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#

```csharp
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

<table>
<thead>
<tr>
<th>Exception</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArgumentOutOfRangeException</td>
<td>index is less than 0.</td>
</tr>
<tr>
<td></td>
<td>-or-</td>
</tr>
<tr>
<td></td>
<td>index is greater than Count.</td>
</tr>
</tbody>
</table>

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.