

TASK GUIDE (B2.06)

A. Objectives.

Student will understand how access array from resource and put it into List and Hashtable.

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:

- -

Test code:

- TestB2AdvancedWidgetsKT061.java

D. Task Description.


Student start to declare List and Hastable and load the array from resource to them.

E. Specification.

1. Open task B2X.05 (ColorGame project) that already test passed.
2. Open “MyActivity.java” file and add new fields in MyActivity class, with this description.

Name	Data type	Modifiers access	Initial value
clrList	Array<String>	-	-
charList	HashMap<String, String>	-	HashMap<String, String>()

How to declare?



```
class MyActivity : AppCompatActivity() {  
    .  
    .  
    <Modifier> <Field name>: <Data type> = <initial value>;  
    .  
    .  
}
```

3. Create a new private void method with name “initColorList” and blank parameters.

```
private fun initColorList() {  
}
```

4. In the “initColorList” method, assign “clrList” with color data from “colorList” resource with this code.

```
clrList = resources.getStringArray(R.array.colorList)
```

Then declare a temporary Array<String> variable “temp” and assign it with “charList” resource.

```
val temp: Array<String>  
temp = resources.getStringArray(R.array.charList)
```

Do together, put each element of “clrList” into “charList” as key, and put each element of “temp” into “charList” as value. Use this code.

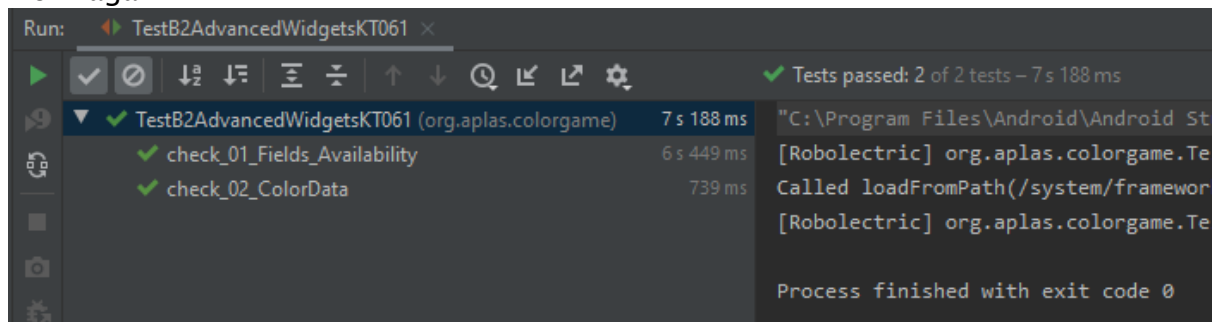
```
for (i in clrList.indices) {  
    charList[clrList[i]] = temp[i]  
}
```

5. Call “initColorList” method in the “onCreate” method, like below.

```
override fun onCreate(savedInstanceState: Bundle?) {  
    super.onCreate(savedInstanceState)  
    setContentView(R.layout.activity_layout)  
    .  
    .  
    .  
    initColorList();  
}
```

F. Testing.

1. Copy “TestB2AdvancedWidgetsKT061.java” file to “org.aplas.colorgame (test)” folder.
2. Right click on the “TestB2AdvancedWidgetsKT061.java” file then choose Run ‘TestB2AdvancedWidgetsKT061’ 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 will get orange check get the messages and you must check your work again.



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

Run the App

If you have passed the test, no change in the UI.