



**FEU-EAST ASIA COLLEGE**  
COLLEGE OF ENGINEERING • COLLEGE OF COMPUTER STUDIES

**INFORMATION TECHNOLOGY EDUCATION DEPARTMENT**

**ITMA133**

**(MOBILE APPLICATIONS DEVELOPMENT 1)**

EXERCISE

1

Welcome Message

<STUDENT NAME>

<SECTION>

<DATE>

## **I. OBJECTIVES**

At the end of this exercise, students must be able to:

Cognitive

- a.) Understand the topics they have learned from lesson 1-2.

Psychomotor:

- a.) Create an Android project.
- b.) Construct an Android Virtual Device in testing the application.
- c.) Manage the directory structure for design and control codes.
- d.) Apply values referencing in string.xml file.
- e.) Compile, run and debug the program.

Affective

- a.) Appreciate the concept behind this exercise.

## **II. BACKGROUND INFORMATION**

In order to accomplish this exercise, the student must have a clear understanding of the following topics:

- Android SDK
- Eclipse IDE
- xml structure
- Android project directory structure
- Android virtual device setup
- String value reference

## **III. LABORATORY PROCEDURE**

Overview

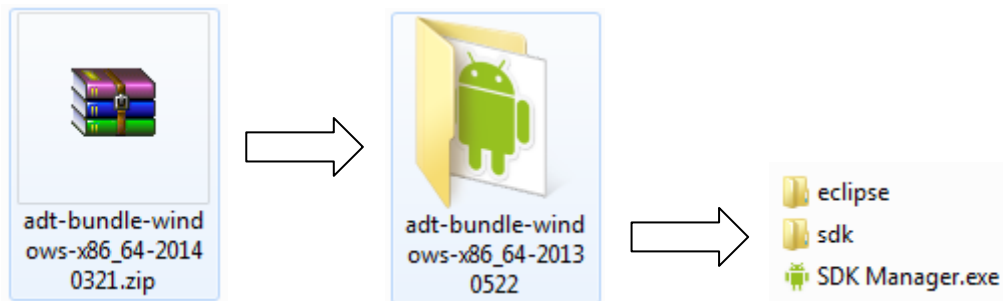
This programming exercise demonstrates the use of Android SDK, Eclipse IDE, and Android Virtual Device to test and run Android application.

## TASK

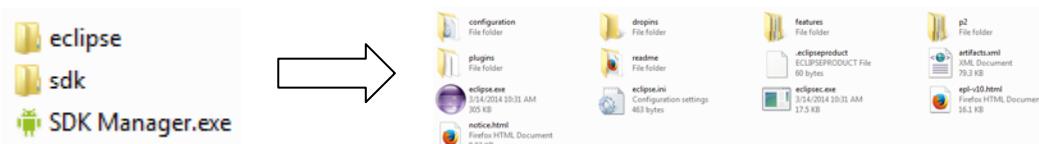
1. Preparing software for the development
  - a. Download the SDK (ADT Bundle for platforms)  
(<http://developer.android.com/sdk/index.html>)



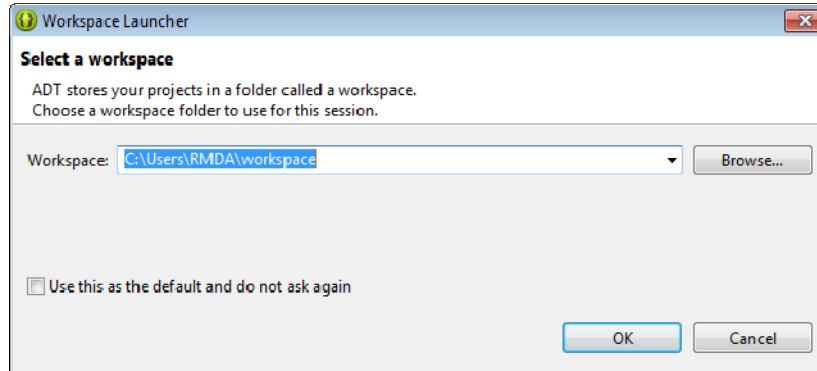
- b. Extract the files  
Note: The selected directory must be in full access directory.



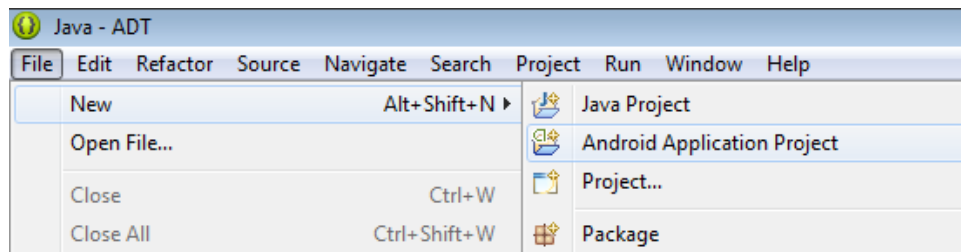
- c. Run **eclipse.exe** inside eclipse folder.



