A modular program is easier to write, read, and modify

An ADT is a collection of data and a set of operations on that data

Data structures are part of an ADT’s implementation

ADT and data structures are not same

The ADT sorted list maintains item in sorted order. It also inserts and deletes items by their values, not their positions

You can use ADT operations in an application without the distraction of implementation details

Encapsulation hides implementation details

A class’s data fields may or may not be public. However, making them private is a recommended best practice. Also, by default all members in a class are private unless a programmer specifies otherwise.

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Java package provides a way to group related classes together

Access to a package’s classes can be public or restricted

“super” keyword -> Used in a constructor of a subclass to call the constructor of the superclass

ADT list contains some operations such as insert, delete, and retrieve

A reference variable as a data field of a class has the default value null

A local reference variable has no default value

The “new” is a Java keyword

An array of objects is actually an array of references to the objects

A traverse operation visits each node in the linked list

Equality operators compare values of reference variables, not the objects that they reference. The “equals” method compares objects field by field

A “.java” file cannot have more than one public class

A new node can be inserted into a linked list

A specified node can be deleted from a linked list

Modularity keeps the complexity of a large program manageable by systematically controlling the interaction of its components. Also, isolates errors and eliminates redundancies

Procedural abstraction separates the purpose and use of a module from its implementation

A module’s specifications should detail how the module behaves and identify details that can be hidden within the module

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