

Public_Interface

O(N) Time Complexity

- Copy Constructor
- Copy assignment
- Destructor
- Clear()
- Erase(SI, EI)

O(1)

- Default constructor
- Move constructor
- Move assignment operator=
- push_front(t), push_back(t), insert(l, t)
- pop_front(), pop_back(), erase(l)
- begin(), end();
- front(), back();
- empty();

Read Only

```
// Read Only
bool operator==(const iterator & rhs) const;

bool operator!=(const iterator & rhs) const;

Object & operator* ( ) const;
// return a reference to the current value
```

Write Only

```
// Write only
iterator & operator++ ( ); // prefix

iterator operator++ ( int ); // postfix

iterator& operator-- ( ); // prefix
```

```
iterator operator-- ( int ); // postfix
```

List Implementation

- A doubly linked list with header and tail nodes as markers
- [Linked Lists](#)

Constructors and big-five

- Copy/move constructor
- Copy/move assignment operator
- Destructor

```
// Constructors
List();

List(const List &rhs);

List(List &&rhs);

List & operator=(const List &rhs);

List & operator=(List && rhs);

~List();

// Read-only accessor functions
int size() const;
bool empty() const;
```