

# TASK GUIDE (B1.06)

## A. Objectives.

Students understand about RadioGroup changed event and how to change Spinner content.

## 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:

- ElementTest.java
- ResourceTest.java
- distance.png
- weight.png

Test code:

- TestB1BasicActivityKT061.java
- TestB1BasicActivityKT062.java

## D. Task Description.

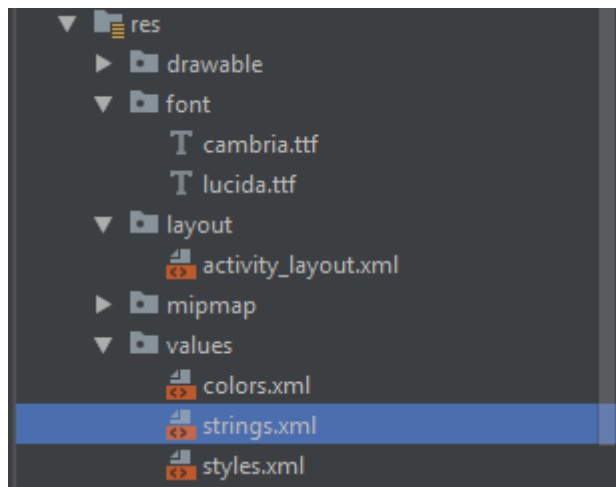
Student start to define string-array resource and make method in RadioGroup changed event to change Spinner content.

Reference to learn Kotlin:

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

## E. Guidance.

1. Open BasicApp project that already test passed.
2. Open “strings.xml” file under “res/values” folder.



3. Add the value of all “string-array” name as described in specification below.

Name	value
distList	Mtr
	Inc
	Mil
	Ft
weghtList	Grm
	Onc
	Pnd

4. Copy file “distance.png” and “weight.png” in Supplement folder to “drawable” folder under “res” folder.
5. Open MainActivity.kt and create an event when “unitType” Radiogroup inside onCreate method.

Code to make event Radiogroup changed:

```
unitType!!.setOnCheckedChangeListener { group, checkedId ->
    inputTxt!!.setText("0")
    outputTxt!!.setText("0")
}
```

6. Write code in onCheckedChanged method.
  - Create a RadioButton variable and assign it with selected RadioButton in RadioGroup.

```
val selected = findViewById<View>(checkedId) as RadioButton
```
  - Define a val adapter: `ArrayAdapter<CharSequence>` variable to accommodate a string-array resource.

- Write a conditional when selected text is Temperature, Distance, Weight  

```
if (selected.text == "Temperature") {
} else if (selected.text == "Distance") {
} else {
```

- Assign the adapter with value from string-array resource **depend on selected radioButton**.

```
adapter = ArrayAdapter.createFromResource(
    unitType!!.context,
    R.array.radioButton,
    android.R.layout.simple_spinner_item
)
```

- Set imageView image with new image resource **depend on selected radioButton**.

```
imageView!!.setImageResource(R.drawable.imageresourcename)
```

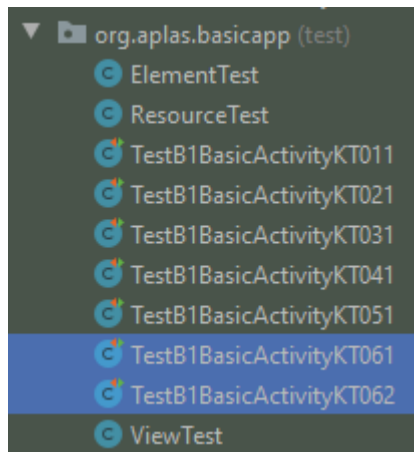
- Set adapter style.

```
adapter.setDropDownViewResource(android.R.layout.simple_spinner_
    dropdown_item)
```

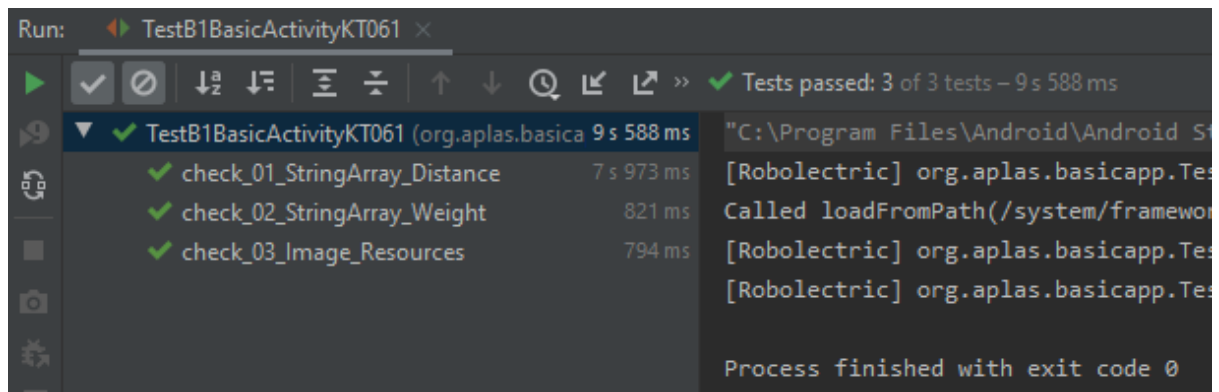
- Set unitOri and unitConv content with adapter.

```
unitOri!!.adapter = adapter
unitConv!!.adapter = adapter
```

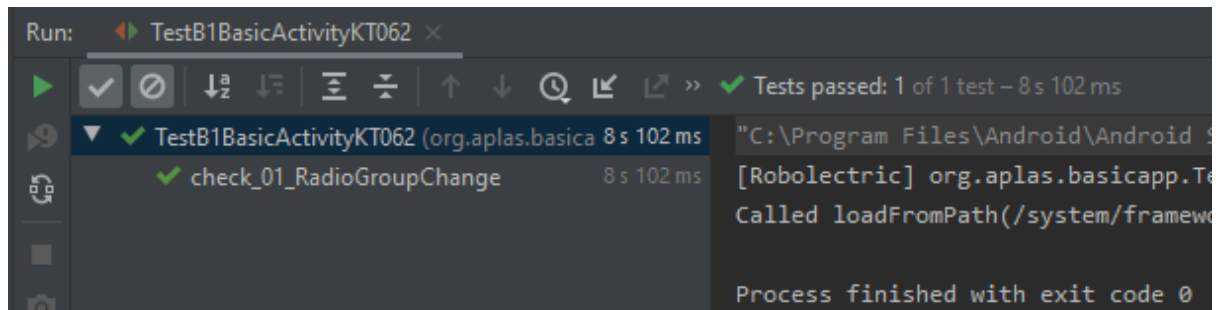
7. Copy “**ElementTest.java**” and “**ResourceTest.java**” files to “org.aplas.basicapp (test)” folder. Replace if possible.
8. Copy “**TestB1BasicActivityKT061.java**” and “**TestB1BasicActivityKT062.java**” files to “org.aplas.basicapp (test)” folder. Replace if possible.



9. Right click on the “TestB1BasicActivityKT061.java” file then choose Run ‘TestB1BasicActivityKT061’ 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, also right click on the “TestB1BasicActivityKT062.java” file then choose Run ‘TestB1BasicActivityKT062’ 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.