

## Copilot

Sure! The C++ Standard Template Library (STL) provides a variety of functions across different containers and algorithms. Here's a brief overview of some key functions:

### List Functions

- **front()**: Returns the value of the first element.
- **back()**: Returns the value of the last element.
- **push\_front()**: Adds a new element at the beginning.
- **push\_back()**: Adds a new element at the end.
- **pop\_front()**: Removes the first element.
- **pop\_back()**: Removes the last element.
- **insert()**: Inserts new elements before the specified position.
- **size()**: Returns the number of elements.
- **begin()**: Returns an iterator to the first element.
- **end()**: Returns an iterator to the element following the last element.

### Vector Functions

- **begin()**: Returns an iterator to the first element.
- **end()**: Returns an iterator to the element following the last element.
- **size()**: Returns the number of elements.
- **empty()**: Checks if the vector is empty.
- **at()**: Returns the element at a specified position.
- **push\_back()**: Adds an element to the end.
- **pop\_back()**: Removes the last element.
- **insert()**: Inserts elements at the specified position.

### Algorithm Functions

- **all\_of()**: Checks if all elements satisfy a condition.
- **any\_of()**: Checks if any element satisfies a condition.
- **none\_of()**: Checks if no elements satisfy a condition.
- **for\_each()**: Applies a function to a range of elements.

These are just a few examples. The STL is quite extensive and includes many more functions and utilities. If you need details on a specific function or container, feel free to ask!