

TASK GUIDE (B1.09)

A. Objectives.

Students create a new image element and fill it when formula checkbox checked.

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 3.5

C. Resources.

Documents:

- Guide

Supplement files:

- formula.png

Test code:

- TestB1BasicActivityKT091.java
- TestB1BasicActivityKT092.java

D. Task Description.

Student start to upload a formula image and make an event listener when formula checkbox checked.

Reference to learn Kotlin:

<https://kotlinlang.org/docs/reference/android-overview.html>

E. Guidance.

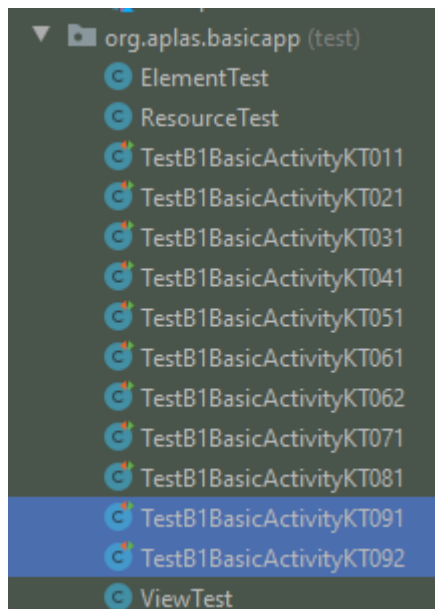
1. Open BasicApp project that already test passed.
2. Copy file “formula.png” in Supplement folder to “drawable” folder under “res” folder.
3. Open activity_main.xml file, to start UI design.
4. Under TableLayout, create an ImageView with id “imgFormula” refer on the specification below.

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

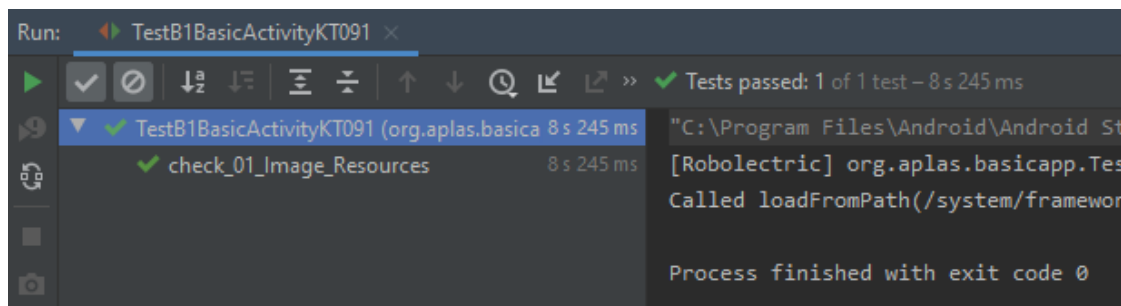
5. Then open MainActivity.kt and go to “onCreate” method. Write your code under “roundBox.setOnCheckedChangeListener” method block.
6. Create an event listener to catch event when “roundBox” changed, with this example.

```
CheckBoxName!!.setOnCheckedChangeListener { buttonView, isChecked ->
    .
    .
    .
}
```

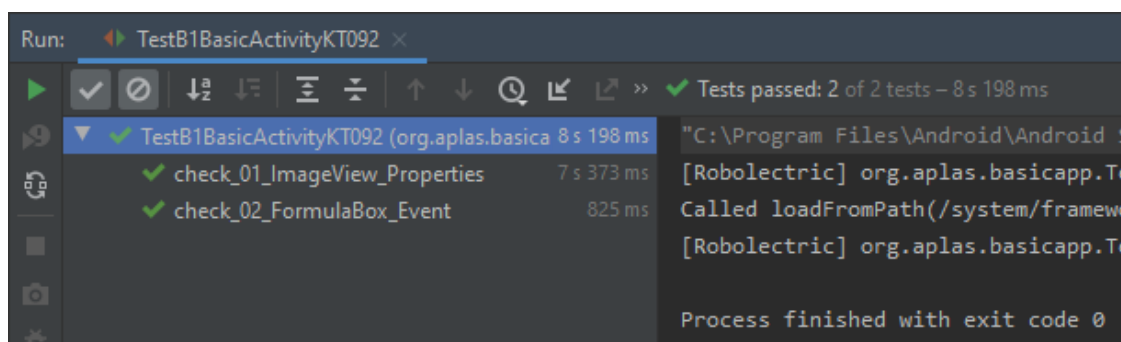
7. Make an action in that method to set visibility of “imgFormula” depend on the check condition of “formBox”. If “formBox” is checked then “imgFormula” become visible, otherwise become invisible.
8. Copy “B1BasicActivityKT091.java” and “B1BasicActivityKT092.java” file to “org.aplas.basicapp (test)” folder. Replace if possible.



9. Right click on the “B1BasicActivityKT091.java” file then choose Run ‘B1BasicActivityKT091’ and click it. It may take long time to execute.
10. 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.



11. Then right click on the “B1BasicActivityKT092.java” file then choose Run ‘B1BasicActivityKT092’ and click it. It may take long time to execute.
12. 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.