

Promineo Tech Back-End Coding Bootcamp Week 2 Research Assignment

Name: Antonio Cousin, Jr

Prompts

1. What are the different loops Java provides us with?

The different loops Java provides us to cut down on making duplicated and rather static codes are the for(), while() and do() [do-while] loops. Each of these loops have their own quirks, but all three function in a similar manner to help cut down on the potential repeating of the same function in a code, which also has the benefit of reducing the amount of troubleshooting in your code, than if you just kept in the repeated coded functions. The for loop is the most compact version of the three, whereas the while loop is the most general loop, and the most likely to output an infinite loop, and the do-while is a guaranteed single loop regardless if the variables don't lend themselves to looping per the syntax of the do-while loop.

2. What is the syntax of one of the loops in your above answer? How and when should you use this loop? Give an example.

The syntax for the while loop takes an established variable (such as an INT or STRING variable) and sets up a condition for the amount of times a set of code defined within the while loop will run. This process will be enacted for as long as the boolean variable of true for the condition keeps returning, and will halt as soon as the boolean variable of false returns after the completion of a loop. Since this loop is more generalized compared to the for loop, this loop is better utilized when you are more likely to have several instances of a repeated command of codes. An example of this is if you are trying to keep track of how many times you would need to move to a new shelf after you put a certain amount of items on a shelf. You could also interchange it with keeping track of the process of fulfilling a recipe on a step-by-step basis (like if you only have a 1/8 cup measuring scoop, and want to make sure you are putting in the right amount of the ingredient with the scoop, like if the recipe calls for 2 1/2 cups of sugar, or 3 1/4 cups of coconut flour).

Sources

Prompts 1/2

- <https://learn.promineotech.com/mod/book/view.php?id=8282&chapterid=439>
- <https://docs.oracle.com/javase/tutorial/java/nutsandbolts/for.html>
- <https://docs.oracle.com/javase/tutorial/java/nutsandbolts/while.html>

