

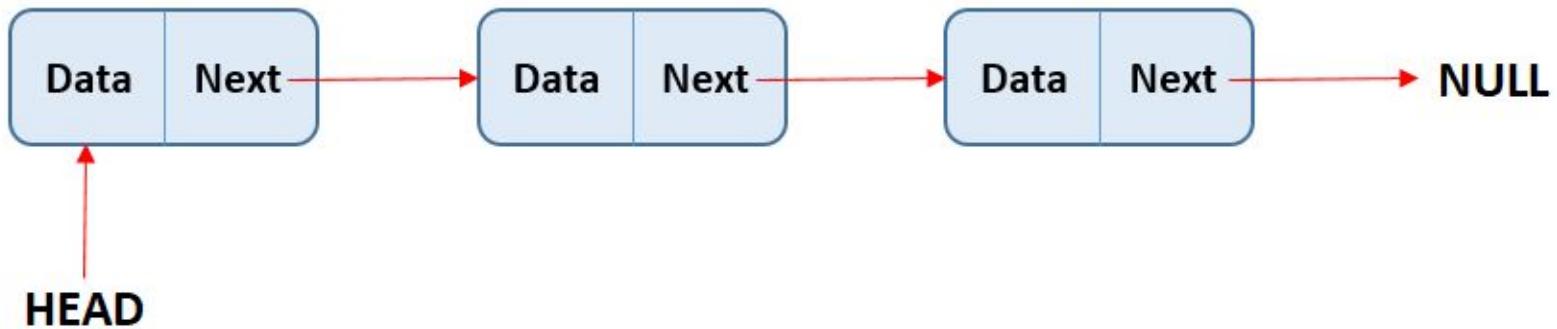
Data Structures

Manage how data is stored and accessed



Linked List

A list where nodes are **linked**, each containing data and a pointer to the **next node**, stored in free memory space.



Node

Nodes hold a **value** and the link
to the **next node**

```
class Node{  
    constructor(data) {  
        this.data = data;  
        this.next = null;  
    }  
}
```

Linked List

Starts with a **head** property
that references the first node.

When we start, the list is
empty, so the head pointer is
null

```
class LinkedList {  
    constructor () {  
        this.head = null;  
    }  
}
```



Demonstration

appendNode



Demonstration

prependNode



Demonstration

pop



Demonstration

removeFromFront



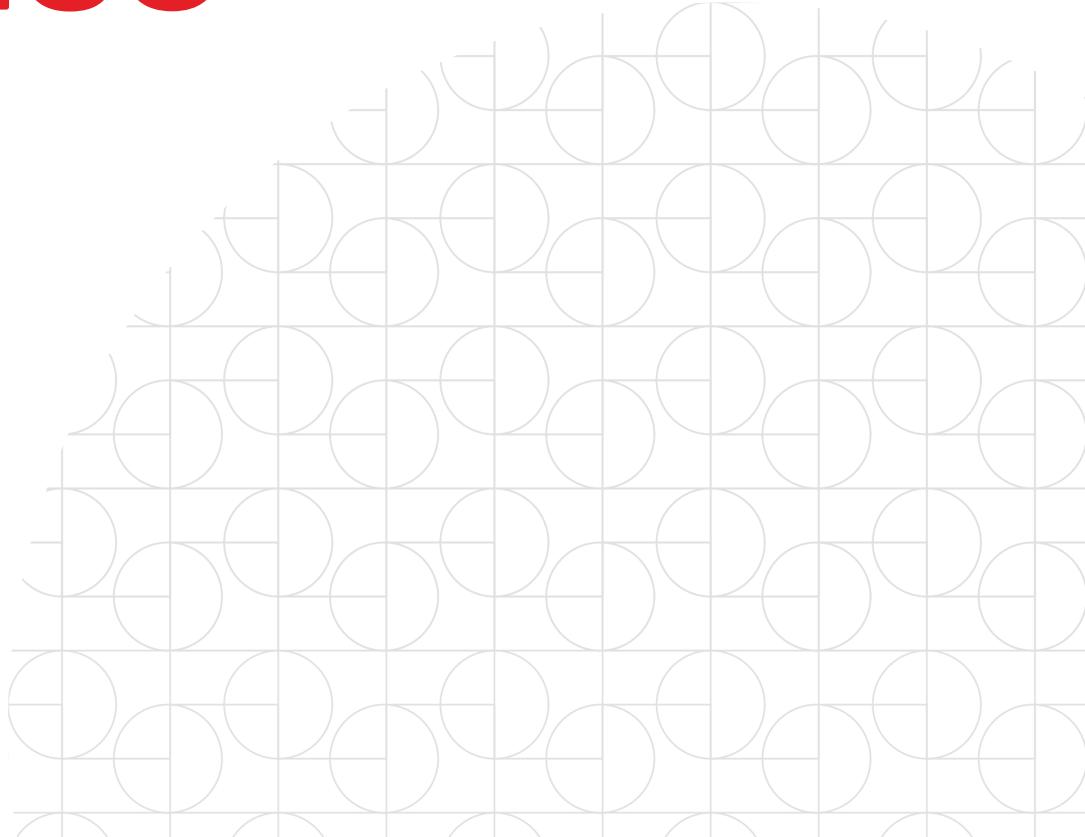
Doubly Linked Lists

A list where nodes are **linked**, each containing data and a pointer to the **next node** and **previous node**.



Examples

- Playlist
- Photo album
- Web browser





Linked Lists Exercise

Implement the required methods and classes according to the specifications in the comments

[https://git.generalassemb.ly/modular-curriculum-all-courses/
linked-lists-starter-code](https://git.generalassemb.ly/modular-curriculum-all-courses/linked-lists-starter-code)