List

* size: int

+ isEmpty(): bool + List()

+ getSize(): int

+ insert(element: ElementType, position: int): bool

+ remove(position: int): bool

+ retrieve(position: int): ElementType

+ clear()

List is the main class representing the List ADT.

- size: int indicates the private attribute to store the size of the list.

+ List() is the constructor for initializing the list.

+ isEmpty(): bool checks if the list is empty.

+ getSize(): int retrieves the current size of the list.

+ insert(element: ElementType, position: int): bool inserts an element at the specified position and returns a boolean indicating success.

+ remove(position: int): bool removes the element at the specified position and returns a boolean indicating success.

+ retrieve(position: int): ElementType retrieves the element at the specified position.

+ clear() clears all elements from the list.