CHIANG MAI UNIVERSITY
Bachelor of Science (Software Engineering)
College of Arts, Media and Technology
1st Semester / Academic Year 2019
SE 103 PROGRAMMING LOGICAL THINKING

Lab Assignment 08 : For-Loop

Name ..... Student ID ..... Section.....

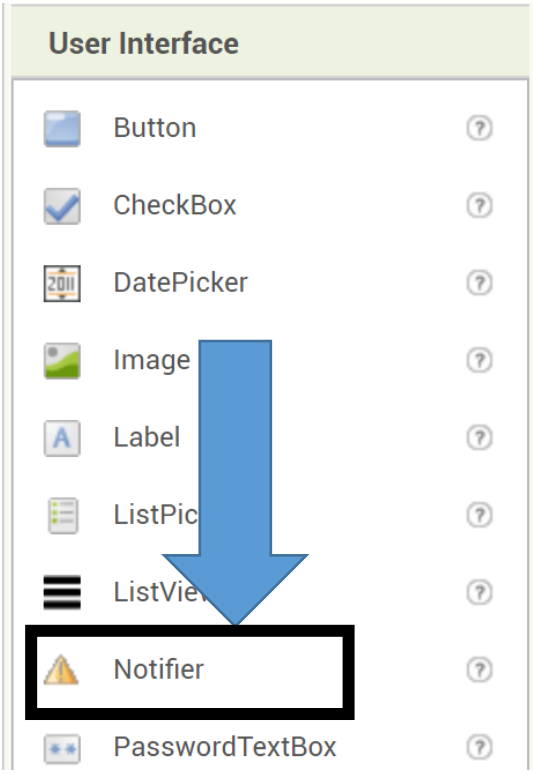
Objectives:

1) The student understands the concept of For-Loop.

