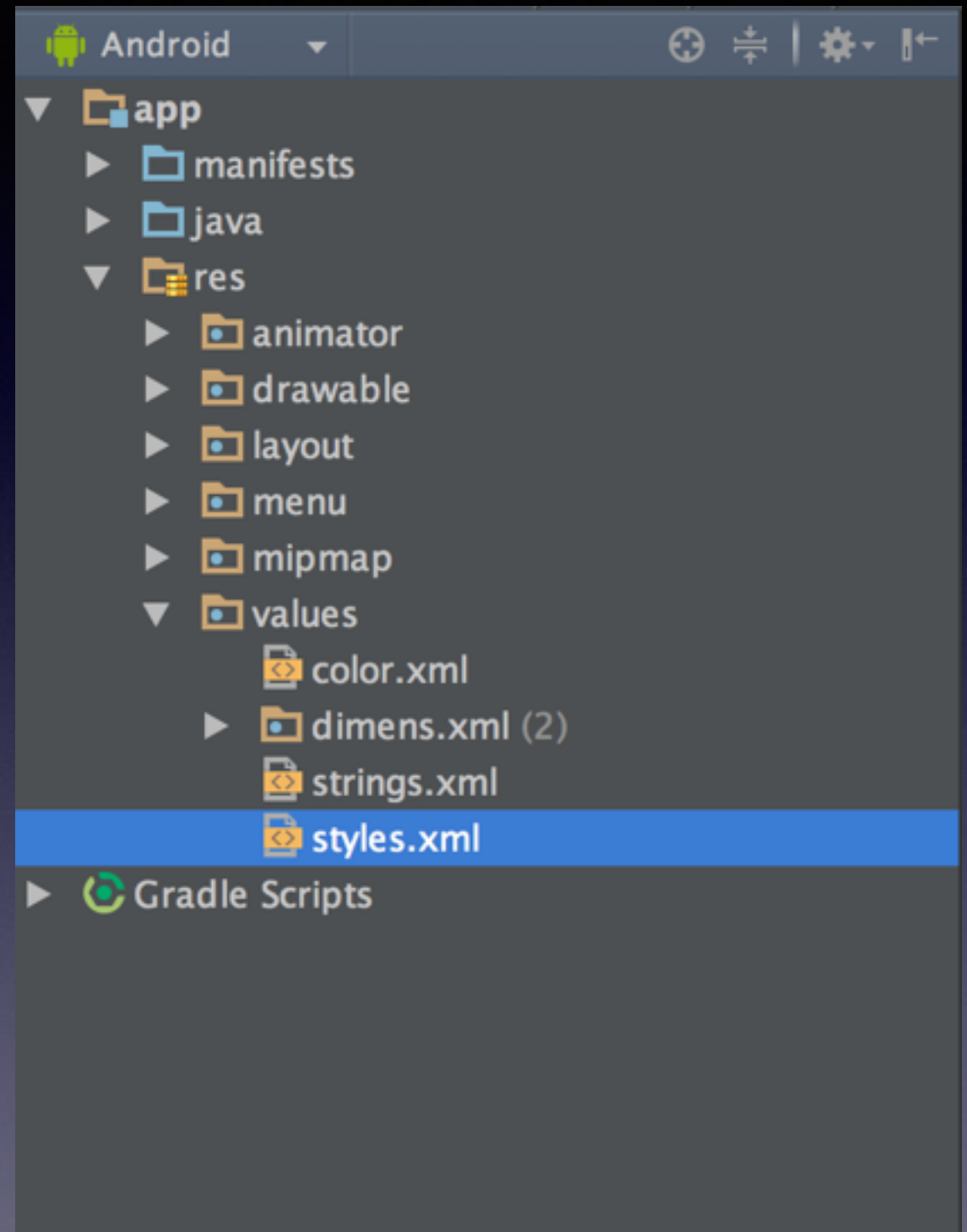
- Style.xml and drawable.xml
- Basics Concept of Material Design
- Animation
- OnClickListener (Click Response)

