# Chapter 4

**ADT Sorted List**

4.1 Abstract Data Type Sorted List

Logical Level

Application Level

Implementation Level

PutItem Function

DeleteItem Function

Improving the GetItem Function

Binary Search Algorithm

Test Plan

4.2 Dynamically Allocated Arrays

4.3 Implementing the Sorted List as a Linked Structure

Function GetItem

Function PutItem

Function DeleteItem

Code

Comparing Sorted List Implementations

4.4 Comparison of Unsorted and Sorted List ADT Algorithms

4.5 Bounded and Unbounded ADTs

4.6 Object-Oriented Design Methodology

Brainstorming

Filtering

Scenarios

Responsibility Algorithms

Final Word

Summary

Exercises