Sorted List Readme

Paul Jones and Andrew Moore
Systems Programming (01:198:214)
School of Arts and Sciences
Rutgers University

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Big-O Analysis

SLCreate

This creates the memory for an empty sorted list. The analysis depends on what the rest of the OS is doing, as it only allocates memory.

$$O(1)$$

SLDestroy

This frees all the memory for a list. The analysis depends on what the rest of the OS is doing, as it only frees memory.

$$O(1)$$

SLInsert

This inserts an object into the sorted list. This is a binary search tree where the worst case is one long branch.

$$O(n)$$

SLRemove

This removes an object from the sorted list. This is a binary search tree where the worst case is one long branch.

$$O(n)$$

SLCreateIterator

This creates an object that allows the caller to iterate through the list.

$$O(1)$$

SLDestroyIterator

This frees the memory used for an object that iterates through the list.

$$O(1)$$

SLNextItem

Returns the next object from an iterator.

$$O(1)$$