Basic Knowledge of Android APP



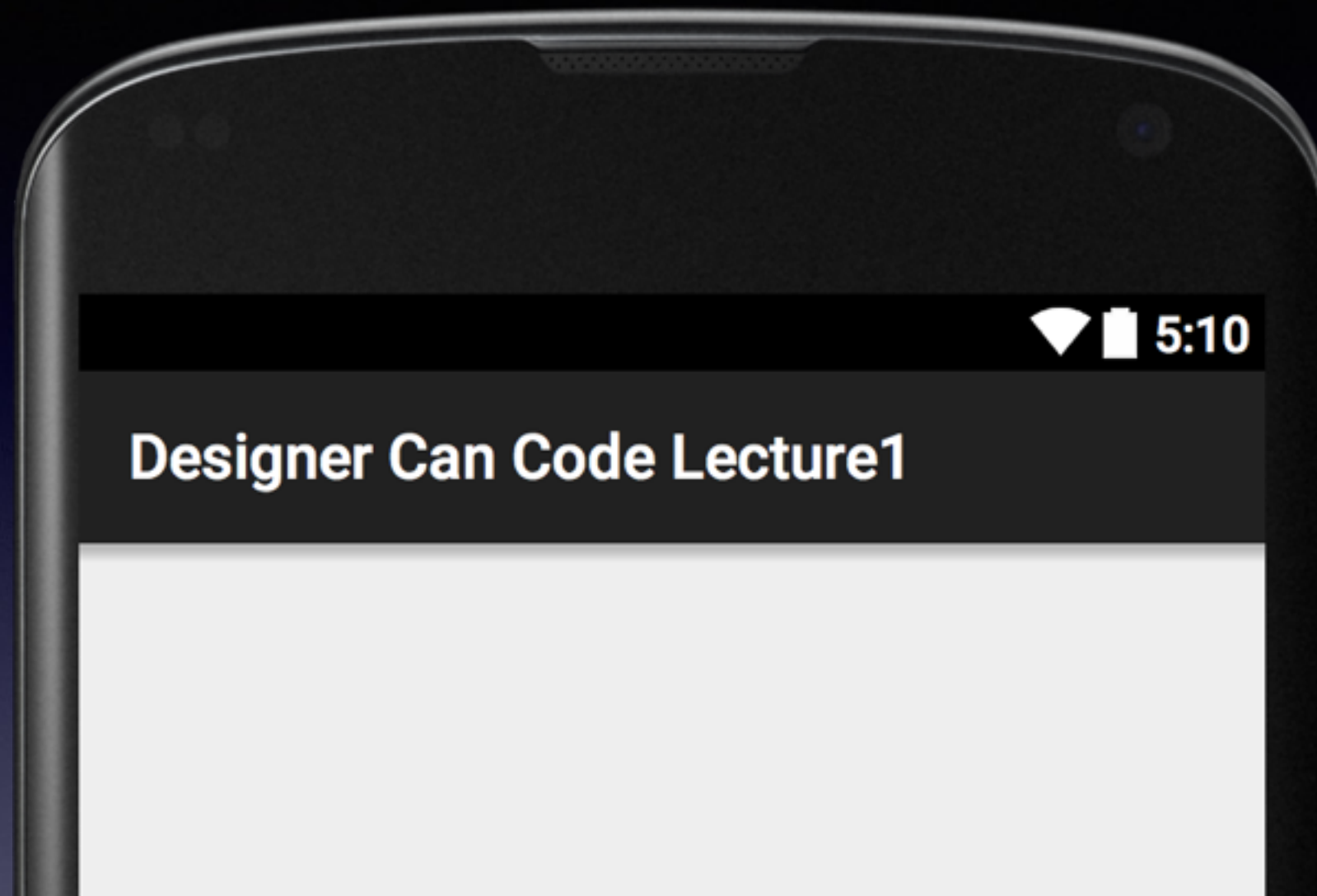
Styles.xml

Customize your theme here.