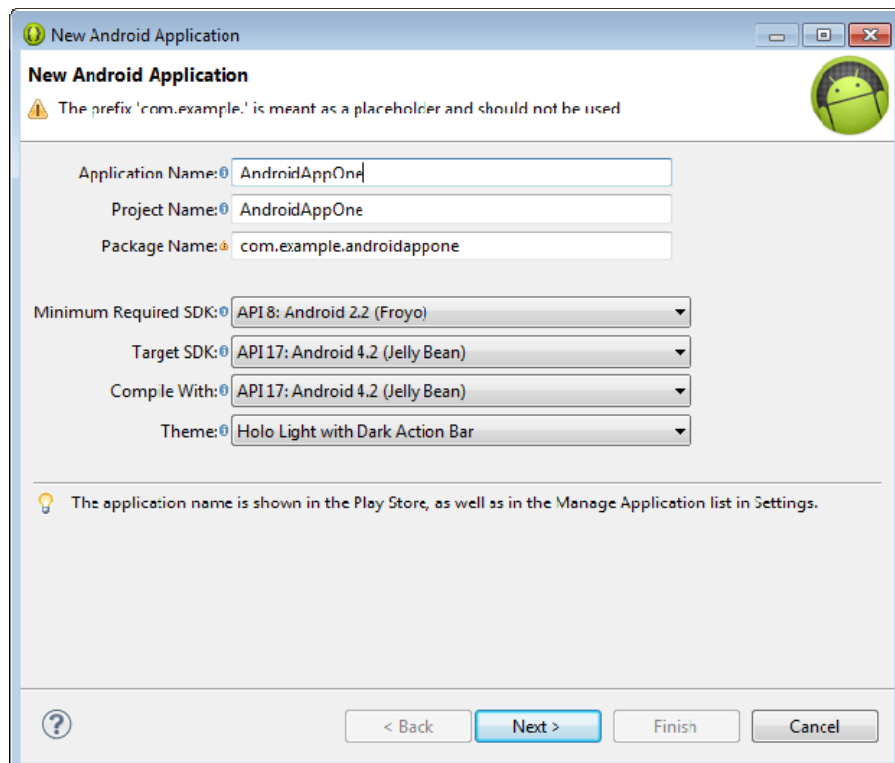
- d. Select you preferred workspace



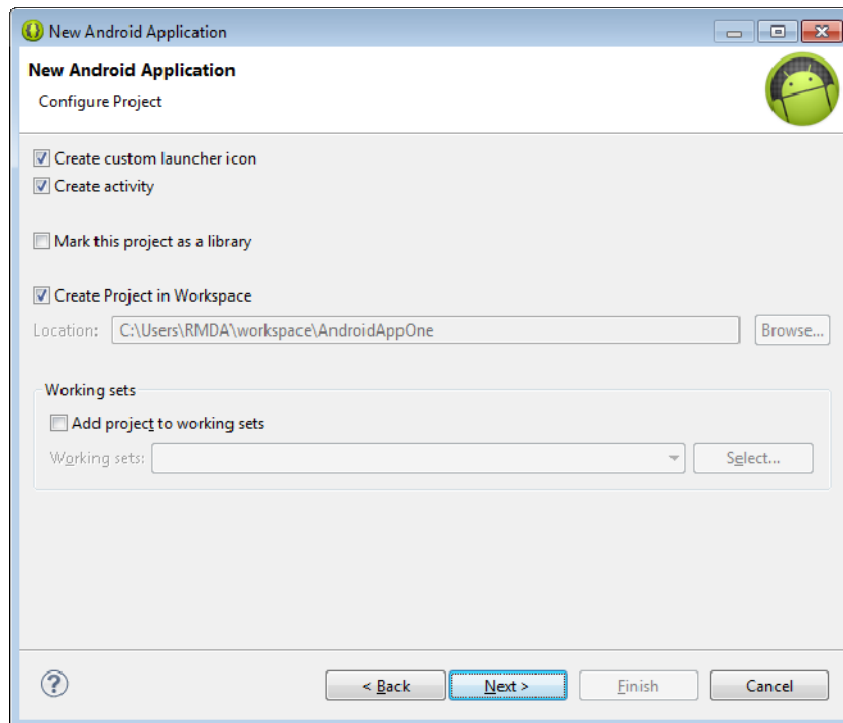
- e. Create a new Android Application Project (File – New – Android Application Project)



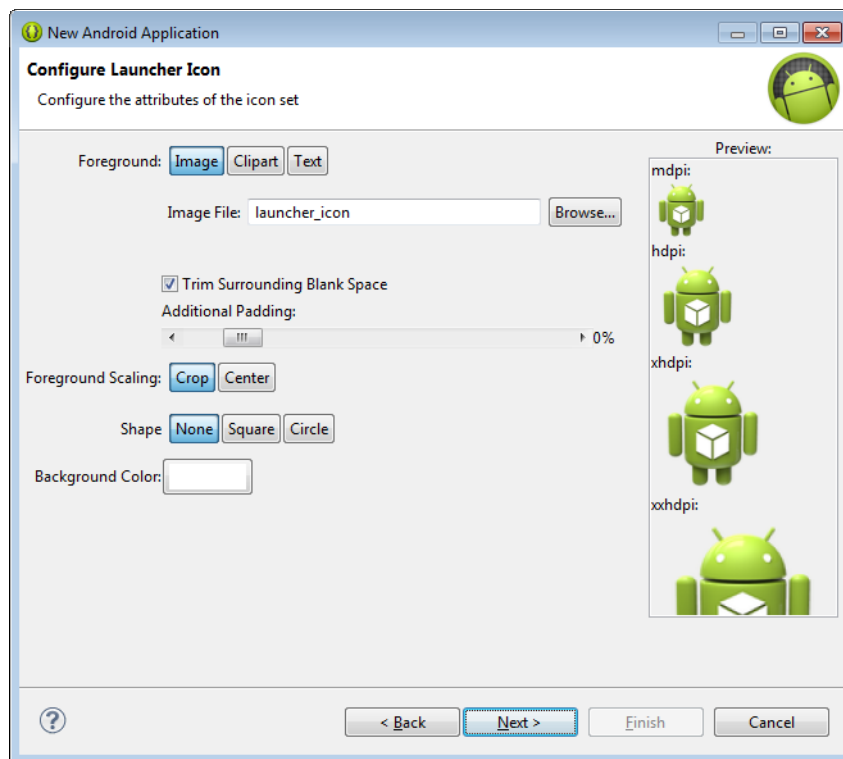
- f. Write the application name as stated below.

