

TASK GUIDE (A1X.09)

A. Objectives.

Students know how to add drawable resource and make a Table.

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

C. Resources.

Documents:

- Guide

Supplement files:

- header_style.xml
- cell_style.xml

Test code:

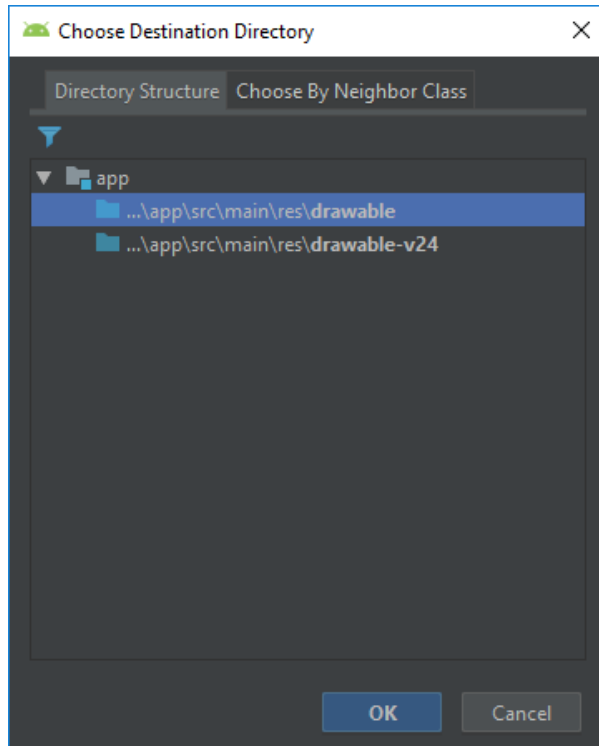
- TestA1BasicUIX091.java
- TestA1BasicUIX092.java

D. Task Description.

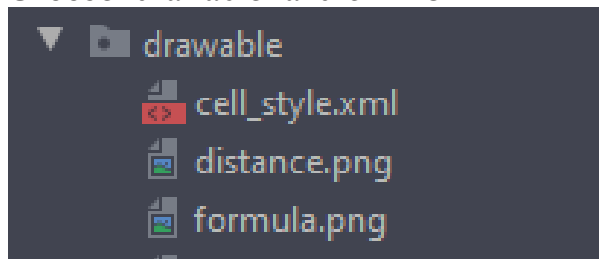
Student add drawable resource and start to design the interface with specified requirement and test it.

E Specification.

1. Open BasicAppX project that already test passed.
2. Copy file “cell_style.xml” , “header_style.xml” and “formula.png” in Supplement folder to “drawable” folder under “res” folder.



Choose “drawable” and click OK.



3. Open activity_main.xml file, to start UI design.
4. Under ImageView “img”, create a TableLayout with id “table” refer on the specification in specification below.

name	value
id	table
layout width	wrap_content
layout height	wrap_content
layout below	@id/img
layout center horizontal	true

layout top margin	5pt
stretch columns	*

- In the TableLayout tag, add 3 TableRow(s) with no properties.
- In each TableRow(s) tag, add 1 TextView as “header” refer on the specification in specification document.

name	value		
id	tv11	tv21	tv31
layout width	wrap_content		
layout height	wrap_content		
background color	@drawable/header_style		
padding	5dp		
text	@string/rbTemp	@string/rbDist	@string/rbWeight
text color	#FFFFFF		
text style	bold		

- In each TableRow tag, under header textview, add 3 TextView(s) as “content” refer on the specification in specification document.

1st Row

name	value		
id	tv12	tv13	tv14
layout width	wrap_content		
layout height	wrap_content		
background color	@drawable/cell_style		
padding	5dp		
text	0°C	32°F	273.15 K

2nd Row

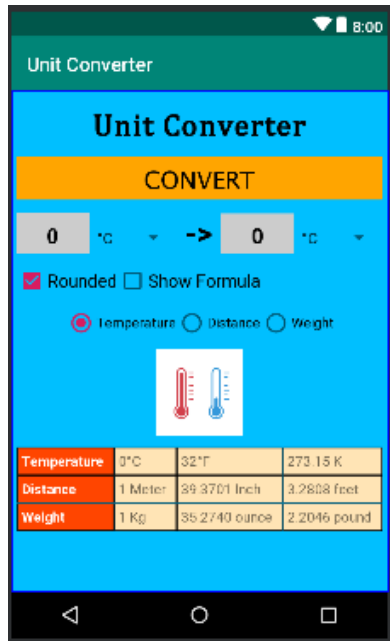
name	value		
id	tv22	tv23	tv24
layout width	wrap_content		
layout height	wrap_content		
background color	@drawable/cell_style		
padding	5dp		
text	1 Meter	39.3701 Inch	3.2808 feet

