LEARNING PROFILE FOR ASSIGNMENT#1, QUESTION#8

Candidate.java

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| --- | --- | --- | --- | --- | --- |
| *Name* | *:* | *Tyler Lucas* | *Due Date* | *:* | *N/A* |
| *Student ID* | *:* | *3305203* | *Submission Date* | *:* | *2017/05/09* |

# 1. Problem Statement

Google Inc. is looking to recruit three of the Boston runners. The criteria for selection are as follows:

1. Average final marks in bachelor’s degree (store up to 2 decimal places). The fifteen candidates have the following grades: 82.30%, 85.10%, 77.77%, 69.93%, 93.03%, 88.61%, 55.99%, 87.49%, 88.00%, 91.20%, 66.79%, 76.65%, 55.89%, 90.01%, and 87.9%.
2. Ability to communicate as one of the three values – “excellent”, “average”, and “poor”. The fifteen candidates have the following ability to communicate, respectively: poor, poor, average, average, average, poor, excellent, excellent, excellent, average, excellent, average, excellent, excellent, poor.
3. Innovation as one of the two values – “brilliant” and “average” (store as a Boolean; brilliant = true and average = false). The fifteen candidates have the following innovative abilities: brilliant, average, average, average, brilliant, brilliant, average, brilliant, average, brilliant, average, brilliant, brilliant, average, average.
4. Ability to regulate one’s own skill as a probability value between 0 and 1.0 – 1.0 implies excellent regulatory capabilities and 0.0 implies no skills to regulate (store as a double). The fifteen candidates have the following regulatory abilities: 0.5, 1.0, 0.8, 0.0, 1.0, 0.7, 0.8, 0,9, 0.5, 0.6, 0.3, 0.2, 0.5, 0.3, 0.8.

Store these values for the fifteen candidates in an extended AddressBook class. In general, Google will not consider a candidate with average marks of less than 85%. Google will consider a candidate with average marks of less than 85% only if the candidate at least has 0.5 regulatory abilities and at least ‘average’ ability to communicate. Google will only consider a candidate with poor communication ability if the candidate has a ‘brilliant’ innovation capability. Write a program that will help Google to programmatically determine eligibility of the fifteen candidates for these positions, and print the output on the console.

# 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

|  |  |  |  |
| --- | --- | --- | --- |
| **#** | **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”. |
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# 4. Sample Input and Output

[Version 1.2-1.3, input “0”]

Enter temperature in integer degrees Celsius: 0

0 degrees Celsius is equivalent to 32 degrees Fahrenheit.

[Version 1.2-1.3, input “60.5” (float type input)]

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

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