

# Agenda

Generics
Iterators
Collections
Regular Expressions

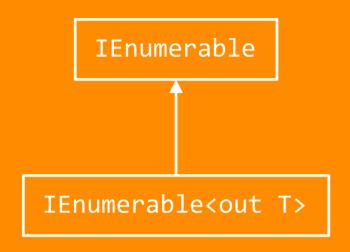
## Generics

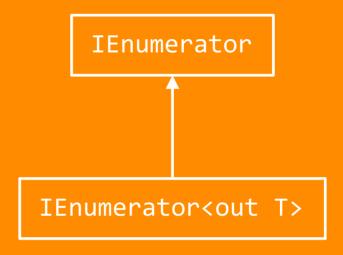
Parametric Polymorphism

Type Constraints

Co- and contravariance

#### Iterators





Producer

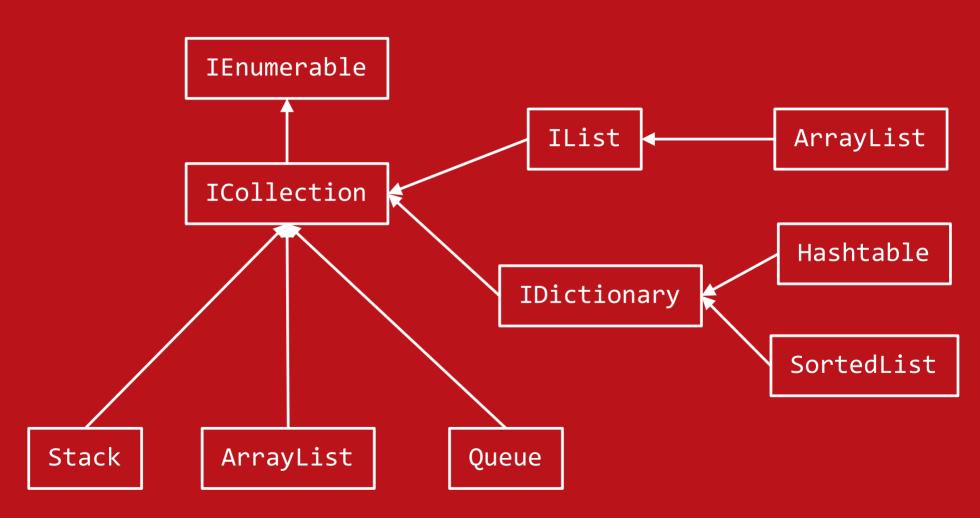
**Building block for Linq** 

```
yield return T;
```

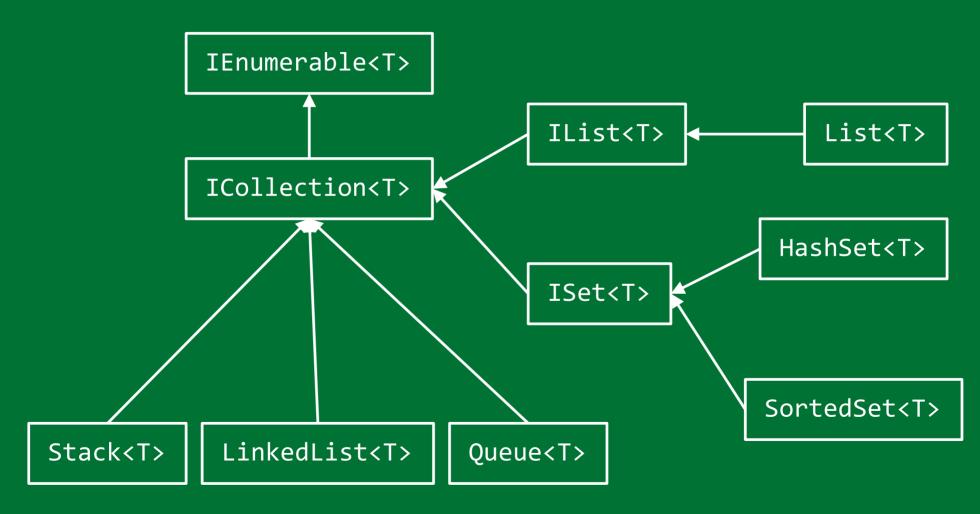
yield break;

```
foreach (var item in items)
{
}
```

