

STUDY GUIDE

LINKED LISTS

Key Terms

- » **Linked Lists:** A foundational data structure used by many complex data structures. The key component is a node.
- » **Null next node:** The very last node, also called "the tail."
- » **Doubly Linked Lists:** First points in one direction but then allows us to traverse the list backward. Here, a *previous* property points to the previous item in the list

Cheat Sheet

What's in a node

- » A *data* property that stores a value.
- » A *next* property, sometimes called a "pointer," that points to the next item in the list.

The challenges of a linked list

- » They take up more space than arrays.
- » It can take more time to access a linked list.
- » You can't access a particular node in a linked list without starting from the top and moving sequentially until you find it.

Building a linked list:

- » Start with a head property that references the first node.
- » Add a next pointer and the new node with data.
- » Find the last node by looking for the node with null as its next value.