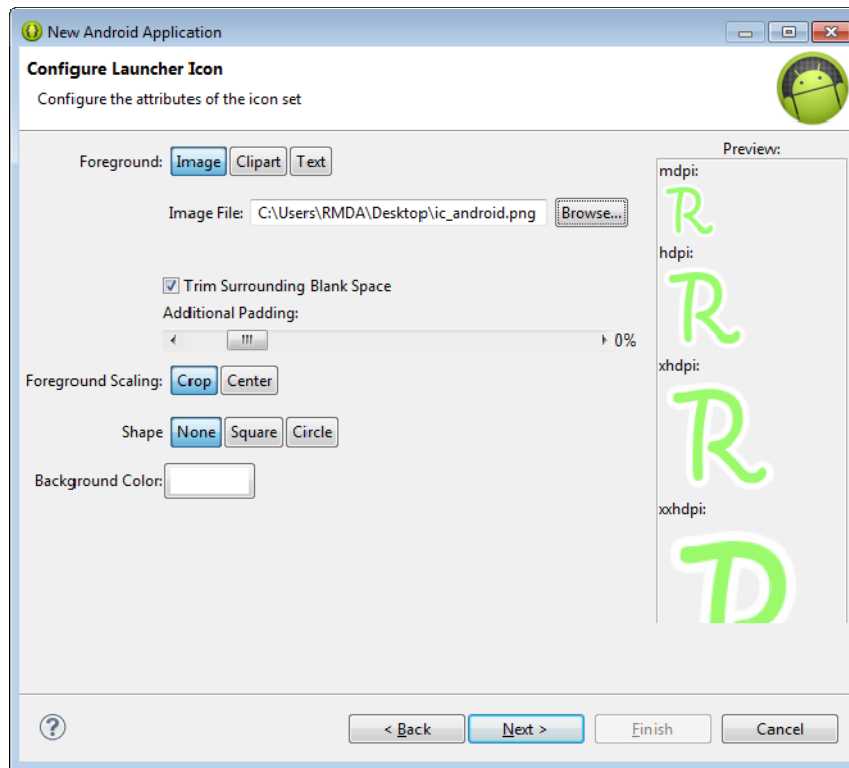


g. Click next

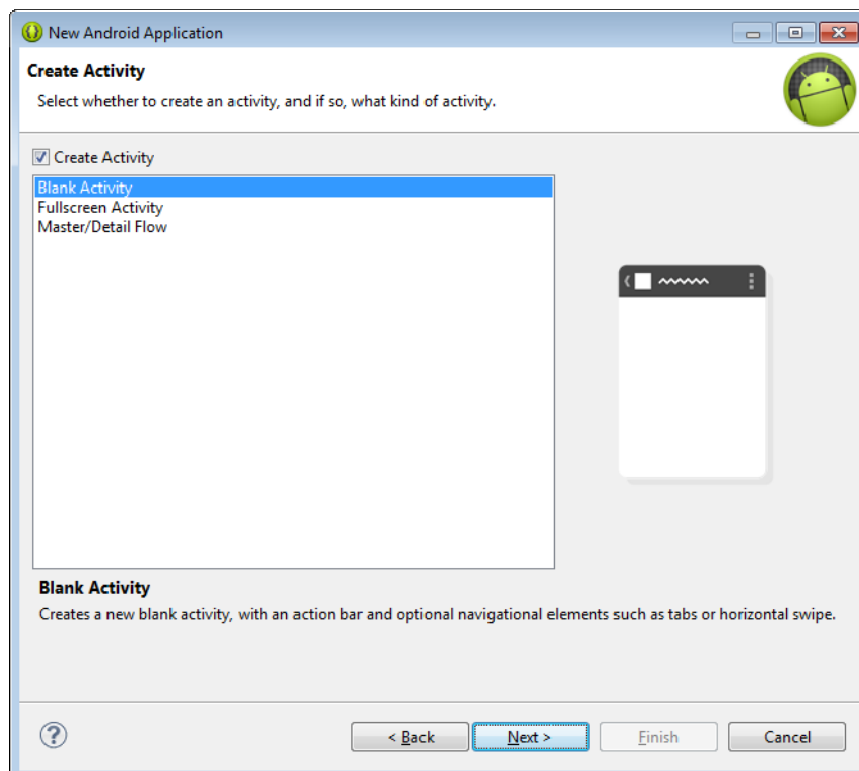


h. Browse for some icon to be used

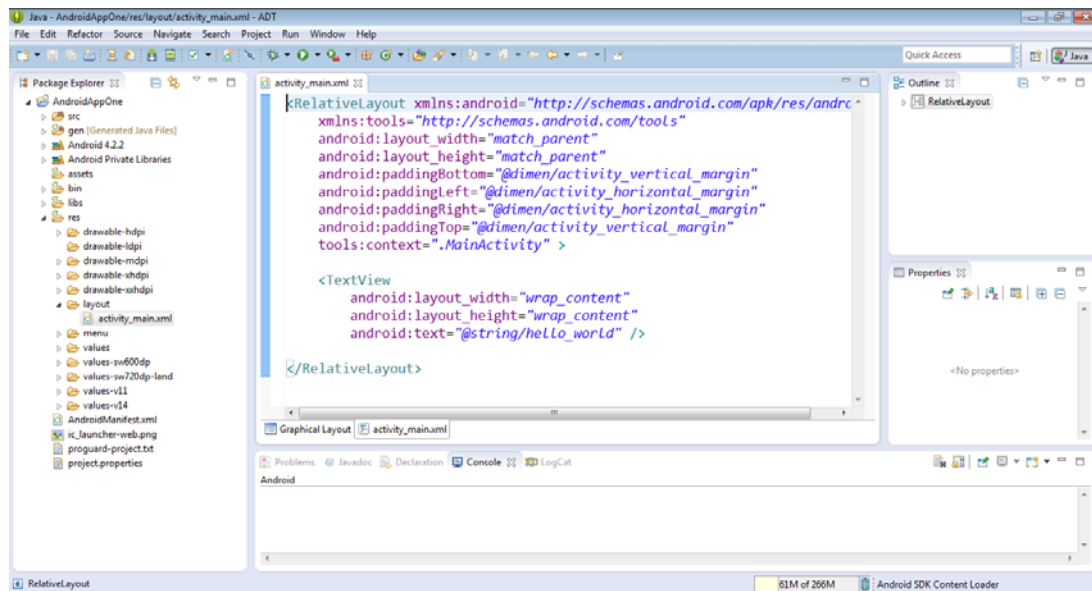
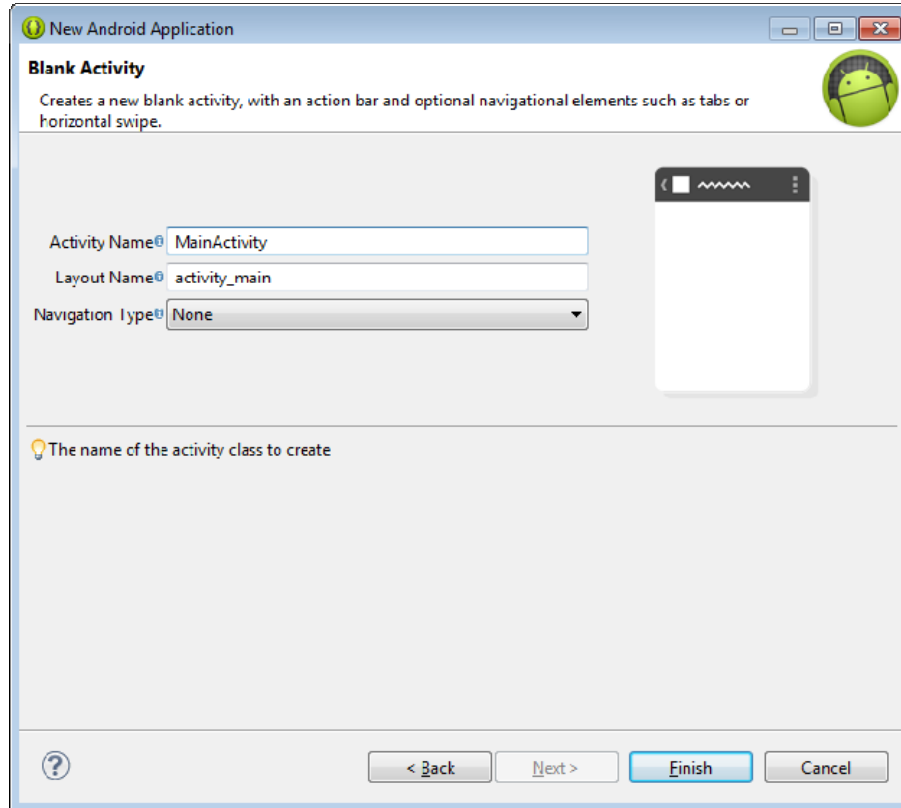




