BRITISH COLUMBIA INSTITUTE OF TECHNOLOGY

Assignment #1

School of Computing and Academic Studies COMP3717

*Programs: CST* *Due: Sun Oct 1, 2017 at 11:59 pm*

ASSIGNMENT DETAILS

- The assignment involves creation of a very simple conversion app

- Each set will do a different conversion

Set	Conversion	Required Conversions	Reference
A	Weight	Kilograms to Pounds Pounds to Kilograms Kilograms to Stones Stones to Kilograms Grams to Ounces Ounces to Grams	http://s7.metric-conversions.org/weight/
C	Length	Kilometers to Miles Miles to Kilometers Meters to Yards Yards to Meters Meters to Feet Feet to Meters	http://s7.metric-conversions.org/length/
G	Temperature	Celsius to Fahrenheit Fahrenheit to Celsius Celsius to Kelvin Kelvin to Celsius Fahrenheit to Kelvin Kelvin to Fahrenheit	http://s7.metric-conversions.org/temperature/
O	Area	Hectares to Acres Acres to Hectares Hectares to Square Feet Square Feet to Hectares Square Meters to Square Feet Square Feet to Square Meters	http://s7.metric-conversions.org/area/
S	Speed	Kilometers per hour to Miles per hour Miles per hour to Kilometers per hour Meters per second to Miles per hour Miles per hour to Meters per second Meters per second to Kilometers per hour Kilometers per hour to Meters per second	http://s7.metric-conversions.org/speed/

- The purpose of this assignment is for you to explore and understand the workings of Activities, Intents, Spinner, Event Handlers and Buttons

- Assignments must be done in teams of two students assigned by your lab instructor.

- The assignment consists of two screens. On the first screen (InputActivity), the user decides on the conversion, enters an amount then clicks on the "Convert" button.

- Results of the conversion are displayed on the second screen (OutputActivity) in a user-friendly manner. For example: *32° Fahrenheit converts to 0° Celsius.*

- The second screen has a "*Back*" button that leads to the first screen.
- Your application must cater to portrait and landscape orientations and must support an additional language to English.
- If there are any technical details missing, try to make realistic assumptions and build on them
- Use Android Resource files everywhere possible and avoid using literal strings/dimensions in the application
- Make sure you set the minimum SDK to be 19
- All click events are to be handled by listeners
- You are encouraged to go beyond what has been asked for, in terms of functionality and app design, but at minimum you should satisfy the basic features mentioned
- When you create the Android Application in Android Studio follow the exact instructions shown below with regards to naming the Application and Package. This is required to enable the marker to identify whose submission it is and keep the number of assignment apps installed on the emulator to a small number.
    - Application name: LastName1_ LastName2
    - Company Domain: ass1.bcit.ca
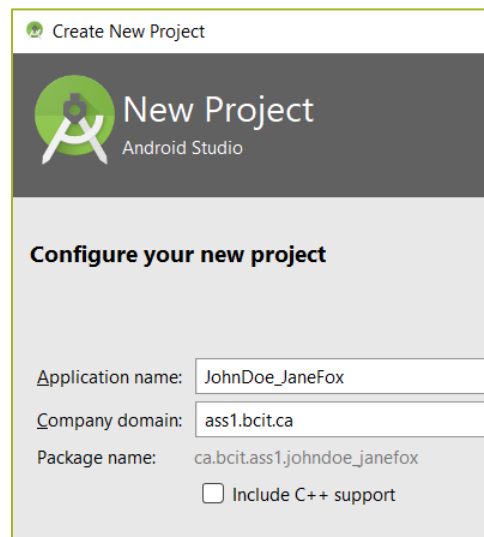
- The names of students in the team should display on the main activity
- This assignment will be tested with the Nexus 6 emulator.

SUBMISSION:

- Put the following information into a readme.txt file located in the root of your application:
    - your names, BCIT ID numbers and email addresses. This is necessary in case the marker wishes to urgently contact you.
    - what you have completed and what you have not completed
    - any major challenges
    - any special instructions for testing your app
- Also, put your .apk file in the root of your application.
- Before submitting the source code for your assignment, close Android Studio then delete the following directories so that the footprint of your app is smaller:
    - /build
    - /.idea/libraries
- Assignments must be zipped (.zip extension) and uploaded to the drop-box folder for the Assignment 1 in D2L. Do not use any compression utility other than plain zip.
- Assignment Zip files should be named **LastName1_ LastName2.zip** (Just zip up the Android Studio project for your app and this should follow the naming convention if you have followed the instructions)
- Your ZIP file will include all directories and files comprising your entire android app.
- There will only be one submission per team
- If you make more than one submission, then you must version the submission filename by adding _v1, _v2, etc.

COMP3717 ASSIGNMENT 1 MARKING GUIDE:

Name 1: _____   Set _____

Name 2: _____

Name 3: _____

Task	Max Mark	Actual Mark
InputActivity displays the input screen whereby the user enters an amount and chooses which conversion he/she is interested in.	10	
OutputActivity activity displays the result. • "Back" button • Correct results	10	
Other • cater to portrait and landscape orientations • support additional language to English • click events are to be handled by listeners • student names on the main screen • package name as prescribed • app & submission names as prescribed • Followed instructions • Design and coding conventions • readme.txt & .apk in the root of the app	10	
TOTAL:	**30**	