

Exercise 1.1 – Create a More Complex Function

Learning Outcomes

Upon completion of this exercise, you will be able to:

- Create simple functions that are able to perform a task
- Distinguish between Public and Private functions and the effect of the keyword Private.

1. Create a function to deliver a warning message.

- i. In the **Training.ci** file, create the following function:

```
FUNCTION
Warning()
    STRING OperatorName = FullName();
    Message("Big Warning !!", "Look Out, " +
OperatorName, 48);
END
```

- ii. Save the file and compile the project.

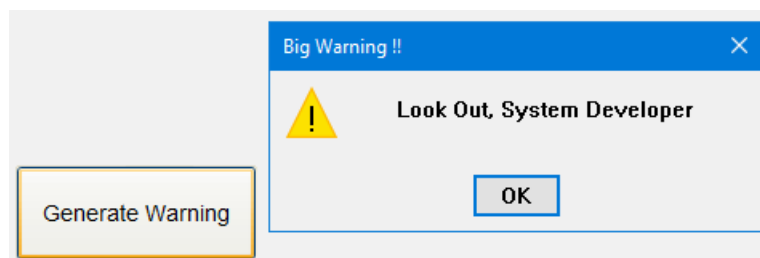
Note: This function will prompt the logged in operator with a personalised warning message.

2. Run the function.

- i. Create a temporary button on the **TestCicode_HD1080** page as follows:

Appearance(General) Text	Generate Warning
Input (Touch) Up Command	Warning()

- ii. Compile and run the project.
- iii. Test the function **Warning()**.



Exercise - Create a More Complex Function (cont.)

3. Make the function private.

- i. Return to the **Training.ci** file in the Cicode editor.
- ii. Insert the keyword PRIVATE on the line preceding the function.

```
PRIVATE
FUNCTION
Warning()
    STRING OperatorName = FullName();
    Message("Big Warning !!", "Look Out, " +
    OperatorName, 48);
END
```

- iii. Save the **Training.ci** file.
- iv. Compile the project. The Compile Error message as shown below appears.

Compile Messages						
Compilation Failed with: 1 Errors 1 Warnings						
Row	Type	Name	Field	Table	Error	Context
1	ERROR	TestCicode_HD1080	CMD	C:\ProgramData\AVEVA Plant SCADA 2023\User\MixerPlant\PGBUTTON.DBF	FUNCTION expected (E2031)	Line[1]:Warning()()
2	WARNING	TestCicode_HD1080	CMD	C:\ProgramData\AVEVA Plant SCADA 2023\User\MixerPlant\PGBUTTON.DBF	Possible missing operand between tags (W1021)	Line[1]:Warning()()

- v. A Private function is visible only to other functions within the same Cicode file and thus cannot be called from elsewhere in the Project, as this message demonstrates.
- vi. Remove the word PRIVATE from the function and save the Training.ci file.