i. Create a Blank Activity

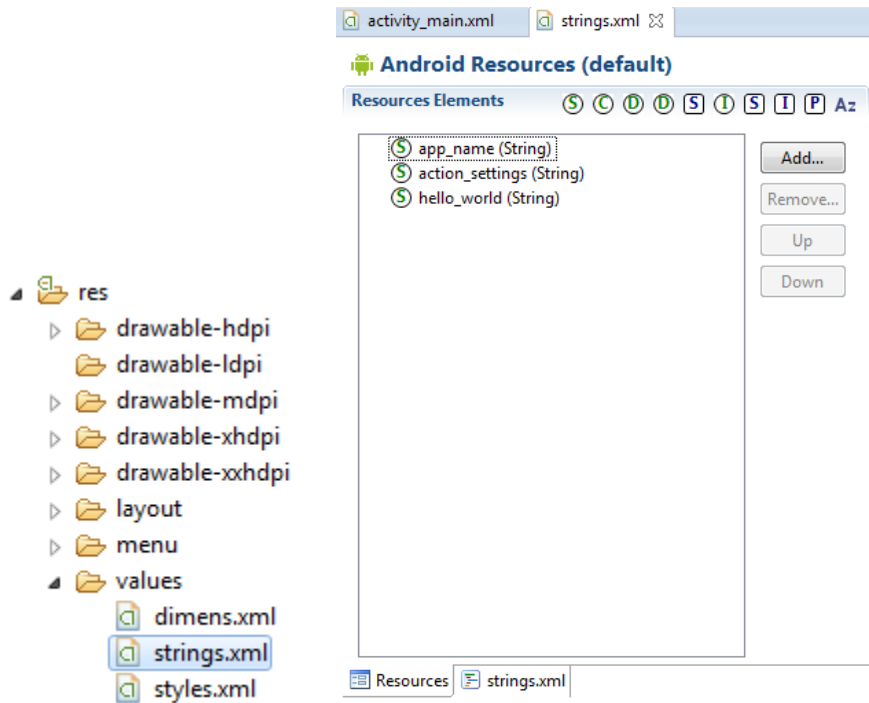


j. Set the Activity Name



## 2. Reference a string value

- a. Open strings.xml under res/values/ folder.

