

Homework 0

Assigned: 1/21/22

Due: 1/27/22 @ 5 PM

Provide answers for the following questions. Each answer should be roughly a paragraph, with the exception of the first one. Submit your text answers as a .pdf to the Homework 0 link on Brightspace in the Homework folder. Submit your Java code as a single .java file to the Homework 0 link as well. We will go over this process soon (certainly before 1/27). If you are unable to access Brightspace for any reason, alert course staff **ASAP**.

1: Acknowledge that you have read the syllabus by stating this as your answer to this question.

- I have read the syllabus.

2: Did you notice anything interesting in the course schedule? If so, why does it interest you?

- I have noticed arrays and trees in the course schedule and I am interested in learning more about these topics as I have heard they come up frequently in interviews for software engineering positions, and I have not dealt with these data structures in the purview of OOP.

3: What is an object as it pertains to Computer Science?

- An object as it pertains to Computer Science is a concept that is the root of the hierarchy in programming. Objects are collections of methods, and data, however it is also an abstract concept that we use to make things easier to understand. There are 4 concepts that pertain to objects and how we can utilize them. Abstraction is the notion of using simplistic classes to represent and simplify complex underlying code.

Encapsulation is establishing a clear division between the concerns and data of objects, i.e. what does this object *need* to know. Polymorphism is the idea that an object can be considered multiple different classes. Finally, inheritance is the idea that some classes may implement aspects of other classes.

4: Write a very short program that will display that text: “Hello World”. Your program should also display your name right after. This is the entirety of what you need to do, and exists to confirm that you have the ability to produce Java programs (for future assignments).