

List<T>.Insert Method (Int32, T)

.NET Framework (current version)

Note

The .NET API Reference documentation has a new home. Visit the [.NET API Browser](#) on docs.microsoft.com to see the new experience.

Inserts an element into the [List<T>](#) at the specified index.

Namespace: [System.Collections.Generic](#)

Assembly: mscorlib (in mscorlib.dll)

Syntax

C#

```
public void Insert(  
    int index,  
    T item  
)
```

Parameters

index

Type: [System.Int32](#)

The zero-based index at which *item* should be inserted.

item

Type: T

The object to insert. The value can be **null** for reference types.

Implements

[IList<T>.Insert\(Int32, T\)](#)

Exceptions

Exception	Condition
ArgumentOutOfRangeException	<i>index</i> is less than 0. -or- <i>index</i> is greater than Count .

Remarks

[List<T>](#) accepts **null** as a valid value for reference types and allows duplicate elements.

If [Count](#) already equals [Capacity](#), the capacity of the [List<T>](#) is increased by automatically reallocating the internal array, and the existing elements are copied to the new array before the new element is added.

If *index* is equal to [Count](#), *item* is added to the end of [List<T>](#).

This method is an $O(n)$ operation, where *n* is [Count](#).