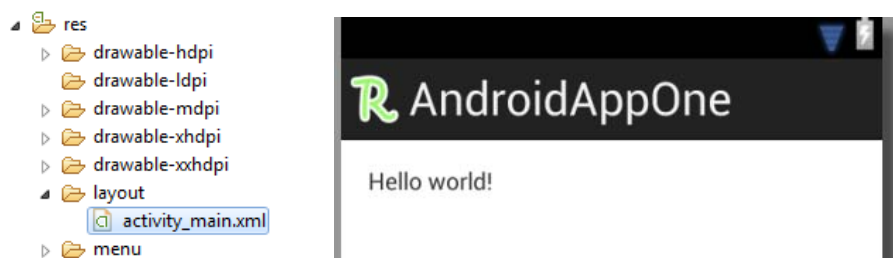


- b. Open the strings.xml in code view and add the statement in line 7.

```
1 <?xml version="1.0" encoding="utf-8"?>
2 <resources>
3
4     <string name="app_name">AndroidAppOne</string>
5     <string name="action_settings">Settings</string>
6     <string name="hello_world">Hello world!</string>
7     <string name="message">Welcome to Android</string>
8
9 </resources>
```

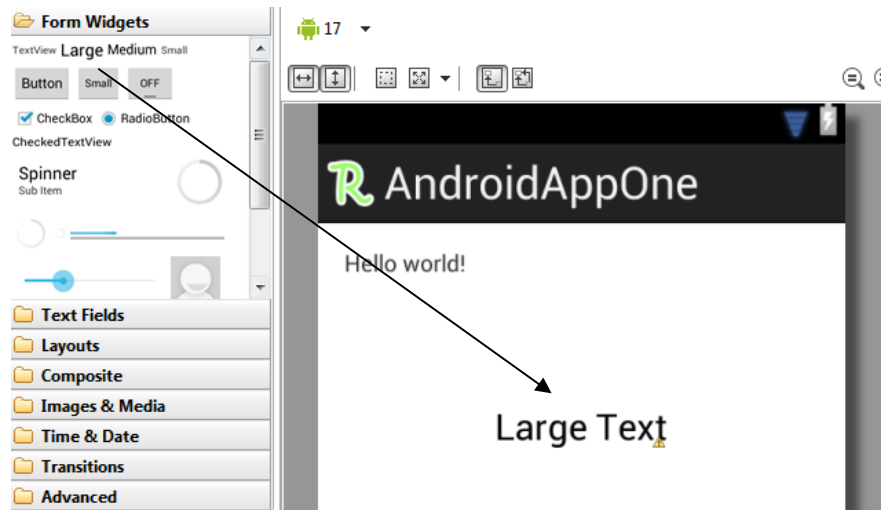
## 3. Place TextView in the Design View

- a. Open activity\_main.xml from res/layout folder. (select the Graphical Layout)

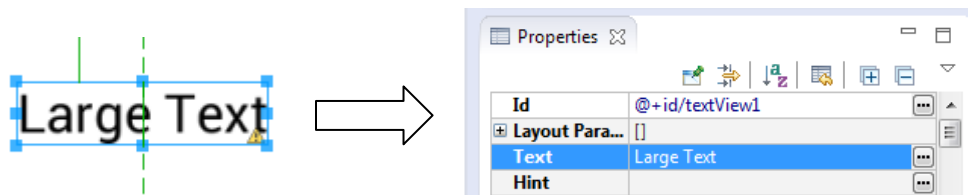




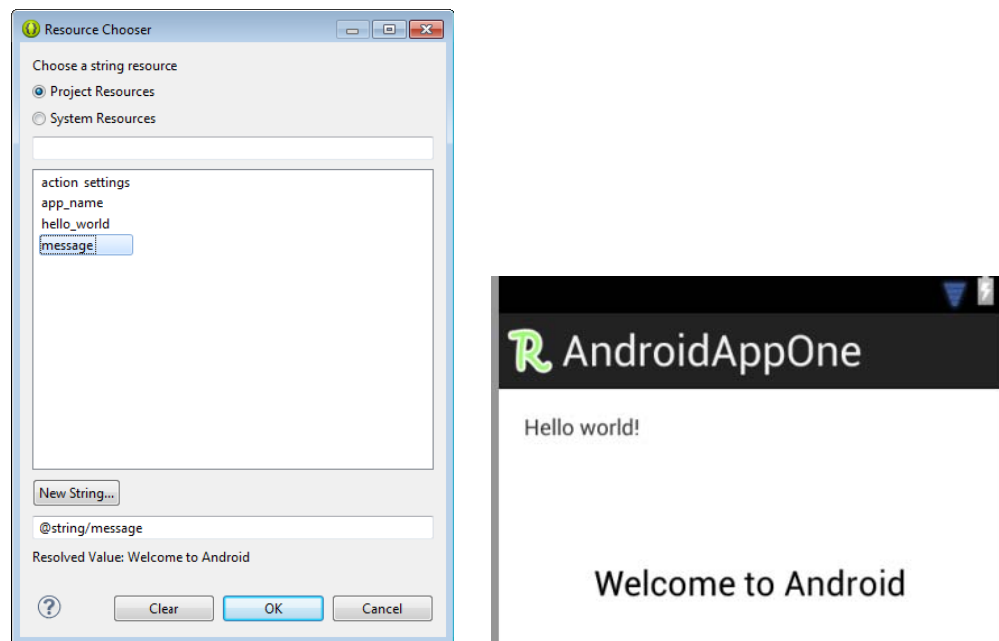
b. Place TextView in view layout



c. Select the Text View and browse the Text property.