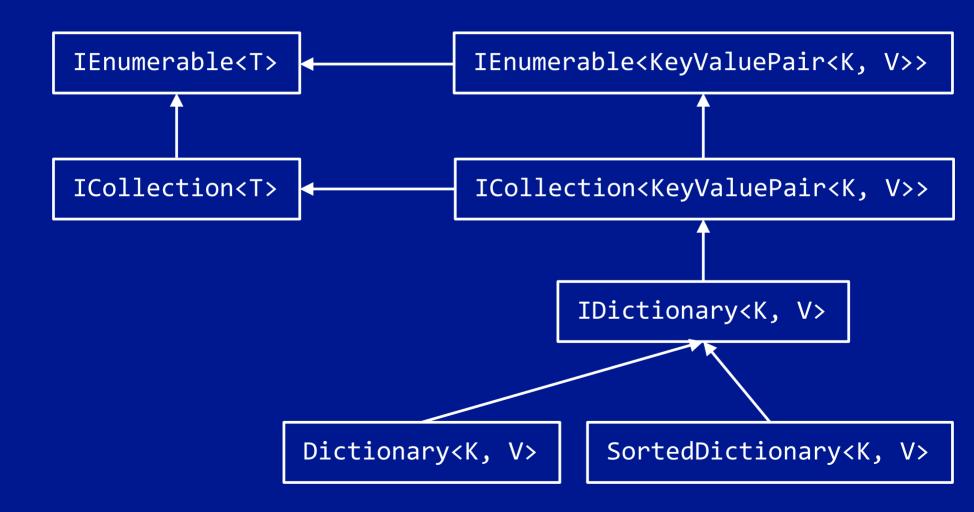
### System.Collections



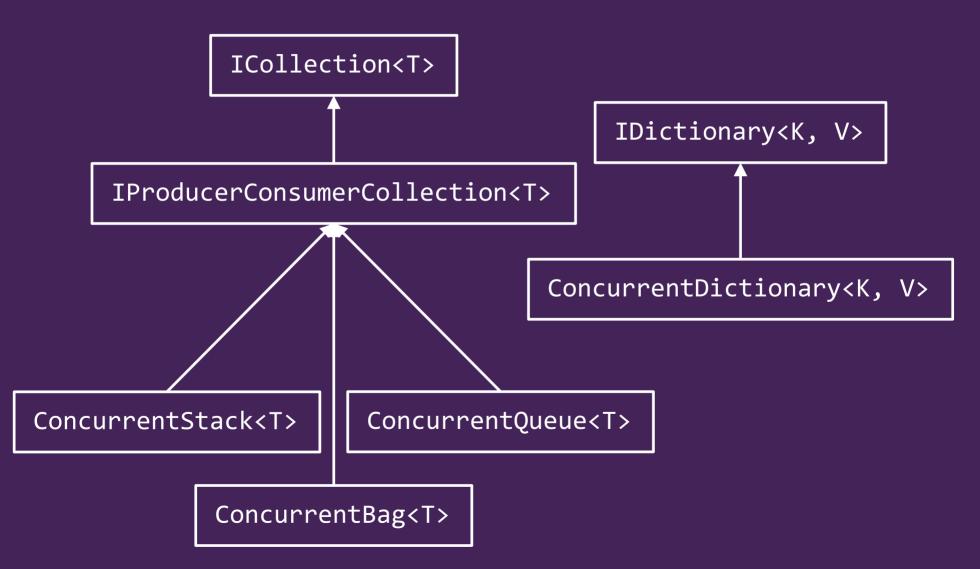
#### System.Collections.Generic



#### System.Collections.Generic 2



#### System.Collections.Concurrent



## Regular Expressions

Zero or more times the previous character
Once or more times the previous character
Zero or one time the previous character
Any single character (not \n)
Any whitespace character (e.g. tab)
Any non-whitespace character
Word boundary
Any non-word boundary position
Any word character (a-z, A-Z, 0-9)
Any non-word character
Start of the input text
End of the input text

## Regular Expressions

[1c]	matches character '1' or 'c'
[a-z]	matches all lower-case letters
[a-zA-Z]	matches all letters
[0-9]+	matches integer numbers
[0-9]+\.[0-9]+	matches a floating point
[0-2][0-9]:[0-5][0-9]	matches a time e.g. 12:34