

TASK GUIDE (B2X.02)

A. Objectives.

Student will understand about style, theme, and drawable vector image.

B. Requirements.

Hardware:

- 2 GB RAM minimum, 8 GB RAM recommended
- 2 GB of available disk space minimum, 4 GB Recommended (500 MB for IDE + 1.5 GB for Android SDK and emulator system image)
- 1280 x 800 minimum screen resolution
- Intel processor with support for Intel VT-x, Intel EM64T (Intel 64), and Execute Disable (XD) Bit functionality

Software:

- Microsoft Windows 7/8/10 (32-bit or 64-bit)
- JDK 8
- Android Studio IDE (Minimum 3.2)

C. Resources.

Documents:

- Guide

Supplement files:

- ic_resicon.xml

Test code:

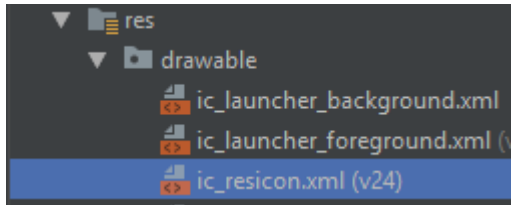
- Test B1AdvancedWidgetsX021.java

D. Task Description.

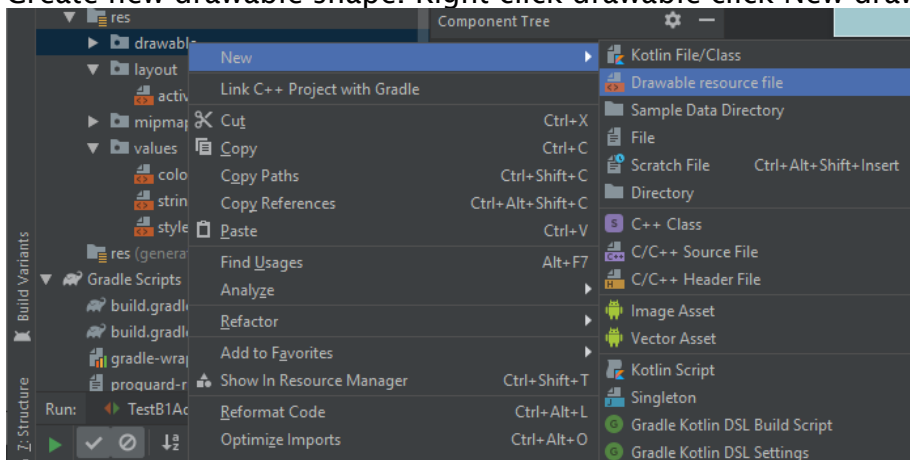
Student start to upload drawable vector image and define new styles.

E. Specification.

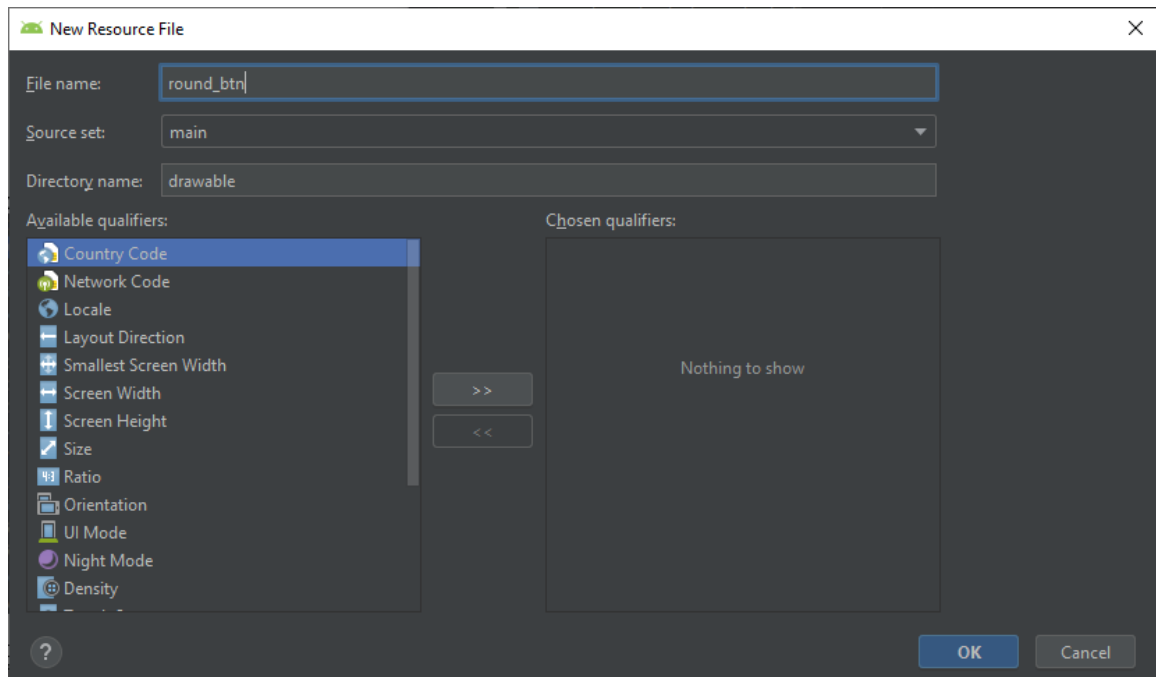
1. Open task B2X.01 (ColorGameX project) that already test passed.
2. Copy “ic_resicon.xml” in the supplement folder to “drawable”.



