



# មជ្ឈមណ្ឌលកូរ៉េ សហប្រតិបត្តិការ អេច អ ឌី Korea Software HRD Center

## Android

### Style & Gradient & Selector

ណែនាំដោយ : បណ្ឌិត គឹម ថេឡុង



<http://www.kshrd.com.kh>



୭. Shape

୧୦. Gradients

୧୧. Selectors

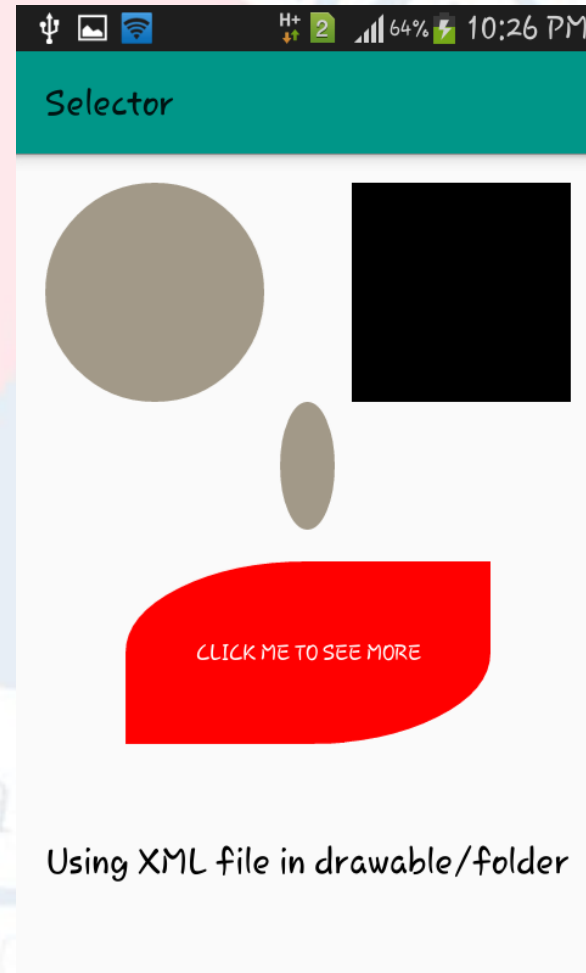
୧୨. Style



# 9. Shape

## ❑ How to create shape

- 1) Create file XML in drawable/ folder
- 2) Assign it to a View(Layout)



# 9. Shape (🔗)

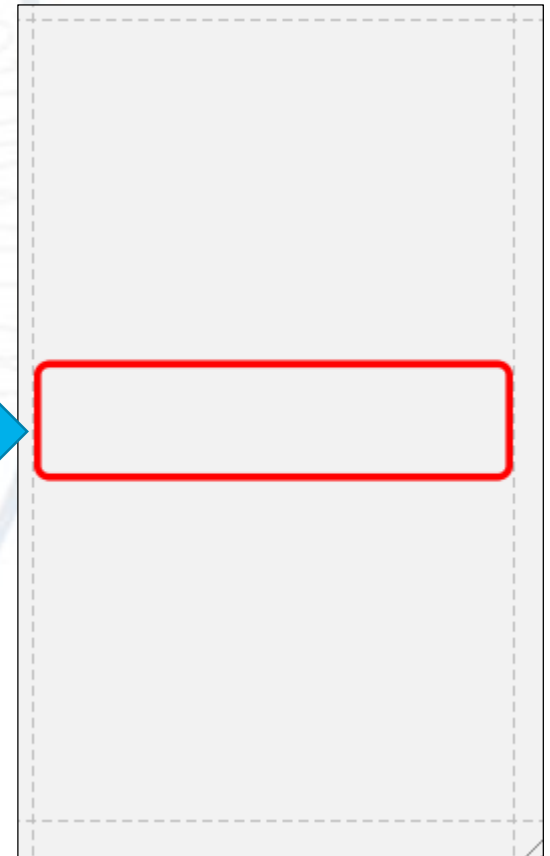
## ❑ How to create shape

- 1) Create file XML in drawable/ folder
- 2) Assign it to a View(Layout)

