

 Listen

https://app.readspeaker.com/cgi-bin/rsent?customerid=11151&url=https%3A%2F%2Fe.centennialcollege.ca%2Fcontent%2Fenforced%2F658923-COMP304002_2021M%2FWeek%2520%2F1ab%2520Assignment%2520%2521%2520%2520%2520Week%2520%2520Due%2520Date.html&lang=en_us&voice=11151&voice=Kate&readid=tbl_read_element_1

Lab Assignment 1 – Developing an Android Application That Includes Multiple Activities and Fragments (Graded 5%)

Discover & Learn

The purpose of this lab assignment is to:

- Use Android Studio IDE
- Explain and use the Android Manifest file
- Explain and use Activities, Fragments and Intents in Android apps
- Use resources in Android apps

Be sure to read the following general instructions carefully.

This assignment must be completed individually by all the students. You will have to upload the completed assignment on eCentennial through the assignment link under Assessments.

Due Date

Due Date: Wednesday, 26-May 11:59 PM ET

Assessment Information

Total Mark: 30 marks

5% of the overall grade

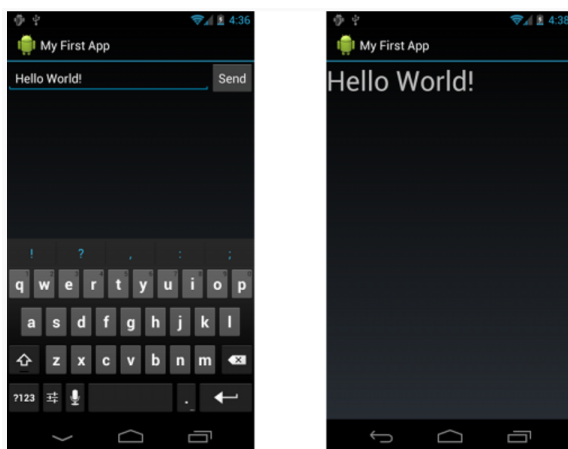
Exercises

Exercise 1 [15 marks]

In this exercise, you will build a simple Android application using Android Studio as described here: "[Create an Android Project](http://developer.android.com/training/basics/firstapp/creating-project.html)" (<http://developer.android.com/training/basics/firstapp/creating-project.html>)

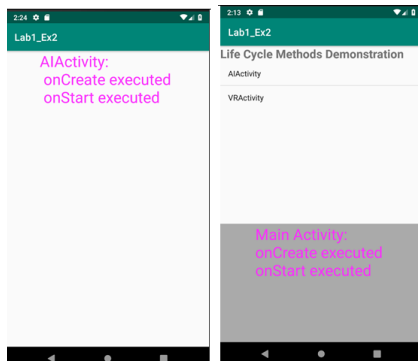
Make sure you name the project as described on page 2 of this document.

Skip the steps that require the use of command line tools or real devices. This app allows the user to type a message in the text field and click Send button. The message will appear on the second activity as shown below.



Exercise 2 [15 marks]

Write an Android Application that demonstrates the activity life cycle and fragments. The main activity should have two fragments. The top fragment contains a list view control whose items are the names of two other activities, AIActivity and VRActivity. The bottom fragment uses a text view control to display the list of life cycle methods that take place when the main activity starts.



Use **Toast** class methods to display a quick message in fragment's onCreateView and onStart methods.

The AIActivity and VRActivity should each have a TextView control to display messages when onCreate, onStart, onStop, and onDestroy are executed.

Declare the String resources in **strings.xml** file. Feel free to use the code from SimpleFragmentsExample app from Week 1 examples.

Android Module Naming Rules

You must name your Android Studio project according to the following rule:

yourfullname_COMP304SectionNumber_Labnumber_ExerciseNumber

Example: johnsmith_COMP304Sec002_Lab1_Ex1

Submission - Assignment Folder

Submit your projects as **zip** files that are named according to the following rule:

yourfullname_COMP304SectionNumber_Labnumber_ExerciseNumber.zip

Example: johnsmith_COMP304Sec002_Lab1_Ex1.zip

Submission can include a recorded video to demonstrate the exercises Ex1 and Ex2 as separate projects.

Upload your zipped assignment file using the assignment link in e-centennial: [Lab Assignment 1 - Week 3 \(id21common/dialogs/quickLink/quickLink.d21?ou=658923&type=dropbox&code=CENCOL-2912618\)](#)

Evaluation table:

Item	Percentage of total mark
Functionality: <ul style="list-style-type: none">• Correct implementation of activities<ul style="list-style-type: none">◦ Class code for main activity and two other activities◦ UI in XML/layout	25%

<ul style="list-style-type: none">o Resources in XML• Correct implementation of fragments<ul style="list-style-type: none">o Class codeo UI in XML• Correct implementation of Event Handlers and life cycle methods<ul style="list-style-type: none">o onListItemClick evento life cycle methods for activities and fragments (onCreate, onStart, onCreateView, etc)	25%
	25%
User Friendliness: <ul style="list-style-type: none">• Alignments of UI controls• Friendly I/O	10%
Comments, correct naming of variables, methods, classes, etc.	5%
Virtual Demo or Recorded Video	10%
Total	100%

References

Textbook, online course material, Lab Session examples, and [Android tutorials](https://developer.android.com/training/basics/firstapp/creating-project) ./https://developer.android.com/training/basics/firstapp/creating-project This material provides the necessary information that you need to complete the exercises.