3. Create new drawable shape. Right click drawable click New drawable resource.



File name: round_btn, then click ok.



4. Open the file and define a shape in the “round_btn.xml” with this code.

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

</shape>
```

5. In the shape tag, define 4 tag values with this specification

tag	attribut	value
corners	radius	20dp
gradient	gradientRadius	100dp
	centerX	50%
	centerY	80%
	centerColor	#9727a6
	startColor	#a9b7d2
	endColor	#7003a6
	type	radial
size	height	50dp
	width	100dp
padding	left	7dp
	top	7dp
	right	7dp
	bottom	7dp

The display will look like below



6. Open “styles.xml” file. Under “AppTheme” tag, add new style with name “ColoredButton” without parent refer on the specification below.

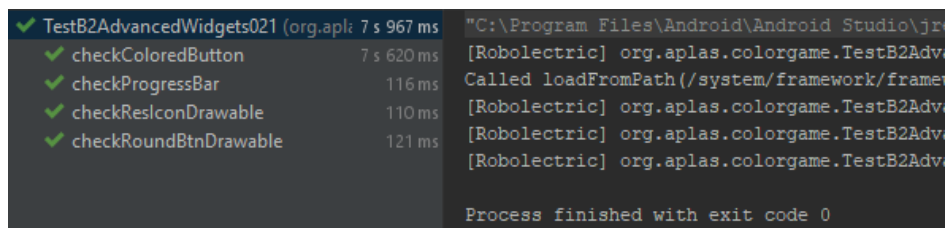
field	Value
layout width	50pt
layout height	20pt
textSize	8pt

7. Under “ColoredButton” tag, add new style with name “ProgressBar” with parent “@android:style/Widget.SeekBar” refer on the specification below.

field	Value
indeterminateOnly	False
progressTint	@color/greenLight
minHeight	18dip
maxHeight	25dip

F. Testing.

1. Copy “ElementTest.java, ResourceTest.java, ViewTest.java, TestB2AdvancedWidgetsX021.java” file to “org.aplas.colorgame (test)” folder.
2. Right click on the “TestB2AdvancedWidgetsX021.java” file then choose Run ‘TestB2AdvancedWidgetsX021’ and click it. It may take long time to execute.
3. Get the result of your task. If passed you will get green check like below. If the test failed, you would get orange check get the messages and you must check your work again.



The screenshot shows the test results for 'TestB2AdvancedWidgets021' in the Android Studio interface. The left pane displays a list of tests, all of which are marked with green checkmarks, indicating they passed. The right pane shows the log output, which includes the package name 'org.aplas.colorgame.TestB2Adv' and the message 'Process finished with exit code 0'.

Test Name	Duration
TestB2AdvancedWidgets021 (org.apl	7 s 967 ms
checkColoredButton	7 s 620 ms
checkProgressBar	116 ms
checkResIconDrawable	110 ms
checkRoundBtnDrawable	121 ms

Log Output:

```
"C:\Program Files\Android\Android Studio\j...  
[Robolectric] org.aplas.colorgame.TestB2Adv...  
Called loadFromPath(/system/framework/frame...  
[Robolectric] org.aplas.colorgame.TestB2Adv...  
[Robolectric] org.aplas.colorgame.TestB2Adv...  
[Robolectric] org.aplas.colorgame.TestB2Adv...  
Process finished with exit code 0
```

You have to try until get all green checkes and continue to the next task.