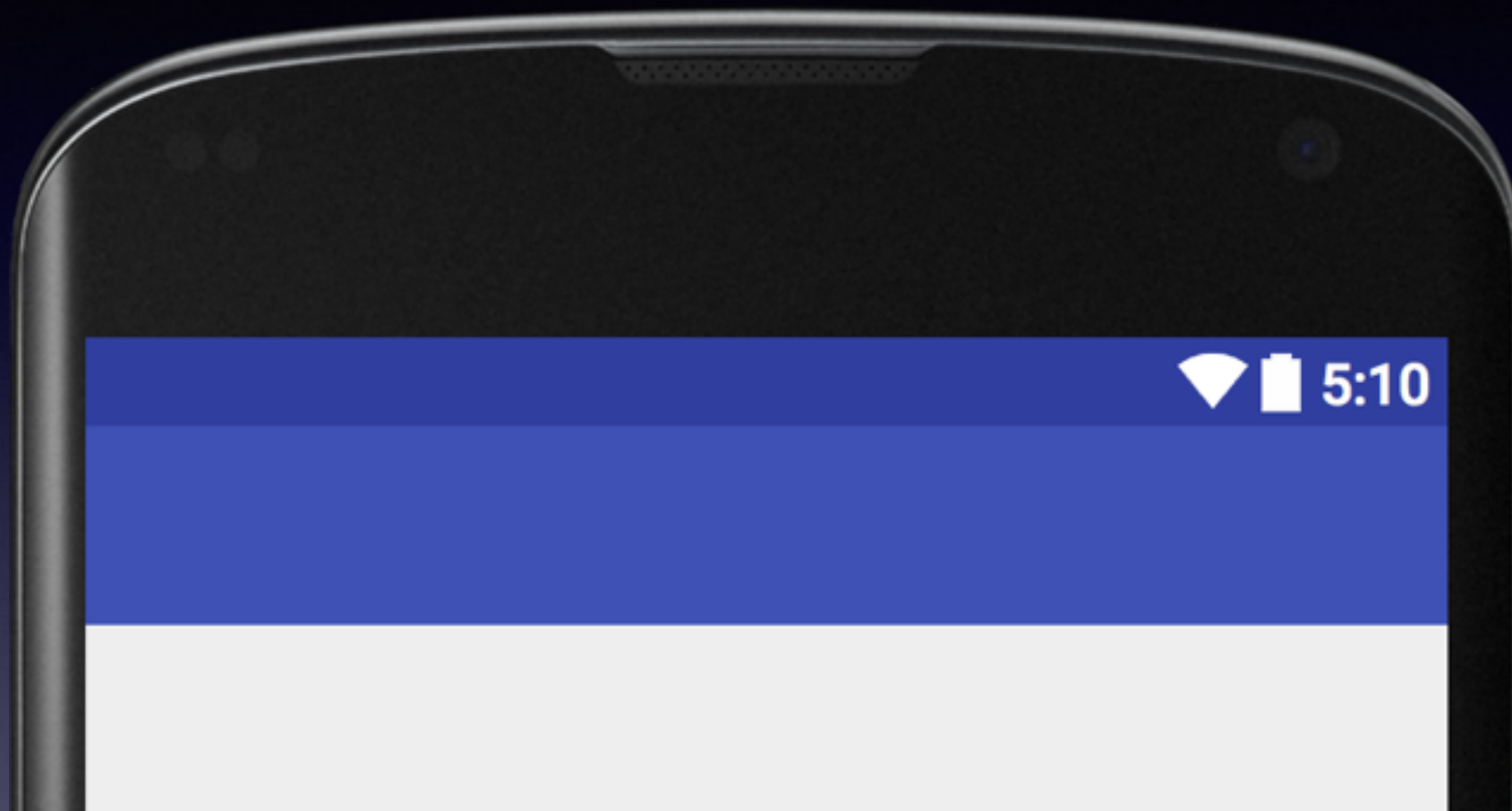
Theme

- Hide ActionBar
- Set Color Scheme
- Default value of the property



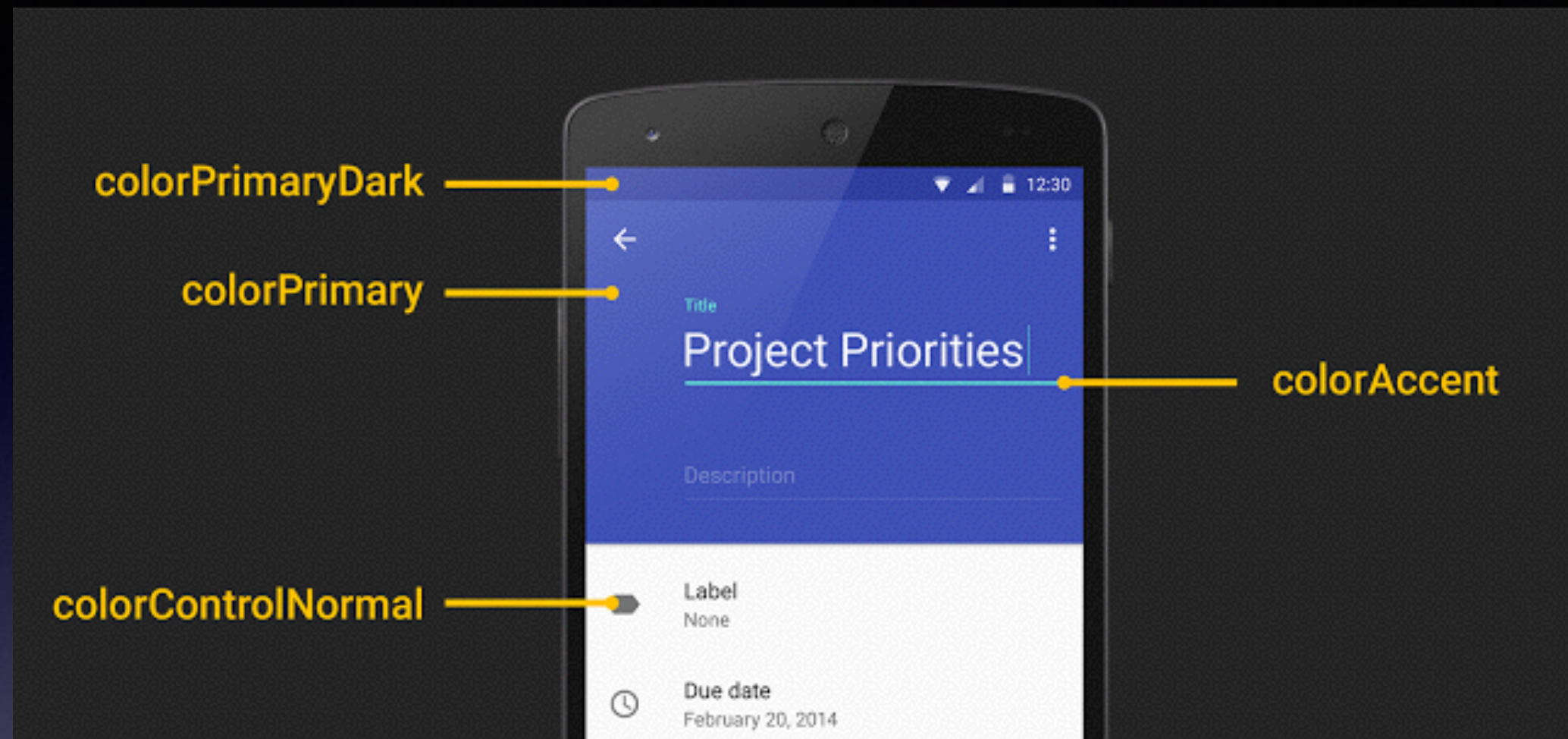
ActionBar

An limited control area



ToolBar

More controllable ActionBar



Material Design

Color Scheme



SCALE UP

PARABOLA

MOVE IN

Material Design Button

It is not compatible with Android 5.0 below
but you can make it compatible like

XML in Drawable

- layer-list
- selector
- ripple

```
<?xml version="1.0" encoding="utf-8"?>
<layer-list xmlns:android="http://schemas.android.com/apk/res/android">
  <item>
    android:bottom="10dp"
    android:left="10dp"
    android:right="10dp"
    android:top="@dimen/trans_pad">
    <shape android:shape="rectangle">
      <corners android:radius="5dp" />
      <solid android:color="@color/primary" />
      <padding
        android:bottom="20dp"
        android:left="@dimen/btn_padding"
        android:right="20dp"
        android:top="@dimen/btn_padding" />
    </shape>
  </item>
</layer-list>
```

