TASK GUIDE (A1X.03)

A. Objectives.

Students know how to design basic layout, add TextView, and add a Button.

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

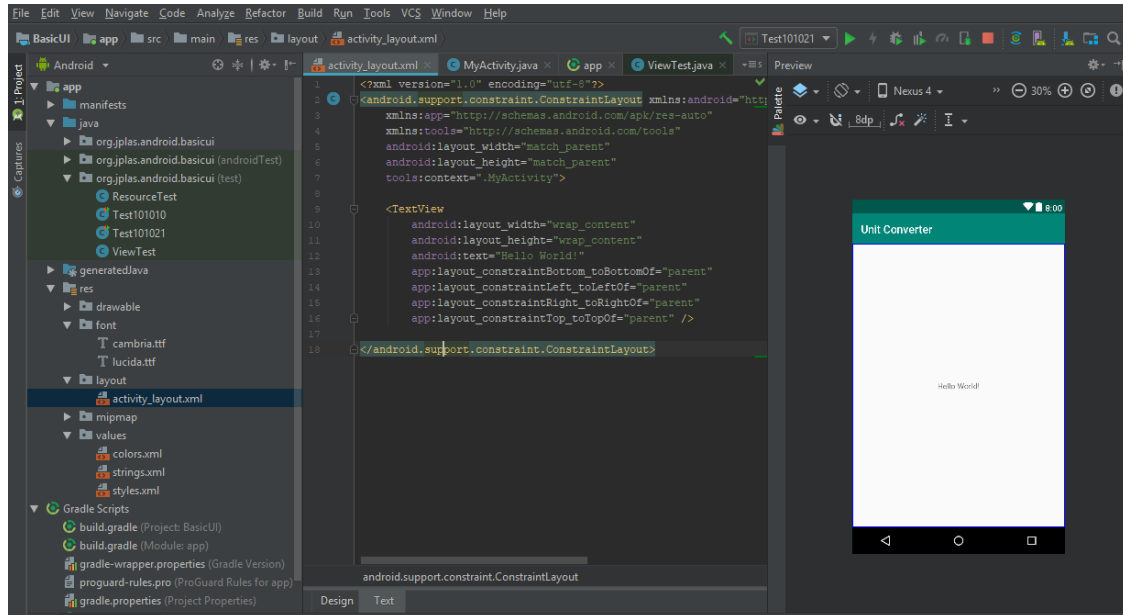Supplement files:
- ElementTest.java

Test code:
- TestA1BasicUIX031.java

D. Task Description.

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

E. Guidance.

1. Open BasicAppX project that already test passed.

2. Open "activity_main.xml" file in layout resource, to start UI design.

3. On the layout xml editor, delete default "ConstraintLayout" with all its tag and create an "RelativeLayout" with id "mainLayout" as a main layout refer on the specification below.

field	value
id	mainLayout
layout width	match parent
layout height	match parent
left padding	5dp
right padding	5dp
background color	@color/viewBgColor

4. In the RelativeLayout tag, add a TextView with id "myTextView1" refer in specification below.

name	value
id	myTextView1
layout width	match parent
layout height	30pt
text	@string/tv1Text
text color	@color/textColor
text size	14pt
gravity	center
font family	@font/cambria
text style	bold

5. Under TextView, add a Button with id "convertButton" refer in specification below.

| name	value
id	convertButton
layout width	match parent
layout height	20pt
text	@string/btnText
text color	@color/textColor
text size	11pt
background color	@color/btnColor
font family	@font/lucida
layout below	myTextView1

6. The UI become like below.
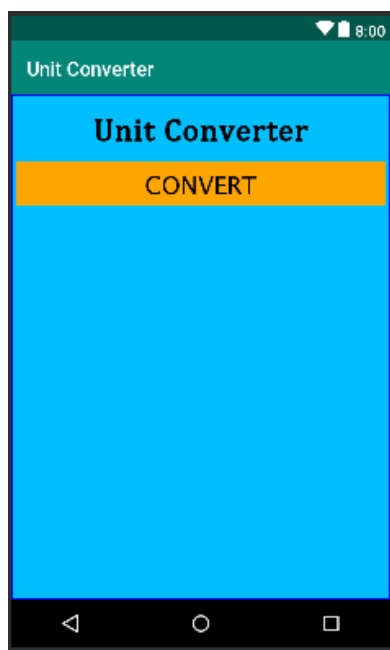
7. Copy "TestA1BasicUIX031.java" and "ElementTest.java" file to "org.aplas.basicappx (test)" folder
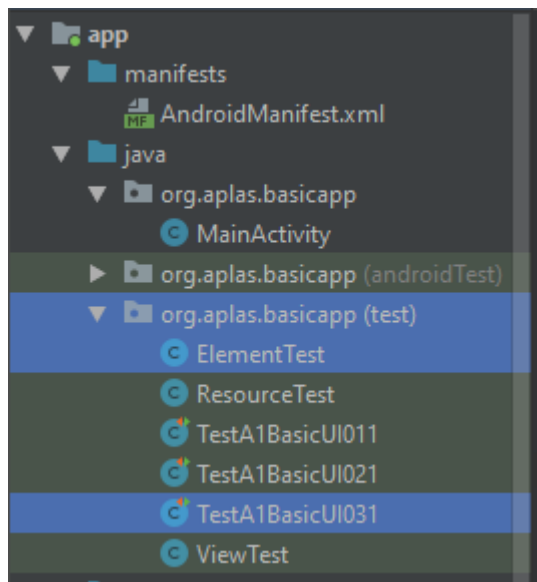
8. Right click on the "TestA1BasicUIX031.java" file then choose Run 'TestA1BasicUIX031' and click it. It may take long time to execute.

9. Get the result of your task. If passed you will get green check. If the test failed, you will get orange check get the messages and you must start your project again.
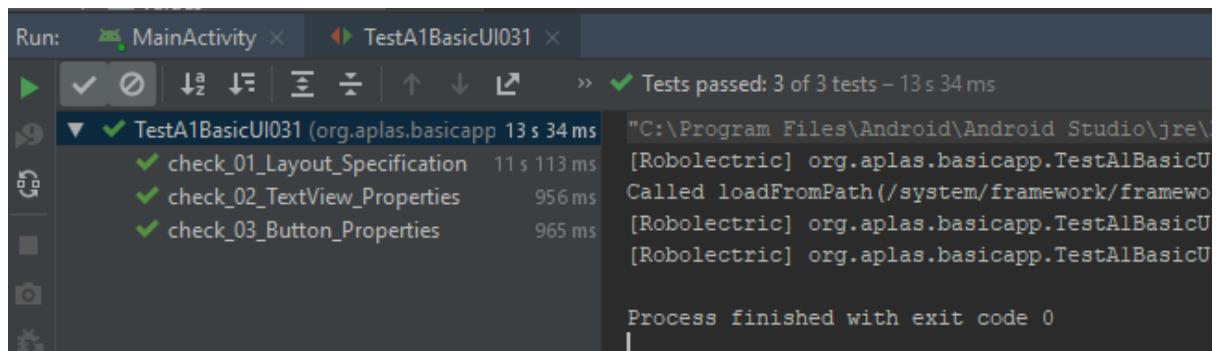
F. Testing.

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