Change root tag from selector to shape

Create **shape1** in **drawable/** folder

```
<?xml version="1.0" encoding="utf-8"?>
<shape xmlns:android="http://schemas.android.com/apk/res/android"
    android:shape="rectangle" >
    <stroke
        android:color="@color/red"
        android:width="3dp"/>
    <corners
        android:bottomLeftRadius="5dp"
        android:bottomRightRadius="5dp"
        android:topLeftRadius="5dp"
        android:topRightRadius="5dp"/>
    <padding
        android:bottom="20dp"
        android:left="20dp"
        android:right="20dp"
        android:top="20dp" />
    <size
        android:width="200dp"
        android:height="50dp"/>
</shape>
```



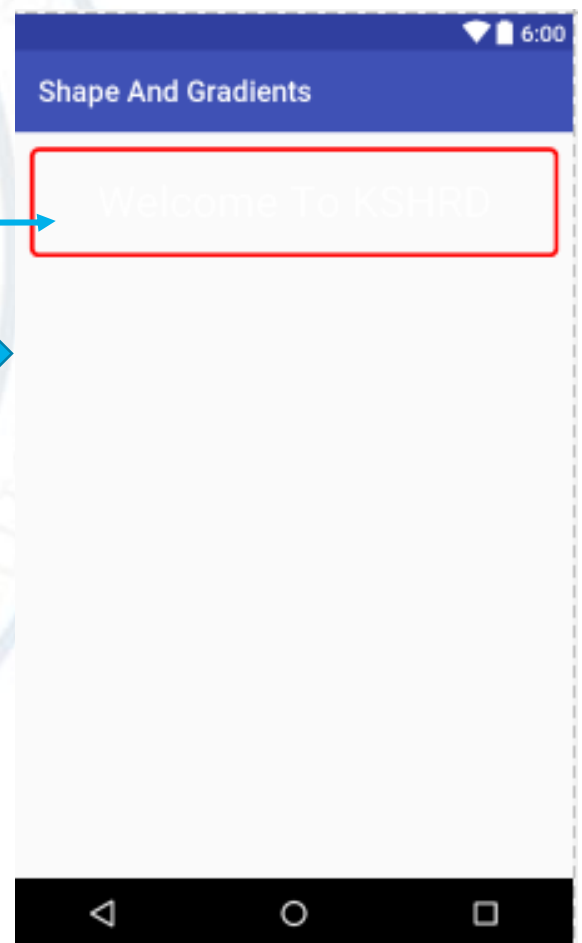
# 9. Shape (🏠)

## 2) Assign it to a Layout

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:paddingRight="10dp"
    android:paddingLeft="10dp"
    android:orientation="vertical">

    <!--apply shape file to LinearLayout-->
    <LinearLayout
        android:layout_marginTop="10dp"
        android:layout_gravity="center_horizontal"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:background="@drawable/shape1">
        <TextView
            android:layout_width="match_parent"
            android:layout_height="match_parent"
            android:text="Welcome To KSHRD"
            android:textSize="30dp"
            android:gravity="center"
            android:textColor="@color/white"/>
    </LinearLayout>
</LinearLayout>
```

Have some text here



## ២. Gradient

Gradient ជា Drawable មួយដែលមាន color ជាលក្ខណៈ gradient ប្រើសំរាប់ដាក់ទៅអោយ buttons, backgrounds, ។ល។ ហើយវាត្រូវបានគេ define ក្នុង Xml file ជាមួយនឹង **<shape>** element។

- **<gradient>** មាន attribute ជាច្រើនដែលមានតួនាទីខុសៗគ្នា



## ២. Gradient (ត)

✓ ឧទាហរណ៍៖

```
<?xml version="1.0" encoding="utf-8" ?>
<shape xmlns:android="http://schemas.android.com/apk/res/android"
    android:shape="rectangle" >

    <gradient
        android:angle="45"
        android:endColor="#87CEEB"
        android:centerColor="#768087"
        android:startColor="#000"
        android:type="linear" />