layer-list

- It can contain many item by using layer approach
- the top layer will be the bottom item at xml
- it can use four properties, left, right, top and bottom, to item position

selector

- the item in selector can have different state, like `state_pressed`, `enable`, `long press`
- It is common to be used as a button background before Android 5.0

ripple

- It only need to mention item drawable and set the color property
- The animation will auto generated
- Be careful, it only support Android 5.0 or above device, so **create drawable-v21 folder** please!!!!



OnClickListener

- OnClickListener is a things on JAVA to handle the click event
- Each Listener should to be set at at least one view in order to trigger event

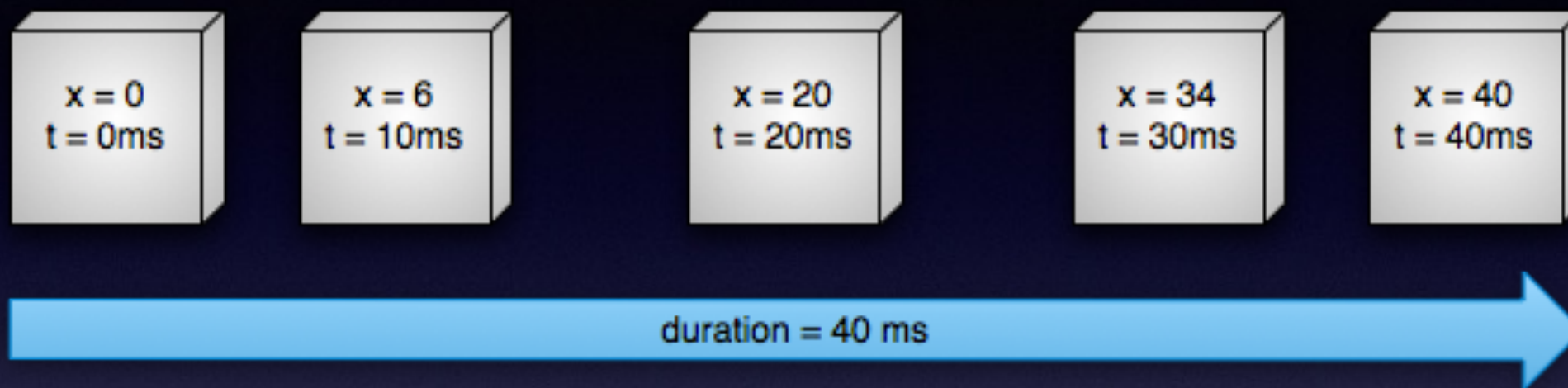
SCALE UP

MOVE IN

Button Testing

Toast

Toast is message dialog on the screen
it will disappear in a few second.