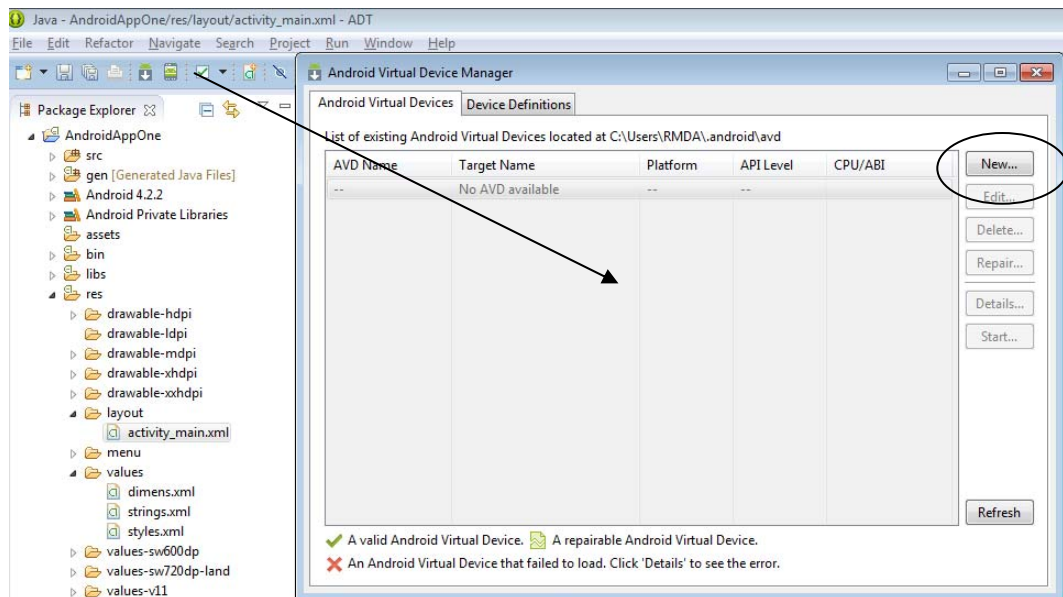


d. Select the message from the Project Resource then click OK.

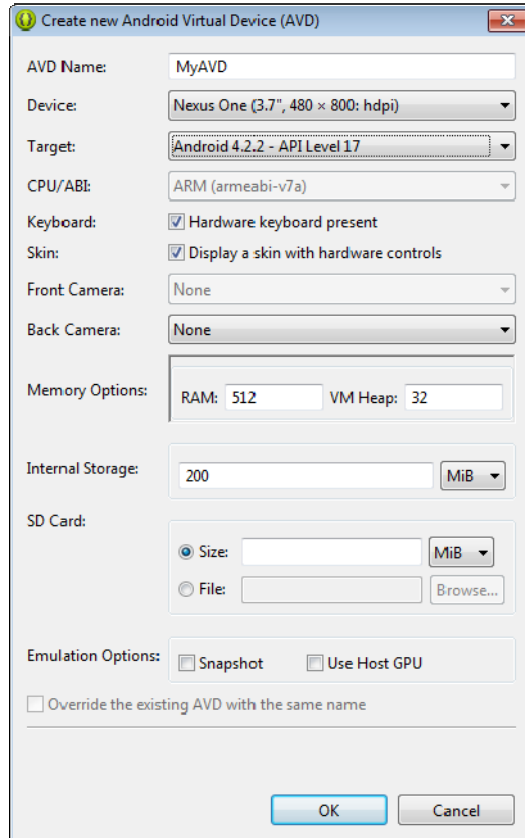


#### 4. Setup Emulator

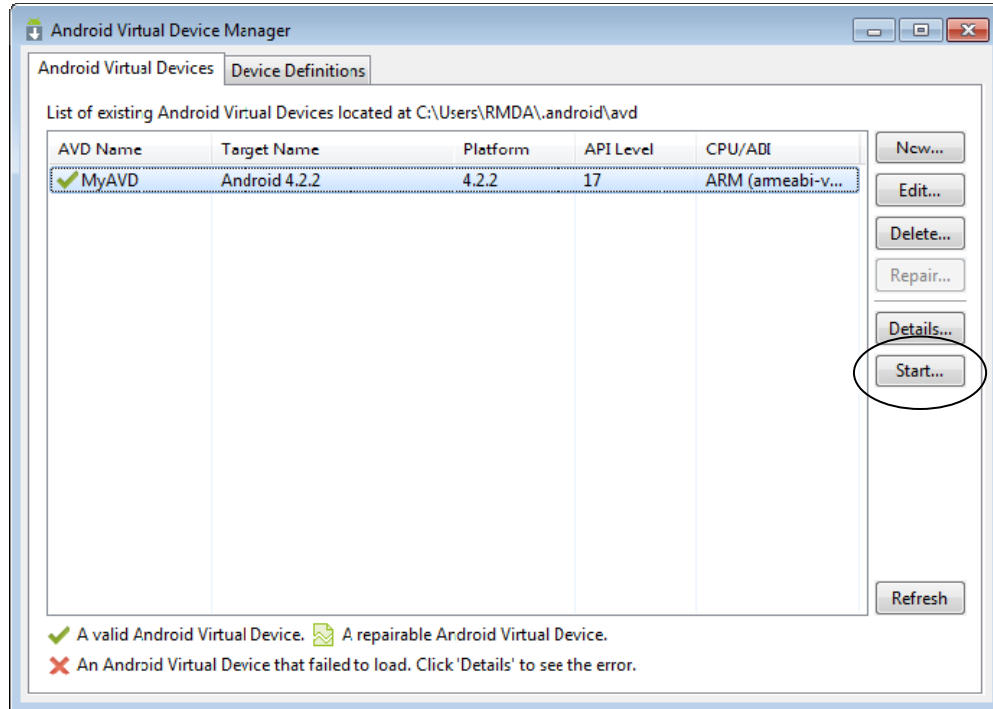
- a. Open Android Virtual Device Manager then click New.