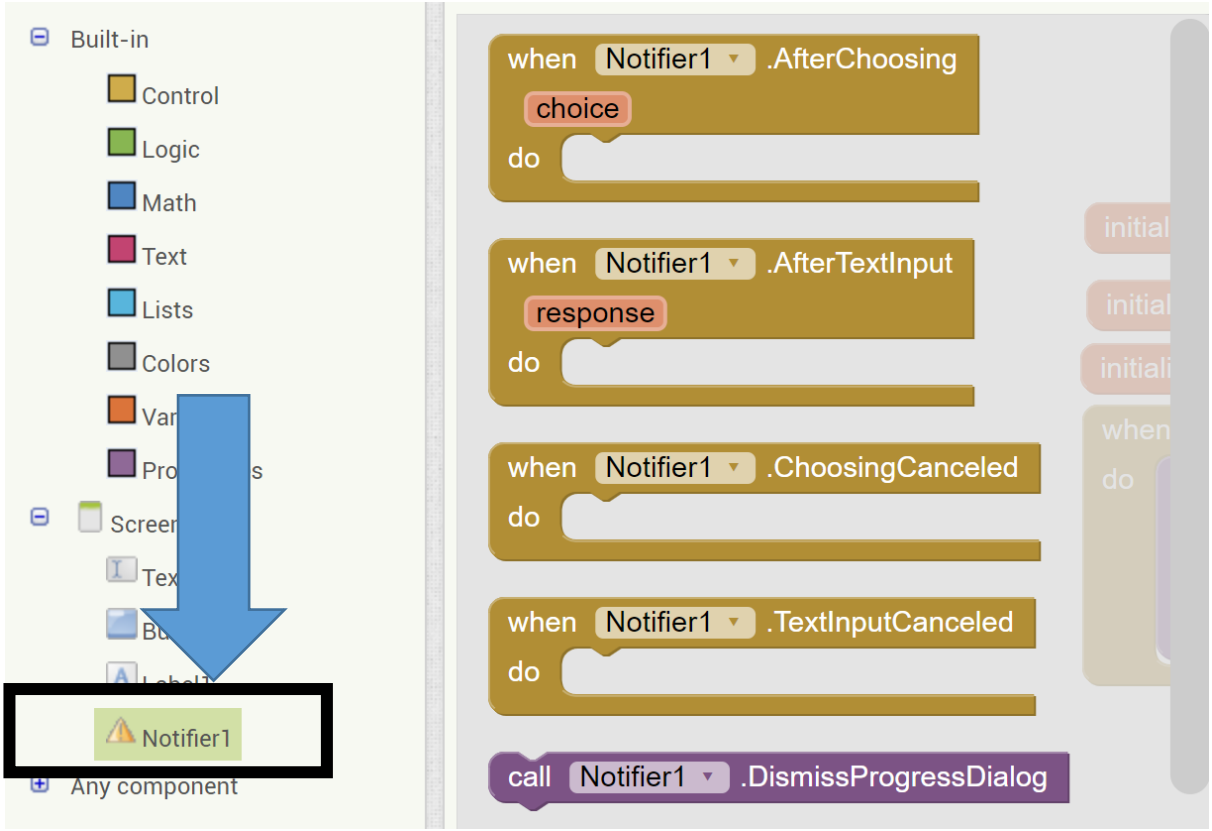
Notifier

The notifier is an UI for displaying information on the mobile device screen as an overlaying panel. Sometimes, the notifier is referred as a message box. It is often used to show the interruption of the program such as result, warning, or error. In AppInventor, the notifier is represent by the following symbol.

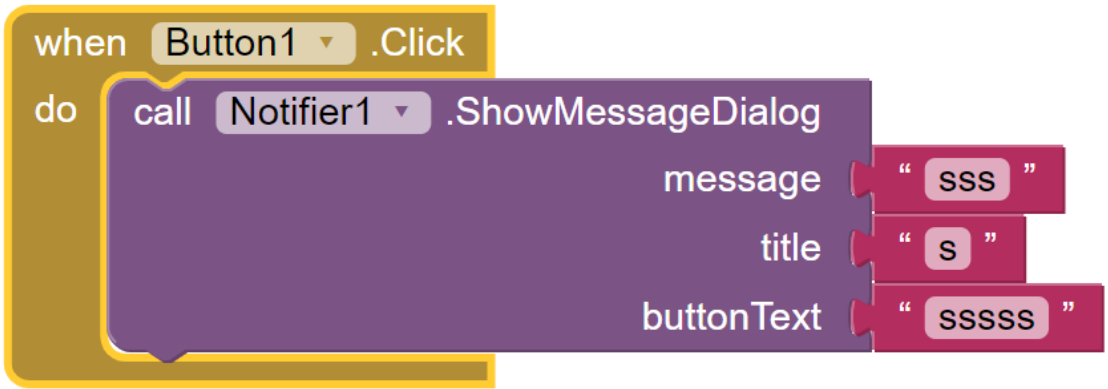
It can be found on the UI panel.



After you add the notifier into the UI panel, you can access the notifier in the Block panel.



To display the message box on the screen with information, you need to select the Notifier Call operation from the list and insert inside an event. There are 3 component of the message box. The message denotes the information, the title denotes the tile of the message box and the buttonText denotes the caption on the button.



If the event is active, a message box with the corresponding information will show.

For-Loop problem set

ALL PROBLEM MUST USE FOR-LOOP !!!!!!!

1. Create a program with 1 button, 1 notifier and 2 textboxes to read 2 integer numbers from user. Then, the program will and display a list of number using the notifier. The list contains a series of integer number starting from the first number and decreases by the second number. The reduction process is repeated for 5 times. For example, if the user input 10 for the first textbox and 3 for the second textbox, the program will display

   10 7 4 1 -2 -5

   if the user input 15 for the first textbox and 4 for the second textbox, the program will display

   15 11 7 3 -1 -5

   The result series will be display in the notifier.

   _____ Signature

2. Reuse the interface from problem 1). Create a program to read 2 input values from user and display the summation of the number between the input number **inclusively**. Assume that the first number is always smaller than the second number.

   If the user input 1 and 5, the program will display

   15

   If the user input 2 and 7, the program will display

   27

a. Write a pseudocode the problem.

b. Develop the program in the App inventor.

_____ Signature

3. Reuse the interface from problem 1). Create a program to read 2 input values from user and display the summation of the number between the input number **exclusively**. Assume that the first number is always smaller than the second number.

   If the user input 1 and 5, the program will display

   9

   If the user input 2 and 7, the program will display

   18

a. Write a flowchart the problem.

b. Develop the program in the App inventor.

_____ Signature

4. Reuse the interface from problem 1). Create a program to read an integer from user and display the factorial of the number.
   If the user input 3, the program will display

   6

   If the user input 5, the program will display

   120

a. Write a flowchart of the problem.

b. Develop the program in the App inventor.

_____ Signature

5. Reuse the interface from problem 1). Create a program to read an integer from user and display the 2 power by the input number.