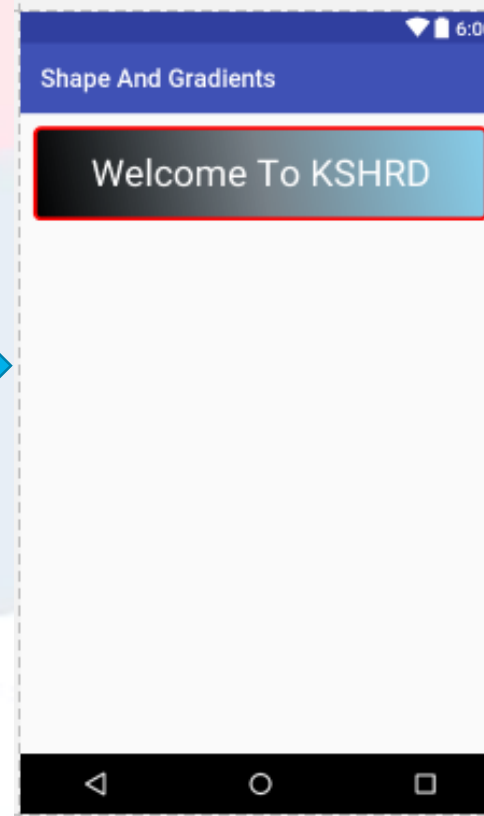
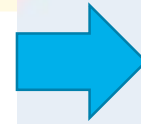
    <stroke
        android:color="@color/red"
        android:width="3dp" />

    <corners
        android:bottomLeftRadius="5dp"
        android:bottomRightRadius="5dp"
        android:topLeftRadius="5dp"
        android:topRightRadius="5dp" />

    <padding
        android:bottom="20dp"
        android:left="20dp"
        android:right="20dp"
        android:top="20dp" />

    <size
        android:width="200dp"
        android:height="50dp" />

</shape>
```



# ៣. Selector

❑ Selector : ប្រើសម្រាប់ custom នូវ View background ដូចជា Button ។

**State របស់ object ដែលប្រើជាមួយ selector**

- `android:state_activated` : set true ប្រសិនបើ object is activated
- `android:state_window_focused` : set true when the application window has focus



# ๓. Selector (๓)

✓ ๑๓๒๒๓๓๓

Drawable/custom\_button.xml

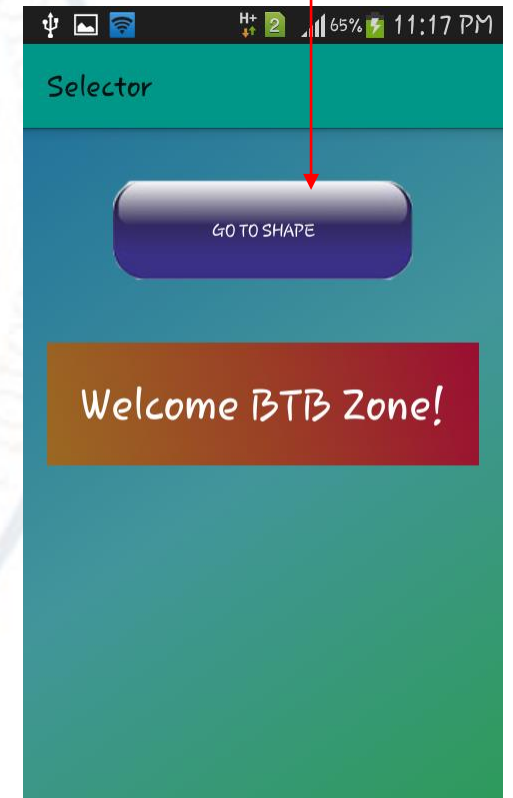
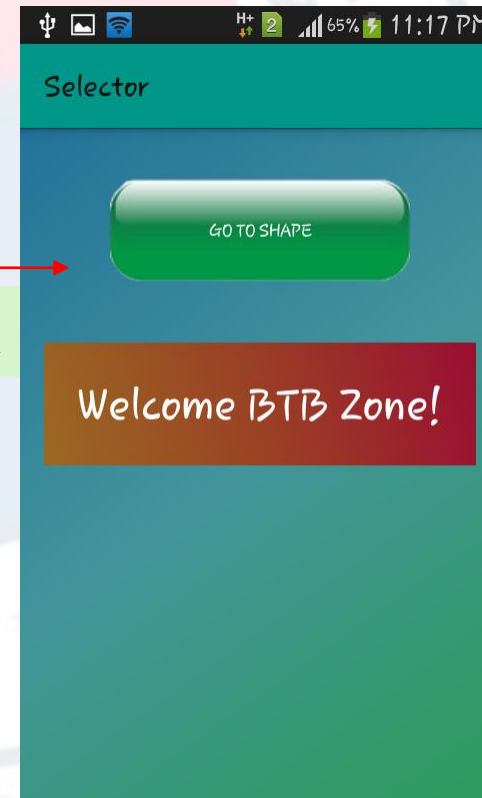
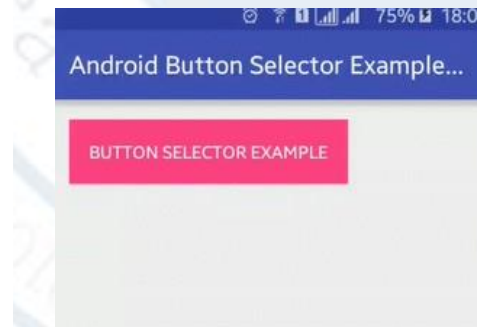
```
<?xml version="1.0" encoding="utf-8"?>
<selector xmlns:android="http://schemas.android.com/apk/res/android">
    <item android:state_pressed="true"
        android:drawable="@drawable/click_btn"/>
    <item android:drawable="@drawable/not_click_btn"/>
</selector>
```

not click

pressed

layout/activity\_main