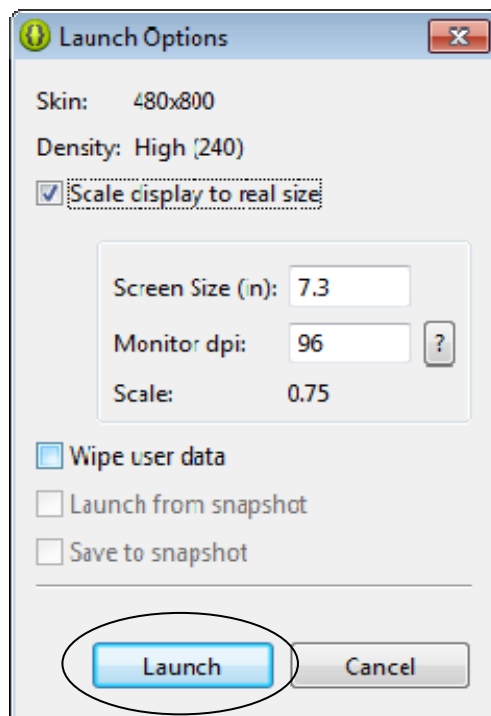
- b. Fill up the given fields as shown below then click ok.

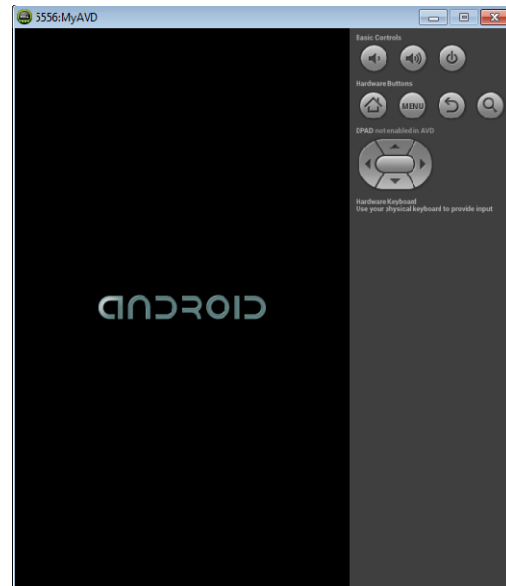
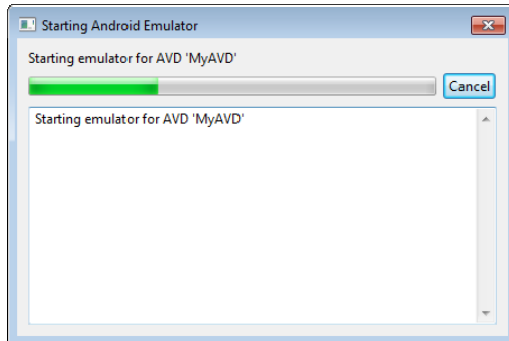


c. Select the AVD created then click start.