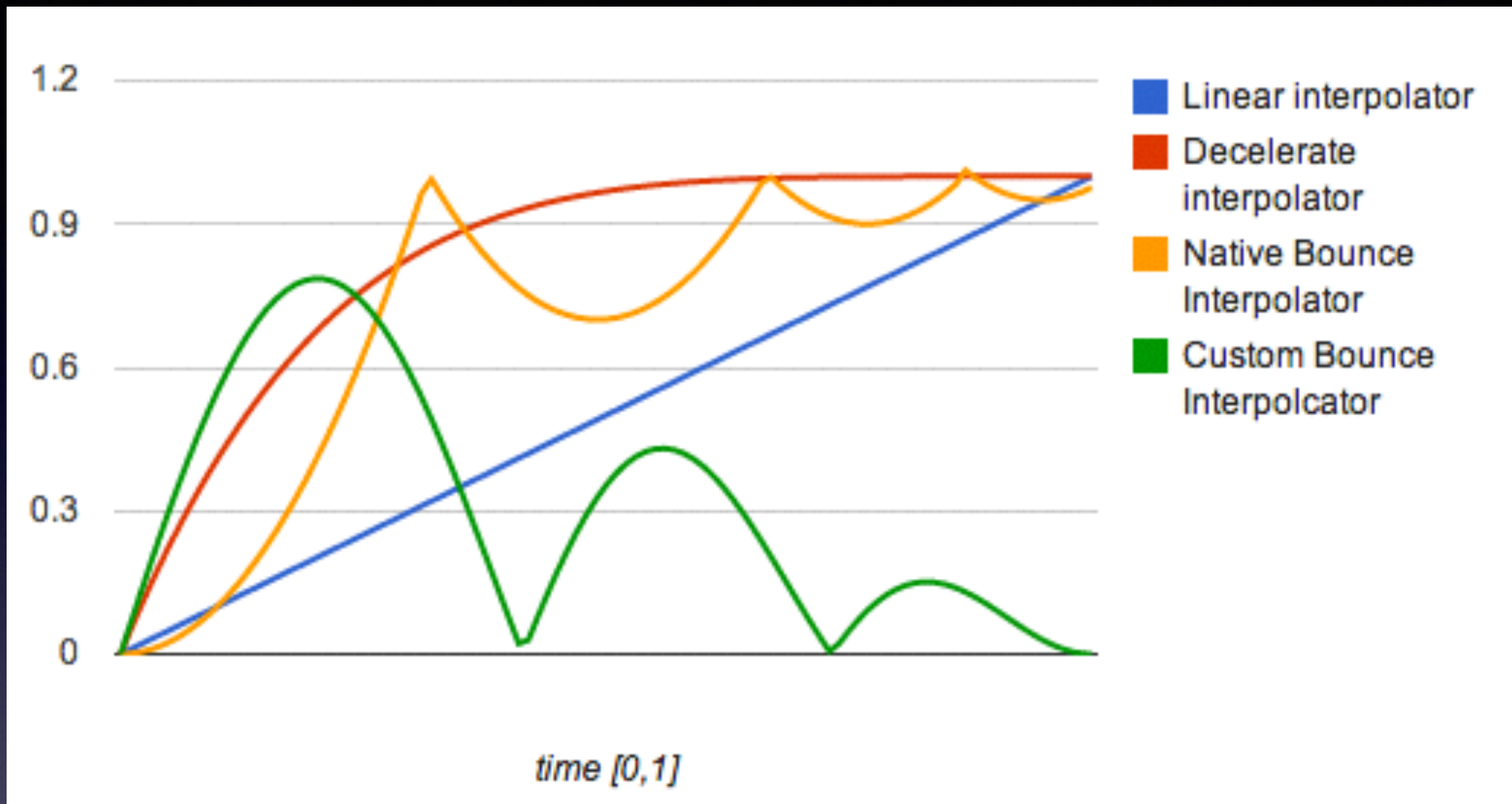
ObjectAnimator

A thing that keep changing a properties very fast


```
<?xml version="1.0" encoding="utf-8"?>
<set xmlns:android="http://schemas.android.com/apk/res/android">
  <objectAnimator
    android:duration="500"
    android:interpolator="@android:anim/overshoot_interpolator"
    android:valueFrom="0"
    android:valueTo="1"
    android:valueType="floatType"
    android:propertyName="scaleX"/>
  <objectAnimator
    android:duration="500"
    android:interpolator="@android:anim/overshoot_interpolator"
    android:valueFrom="0"
    android:valueTo="1"
    android:valueType="floatType"
    android:propertyName="scaleY"/>
</set>
```

ObjectAnimator

ObjectAnimator can put in a set so that it can cooperate with other



interpolator

It is a thing to mention how the value change

ObjectAnimator

- Since ObjectAnimator is to change the properties of a View in order to have animation effect, a customise animation need to customise a View to have a new property to change

