Seguimiento #4
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| **TAD LinkedList** |
|---|
| LinkedList = { Head = <node>, Tail = <node>, Size = <size>} |
| {inv: LinkedList.size >= 0 & LinkedList.first <= LinkedList.first.next <= LinkedList.first.next.next … LinkedList.first.next….next} |
| Operaciones primitivas: |

| | | |
|---|---|---|
| LinkedList | | LinkedList |
| Add | E | LinkedList |
| Size | | Entero |
| IndexOf | E | Entero |
| Get | Entero | E |
| GetNode | Entero | Node |
| Remove | Entero | LinkedList |

| LinkedList |
|---|
| “Crea una lista enlazada” |
| Pre: TRUE |
| post: list: {head = null, size = 0, tail = null} |

| Add |
|---|
| “Añade un nuevo elemento a la lista” |
| Pre: list: {head = <head>, size = <size>, tail = <tail>} |
| Post: list: {head = n, size = <size> + 1, tail = n} |

| Size |
| --- |
| “Indica el tamaño de la lista” |
| Pre: list: {head = <head>, size = <size>, tail = <tail>} |
| Post: <size> |

| IndexOf |
| --- |
| “Indica el índice de un elemento” |
| Pre: list: {head = <head>, size = <size>, tail = <tail>} ^ i ∈ Entero |
| Post: <index> |

| Get |
| --- |
| “Da un elemento de la lista” |
| Pre: list: {head = <head>, size = <size>, tail = <tail>} ^ i ∈ Entero |
| Post: <e> |

| GetNode |
| --- |
| “Da un nodo de la lista” |
| Pre: list: {head = <head>, size = <size>, tail = <tail>} ^ i ∈ Entero |
| Post: <node> |

| Remove |
| --- |
| “Quita un elemento de la lista” |
| Pre: list: {head = <head>, size = <size>, tail = <tail>} |
| Post: list: {head = <head> v n, size = <size> - 1, tail = <tail> v n} |

**TAD Node**

Node = { Item = <Element>, Next = <Node>, Previous = <Node>}

{inv: Node.next = Node o Node.next = null}

Operaciones primitivas:

| | | |
|---|---|---|
| Node | | Node |
| GetItem | | E |
| SetItem | E | E |
| GetNext | | Node |
| SetNext | Node | Node |
| GetPrevious | | Node |
| SetPrevious | Node | Node |

| Node |
|---|
| “Crea un nuevo nodo” |
| Pre: TRUE |
| Post: Node: { Item = Element, Next = null, Previous = null} |