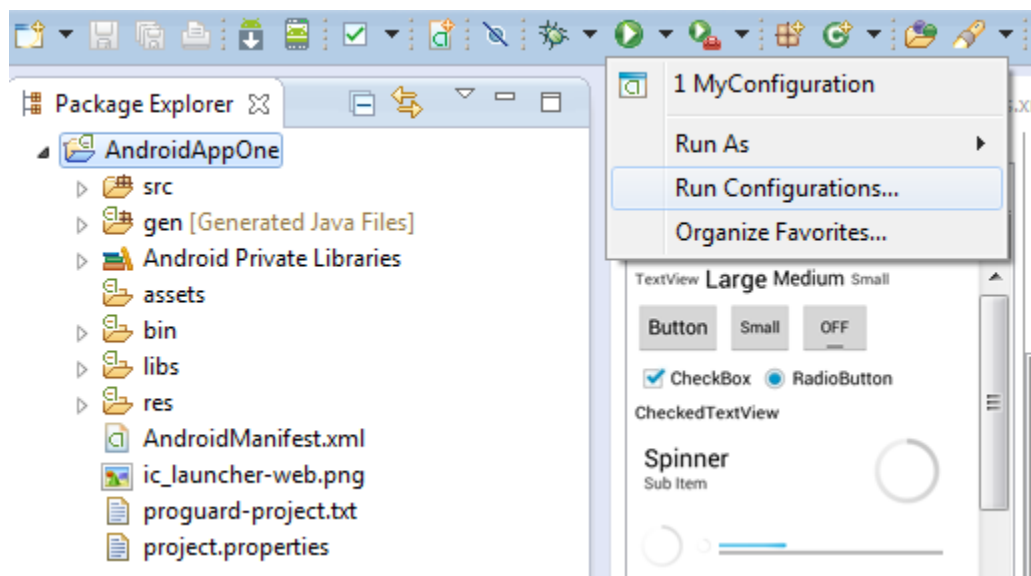
d. Click Launch



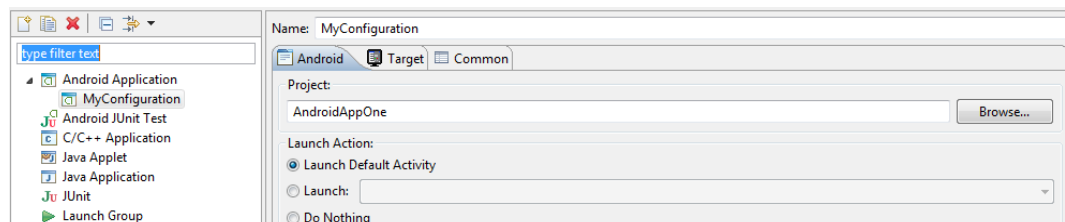


## 5. Run Android Application

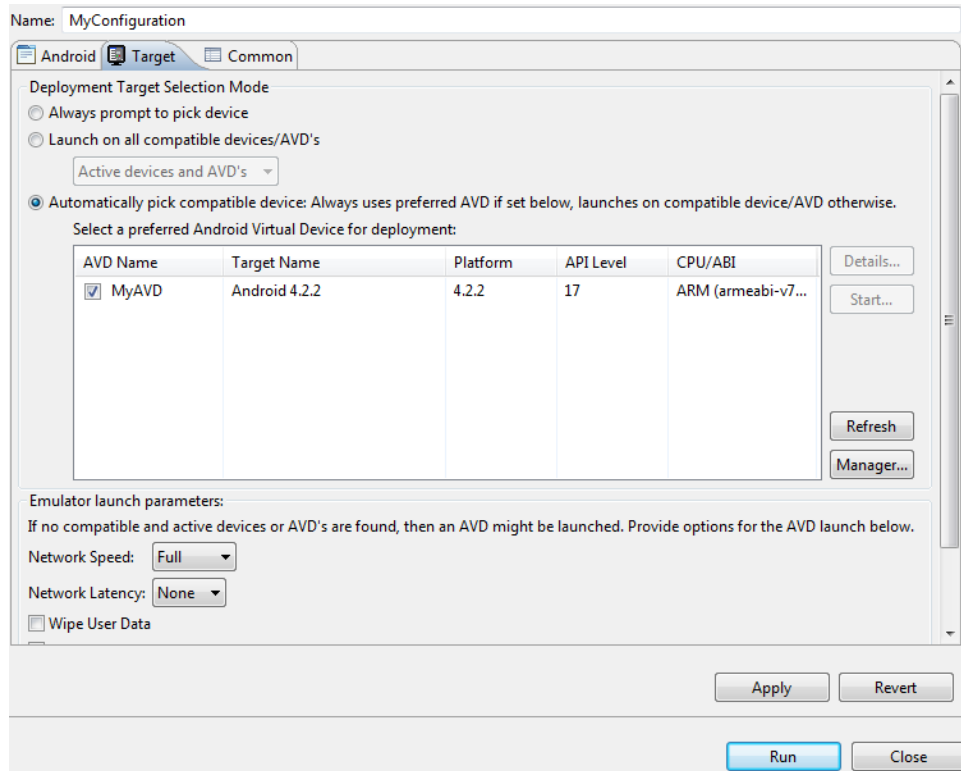
- a. Select the project name and click **Run Configuration** from play dropdown.



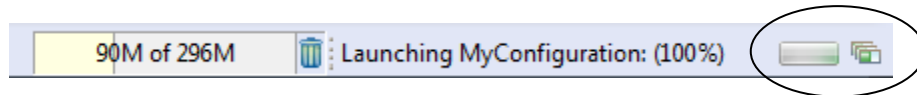
- b. Select your project.



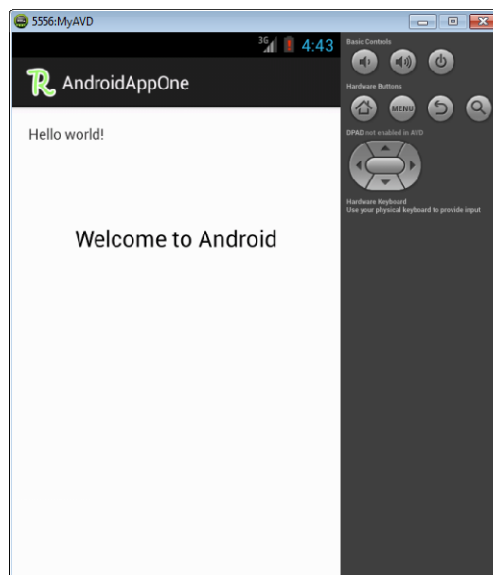
- c. Click target tab, apply button, and then click Run.



Check the application progress bar.



- d. Check the program's output.



6. Modify message output and run.

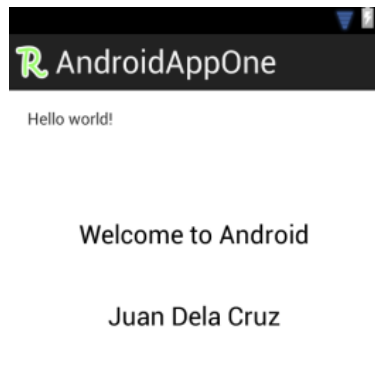
a. Do procedure number 3.


```
<?xml version="1.0" encoding="utf-8"?>
<resources>

    <string name="app_name">AndroidAppOne</string>
    <string name="action_settings">Settings</string>
    <string name="hello_world">Hello world!</string>
    <string name="message">Welcome to Android</string>
    <string name="stud_name">Juan Dela Cruz</string>

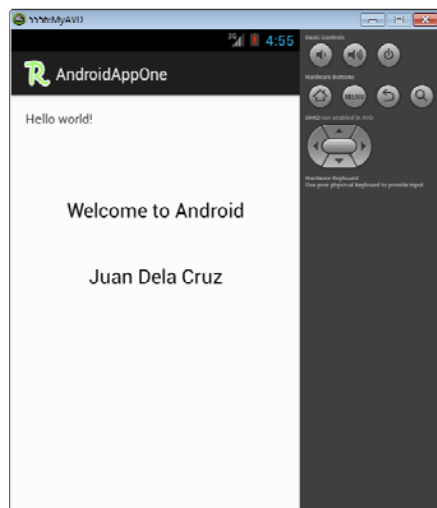
</resources>
```

Note: Save your file



b. Save all your files and click the play button to run.  (you must select the project name from the package explorer before you click the play button).

OUTPUT:



#### IV. QUESTION AND ANSWER

1. Can we use literal string value for TextView Text property and what will be the effect using literal string text value in the program?

---

---

---

---

---

2. What is the difference between simulator and emulator?

---

---

---

---

---

3. State the importance of the following directory and files in android application project.

- src
- gen
- res
- drawable
- layout
- values
- strings.xml
- AndroidManifest.xml

[illegible]

4. Name at least three mobile platforms and their program language used.

---

---

---

---

---

## **V. REFERENCE**

<http://www.developer.android.com>