```
<Button
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:background="@drawable/custom_button"
    android:text="Go To Shape"
    android:textColor="#ffffff"
    android:layout_alignParentTop="true"
    android:layout_centerHorizontal="true"
    android:layout_marginTop="17dp"
    android:id="@+id/button"
    android:onClick="goToShape"/>
```



# 4. Styles

□ **Style** : គឺជាបណ្តុំនៃ Property ដែលប្រើសម្រាប់ format View ដូចជា ៖ height, padding, font color, font size, background color ។

- i. Defining Styles
- ii. Inheritance
- iii. Apply a style to a View
- iv. Apply a theme to an Activity or application

## XML

```
<TextView  
    android:layout_width="fill_parent"  
    android:layout_height="wrap_content"  
    android:textColor="#00FF00"  
    android:typeface="monospace"  
    android:text="@string/hello" />
```

# 4. Styles (ꣳ)

save an XML file in the **res/values/**

## i. Defining Style

```
<?xml version="1.0" encoding="utf-8"?>
<resources>
    <style name="CodeFont" parent="@android:style/TextAppearance.Medium">
        <item name="android:layout_width">fill_parent</item>
        <item name="android:layout_height">wrap_content</item>
        <item name="android:textColor">#00FF00</item>
        <item name="android:typeface">monospace</item>
    </style>
</resources>
```

## ii. Inheritance

↑

```
<style name="CodeFont.Red">
    <item name="android:textColor">#FF0000</item>
</style>
```

## iii. Apply a style to a View

