

Brooks Jackson

4.1-4.3 Journal

1. In section 2.2 (pp 78-89) the authors describe key aspects of object-oriented design. Select one sentence or short passage that you found most useful or helpful. Briefly explain why you chose this particular sentence or short passage.

I picked the sentence: "Inheritance allows you to reuse classes that you defined earlier-perhaps for different but related purposes-with appropriate modification." I like this because it highlights a fundamental idea of inheritance in Java. By reusing classes and their data, we can avoid duplication and excess code.

2. In section 4.1 (pp 172-176) the authors discuss the importance of using abstract data types (ADTs). Select one sentence or short passage that specifies the most important feature of ADTs. Briefly explain why you chose this particular sentence or short passage.

I picked the sentence: "The description of an ADT's operations must be rigorous enough to specify completely their effect on the data, yet it must not specify how to store data nor how to carry out the operations." I like the sentence because it highlights the separation of interface and implementation. ADS's define the operations that can be performed on data and the behavior of those operations, and the sentence emphasizes these key principles.

3. In section 4.2 (pp 177-191) the authors discuss the importance of specifying an ADT and its role in the problem-solving process. Select one sentence or short passage that highlights the greatest benefit of specifying an ADT. Briefly explain why you chose this particular sentence or short passage.

I like "You must specify the behavior of the ADT's operations on its data, that is, the list items. It is important that you focus only on specifying the operations and now how you will implement them." I like it because it shows the key advantage of specifying an ADT: separating interface from implementation.

4. I don't know where my Monster and TestMonster programs are so I have no clue what similarities there might be.