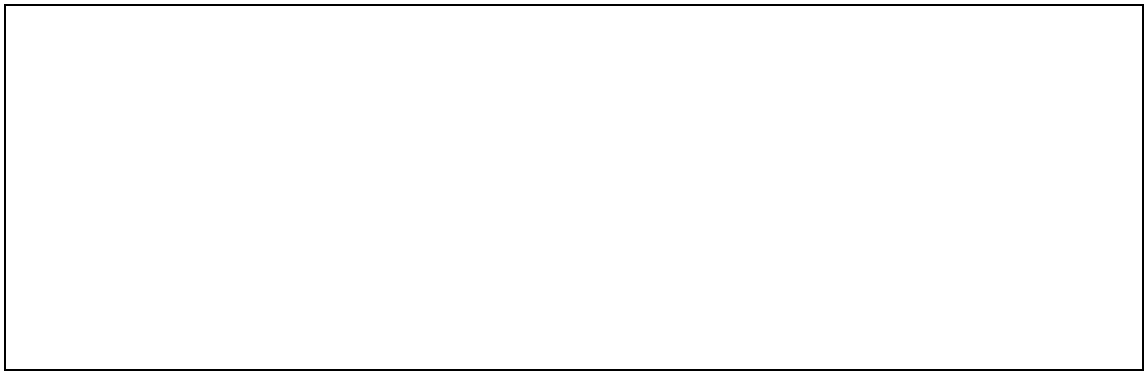
   If the user inputs 3, the program will display

   8

   If the user inputs 10, the program will display

   1024

a. Write a flowchart of the problem.



b. Develop the program in the App inventor.

_____ Signature

6. Create a program to read two integer values from user and display the first number power by the second number.

   If the user inputs 3 and 2, the program will display

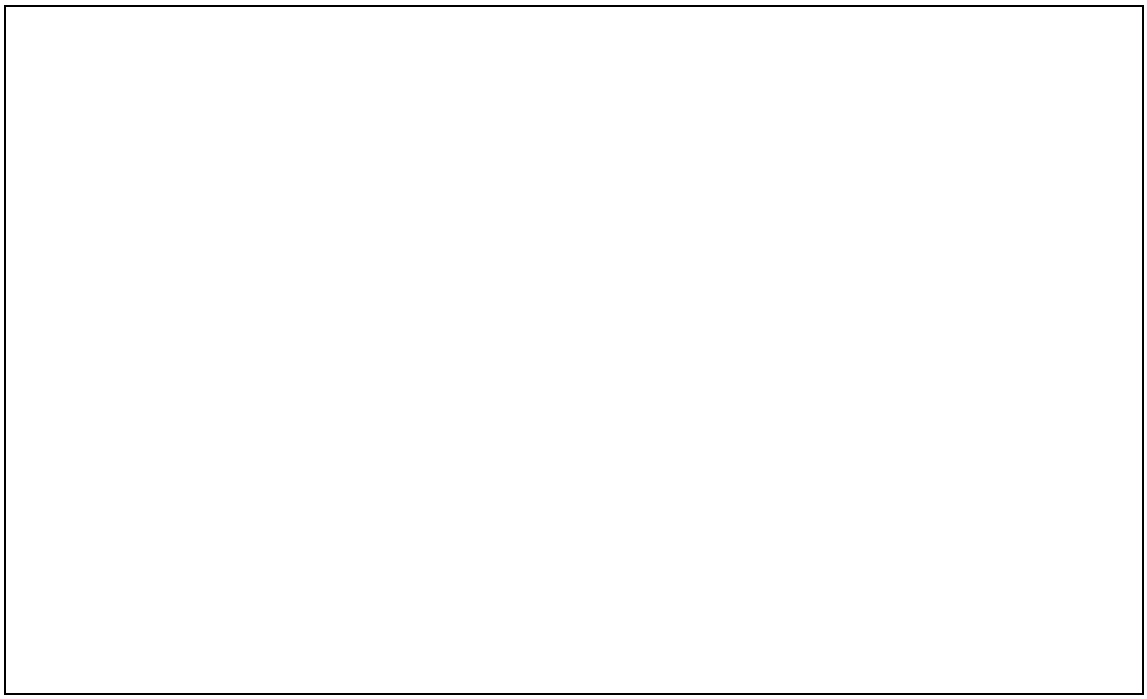
   9

   If the user inputs 5 and 3, the program will display

   125

   Remark: You must use the for-loop to implement this problem.

a. Write a flowchart the problem.



b. Develop the program in the App inventor.

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