```
<TextView
    style="@style/CodeFont"
    android:text="@string/hello" />
```

Style="@style/CodeFont.Red"

## ៤. Styles (ត)

### □ Apply a theme to an Activity or application

- ដើម្បីកំណត់ theme មួយសម្រាប់ activity ទាំងអស់នៃ app របស់អ្នក, បើក **AndroidManifest.xml file** និងកែ <application> tag ដោយដាក់ android:theme attribute ជាមួយនឹងឈ្មោះរបស់ style ។

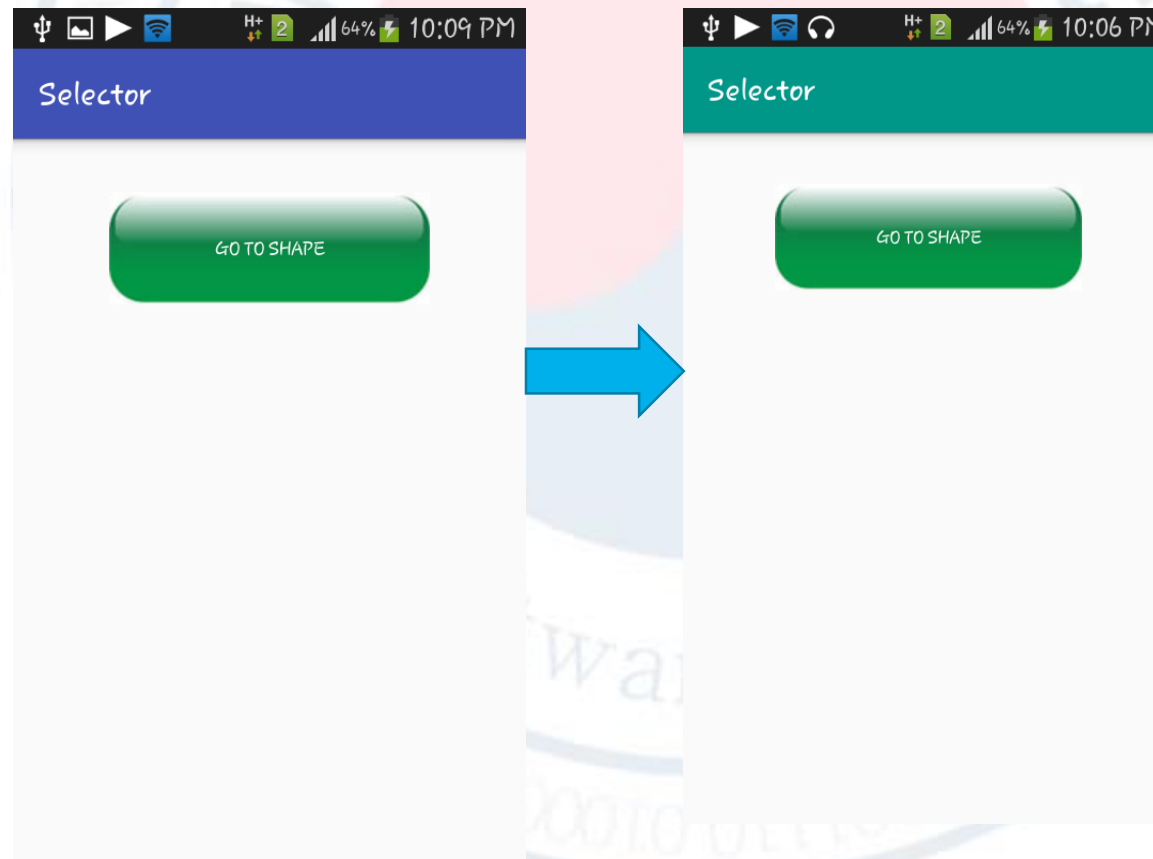
✓ ឧទាហរណ៍: `<application android:theme="@style/CustomTheme">`

- យើងក៏អាចកំណត់ theme មួយសម្រាប់ activity មួយក៏បានដែរ

