

Linked List (Time Complexity)

The time complexity for get, search, insertion, and deletion functions of the linked list (Reading time: under 1 minute)

T I M E			S P A C E
Type	Average	Worst	Worst
Get, Search, Insertion, Deletion	$O(n)$	$O(n)$	$O(n)$

Get, Search, Insertion and Deletion: To get to a node in the list, we would have to walk through the list to find the node we're searching. It is possible to use pointers instead, which would be constant, but in these examples, the time complexity would be linear.

Worst space: The more items, the bigger the list.

In the next lesson, let's talk about another data structure, the binary search tree.