

Read-only and immutable collections





Agenda

ReadOnlyCollection

ReadOnlyDictionary

Immutable collections

ReadOnlyCollection



Arrays and collections

It's a list

Namespace :
`System.Collections.ObjectModel`

ReadOnlyCollection

Read-only base class wrapper around lists

It's a list, elements have an index

Throws an exception if the underlying list is modified

If you have the reference, the underlying list can be modified

AsReadOnly

The `AsReadOnly()` list method creates a read only list from a list

Demo

Declare/Instantiate read only collections
Use read only collection methods

ReadOnlyDictionary



Arrays and collections

ReadOnlyDictionary

Similar to `ReadOnlyCollection`

Read-only wrapper for dictionary

Demo

Declare/Instantiate read only dictionaries
Use read only dictionaries methods

Immutable collections



Arrays and collections

Immutable collections

Collections that can't be modified

Immutable collections are REALLY immutable

The immutable collection package must be installed

Demo

Declare/Instantiate immutable collections
Use immutable collection methods



Summary

A ReadOnlyCollection is a read-only wrapper around a list

A ReadOnlyDictionary is a read-only wrapper around a dictionary

These collections can be modified if you can modify the underlying type

Immutable collections must be used if you need a real immutable collection