✓ ឧទាហរណ៍: `<activity android:theme="@android:style/Theme.Dialog">`

## 4. Styles (ଟି)

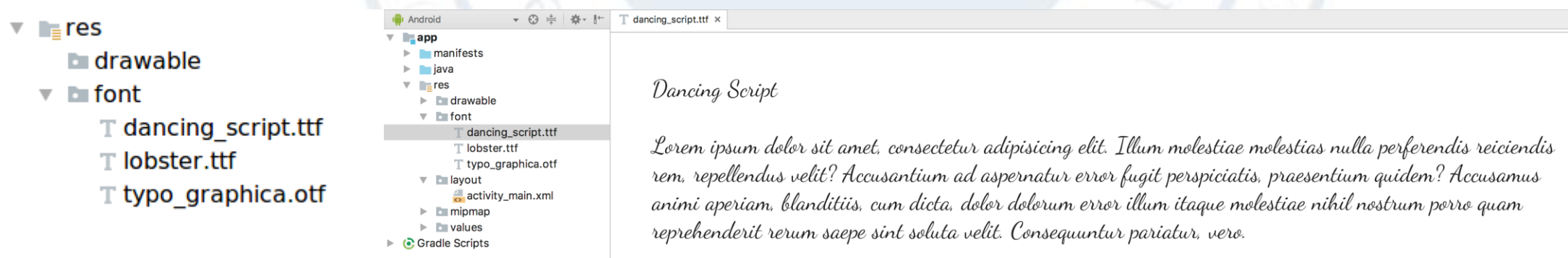
- ❑ Apply a theme to an Activity or application



# ៥. Fonts in XML

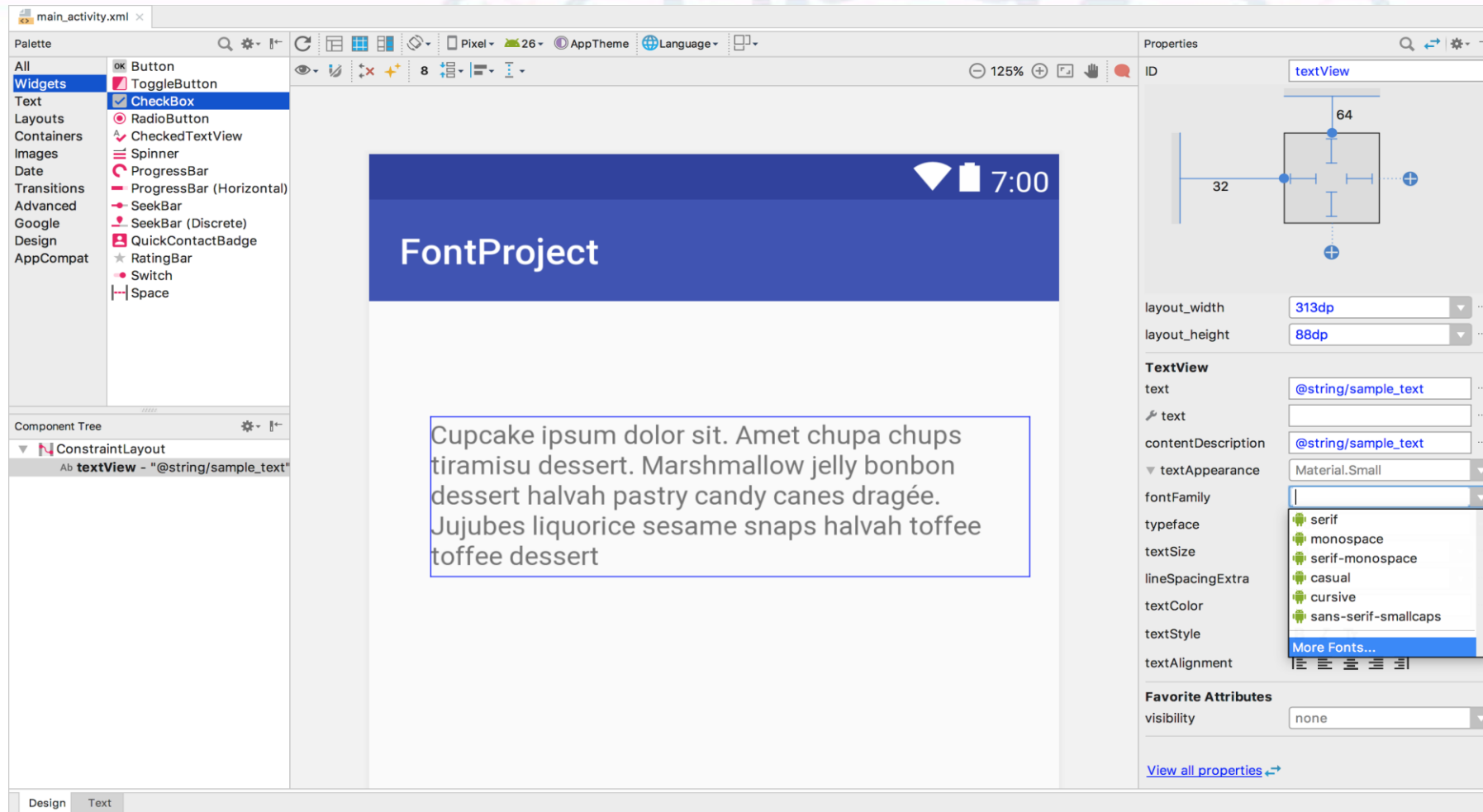
## ❑ Font in XML with Android 8.0 (API level 26)

- Feature ថ្មីរបស់ android 8.0 បានដាក់អោយប្រើប្រាស់ font resources ។ វាជា font file នៅក្នុង res/font-folder/font\_name ។
- ដើម្បី Access Font resource : @font/myfont, or R.font.myfont





# &. Fonts in XML



# &. Fonts in XML

