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| LEARNING PROFILE FOR ASSIGNMENT#0, QUESTION#1 | | | | | |
| *Name* | *:* | *Tyler Lucas* | *Due Date* | *:* | *N/A* |
| *Student ID* | *:* | *3305203* | *Submission Date* | *:* | *2017/04/17* |

**1. Problem Statement:**

Write a java program that allows user to input a temperature in Celsius (integer) and then the program prints the result in Fahrenheit (integer).

**2. Description of the Code:**

Outputs temperature in Fahrenheit given an input temperature in Celsius.

**3. Errors and Warnings:**

Table 1: List of Errors and Warnings Encountered in the Program

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| --- | --- | --- | --- |
| **#** | **Errors / Warnings** | **Details** | **How I solved them** |
| 1 | CelsiusToFahrenheit class wasn’t found in CelsiusToFahrenheit project. | [v. 1.0] I had set the main class as "private". | I changed the class and main method from “private” to “public”. |
| 2 | CelsiusToFahrenheit class wasn’t found in CelsiusToFahrenheit project. | [v. 1.0] I made a type with "String[]". | I corrected the misspelled “Stringp[]” to “String[]”. |
| 3 | error: variable degC is already defined in method main(String[])  int degC = sc.nextInt(); | [v. 1.2] I accidently wrote "int" again, in front of degC = … | I deleted "int ". |
| 4 | Exception in thread "main" java.util.InputMismatchException | [v. 1.2] Scanner integer input fetcher could not handle float input. |  |
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**4. Sample Input and Output:**

[Version 1.2, input “0”]

Enter temperature in integer degrees Celsius: 0

0 degrees Celsius is equivalent to 32 degrees Fahrenheit.

[Version 1.2, input “60.5”]

Enter temperature in integer degrees Celsius: 60.5

Exception in thread "main" java.util.InputMismatchException

at java.util.Scanner.throwFor(Scanner.java:864)

at java.util.Scanner.next(Scanner.java:1485)

at java.util.Scanner.nextInt(Scanner.java:2117)

at java.util.Scanner.nextInt(Scanner.java:2076)

at CelsiusToFahrenheit.main(CelsiusToFahrenheit.java:34)

C:\Users\tyblu\Documents\repos\comp268-random\CelsiusToFahrenheit\nbproject\build-impl.xml:1040: The following error occurred while executing this line:

C:\Users\tyblu\Documents\repos\comp268-random\CelsiusToFahrenheit\nbproject\build-impl.xml:805: Java returned: 1

**5. Discussion:**

The first error, where a class couldn’t be found in the project, was caused by setting either or both the class and the main method to “private”. I first ran into this error when attempting the *HelloWorld* sample program[[1]](#footnote-1). Having read the class Style Guide in which it says “Create private fields with getters/setters rather than leaving fields public,” as well as Controlling Access to Members of a Class[[2]](#footnote-2) in which it says “Use private unless you have a good reason not to,” I mistakenly thought this applied to the main class and method as well, as I’m still not sure what the differences are between a class, method, and object. Searching online didn’t reveal a solution right away, as few experienced programmers would think that something this simple could go awry, but I eventually found the answer here: <https://goo.gl/P2OdMJ>. Of course, the next page in the textbook had the answer as well:

The word “public” in the first line of main() means that this routine can be called from outside the program. This is essential because the main() routine is called by the Java interpreter, which is something external to the program itself.[[3]](#footnote-3)

I’ll have to keep an eye out to see how to implement other access levels at these top levels.

1. (Eck, 2014, p. 21) [↑](#footnote-ref-1)
2. (Oracle, 2015) [↑](#footnote-ref-2)
3. (Eck, 2014, p. 22) [↑](#footnote-ref-3)