Running Head: CHAPTER 10 AND 11

Introduction

Chapters ten and eleven focused on Objects and Classes; the exercises were purely establishing the author's understanding of the topic's wit the use of stack tables and diagrams. The first three exercises gave the student programmer different pieces of code and asked for a drawn representation of the states of the program and their variables. Along with understanding the output and how the code is meant to operate. The last exercise from chapter eleven asked the student programmer to examine java.awt.Rectangle and state if the methods used are pure or modifiers. The process of decomposing these problems started by analyzing them.

Analysis

Exercise one from chapter ten requested a stack diagram to properly represent the local variables and parameters of main and riddle before riddle returns in a given program. The used variables included x, y, and p. In main, x was given the value 5; while in riddle x was valued as x+7, making it 12. Main also stated the blank was a new point with values x[1] y[2]. The final part was the last variables in riddle in the formula, making the two x's 5 and 12. When running the program, the numbers 15, 5, 1, and 2 appear as the output. The final question was if or if not, the program was mutable and why. Due to the methods being changeable in values, it was considered mutable. Exercise two from chapter ten wanted a stack diagram of the program given before the distance was returned with all the variables as well. In main there were four stated objects. Blank was a new point with values given x{5] y[8]. Rect was a new Rectangle with the values given as x[0] y[2] w[4] h[4]. Center was findCenter method for rect. Finally, dist was a method to find the distance from the center and blank. While running the program the double 5.0 was outputted. Exercise 3 from chapter 10 wanted the student developer to draw a diagram that

shows the state of the program before the end of main and included the variables and objects. Box1 was the first stated object as a new rectangle with the given values x[2] y[4] w[7] h[9]. P1 was the next stated variable as a findCenter method for box1. The next statement wanted box1 to grow (1,1), creating new values for the second box1. The last variable was p2 , making it a new findCenter for box1. The end result was two (5,8). Since both boxes came for an original value, they weren't going to change their center point. The last exercises were from chapter 11, a question asking the student to review java.awt.Rectangle and state which methods are pure and which are modifiers. Pure methods only depend on their own parameters while modifiers change the state of an object. It was realized that the Rectangle methods was, in fact, a modifier method. Overall the exercises were analytical for these chapters and did not request a program to be built.

Conclusion

The exercises had a lot of code reading elements encased in it to get the readers to understand what the raw code is stating. Each exercise made sure the student programmer would recognize the code and understand what it is processing. This student developer had to use Google to find extra help since ThinkJava has been unhelpful in understanding programming. In this assignment, they were also unsure if a functional requirement section should even be added in the paper since there was no built program. Overall, there wasn't much problem with the creation of the assignment.

https://github.com/DiannaToledoSG/DT_ch10-11_ex1-3_1