3rd Row

name	value		
id	tv32	tv33	tv34
layout width	wrap_content		
layout height	wrap_content		

background color	@drawable/cell_style		
padding	5dp		
text	1 Kg	35.2740 ounce	2.2046 pound

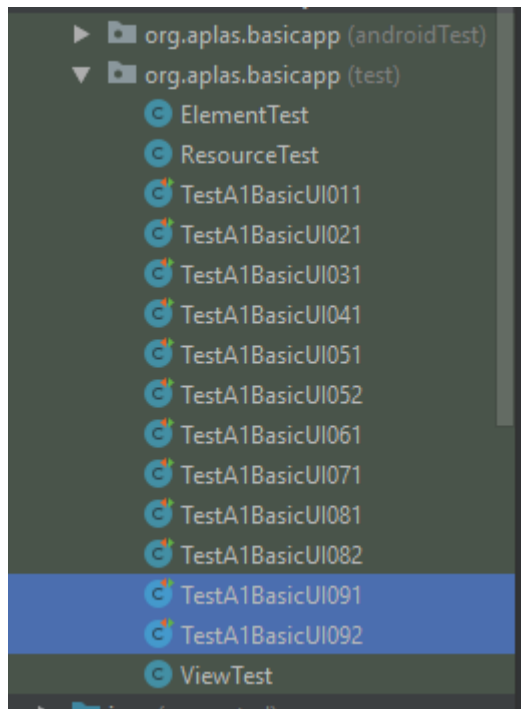
8. The result like below.



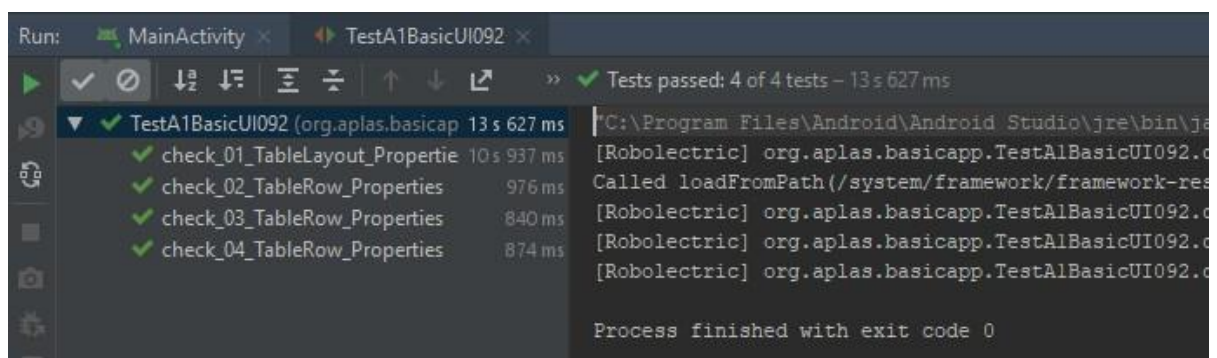
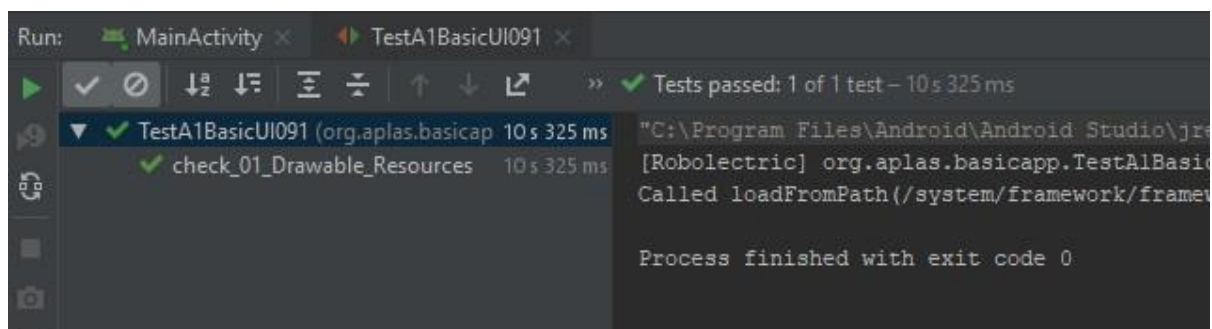
9. Under TableLayout, create an ImageView with id “imgFormula” refer on the specification below.

name	value
id	imgFormula
layout width	match_parent
layout height	match_parent
src	@drawable/formula
layout below	table
layout top margin	1pt
layout center horizontal	true
visibility	invisible

10. Copy “TestA1BasicUIX091.java” and “TestA1BasicUIX092.java” file to “org.aplas.basicappx (test)” folder.



11. Right click on each test file(s) then choose Run and click it. It may take long time to execute.
12. Get the result of your task. If passed you will get green check like below. If the test failed, you will get orange check get the messages and you must start your project again.



13. If all test already passed, you can run MainActivity and will be showed the UI like below



