C♯
Generics, Collections, Iterators, and Regular Expressions

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Agenda

Regular Expressions
Generic Collections
Iterators

Regular Expressions

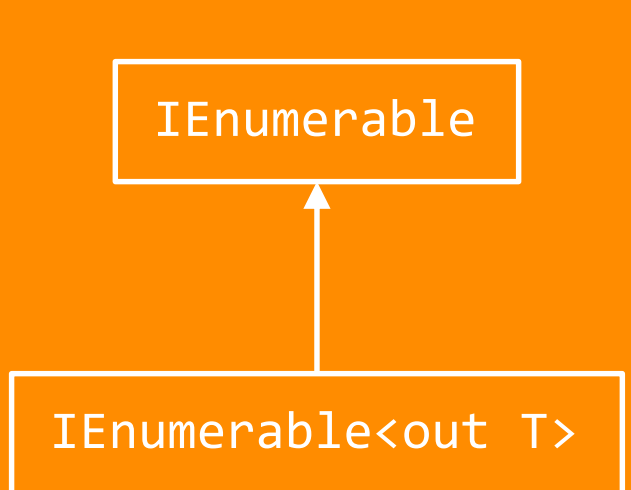
`*`	Zero or more times the previous character
`+`	Once or more times the previous character
`?`	Zero or one time the previous character
`.`	Any single character (not \n)
`\s`	Any whitespace character (e.g. tab)
`\S`	Any non-whitespace character
`\b`	Word boundary
`\B`	Any non-word boundary position
`\w`	Any word character (a-z, A-Z, 0-9)
`\W`	Any non-word character
`^`	Start of the input text
`$`	End of the input text

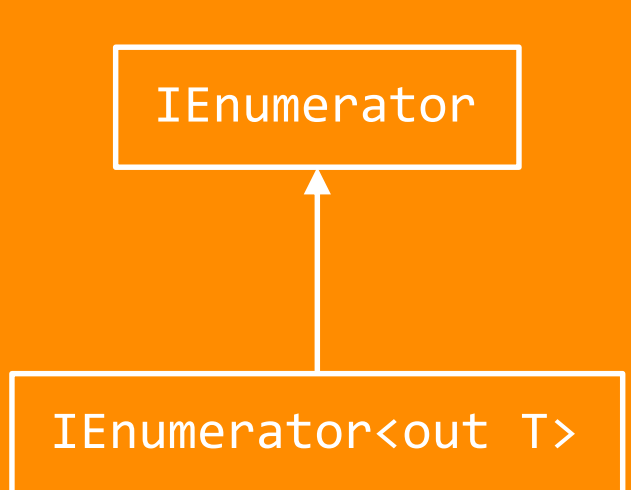
Regular Expressions

`[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

http://msdn.microsoft.com/en-us/library/az24scfc.aspx

Iterators





Producer

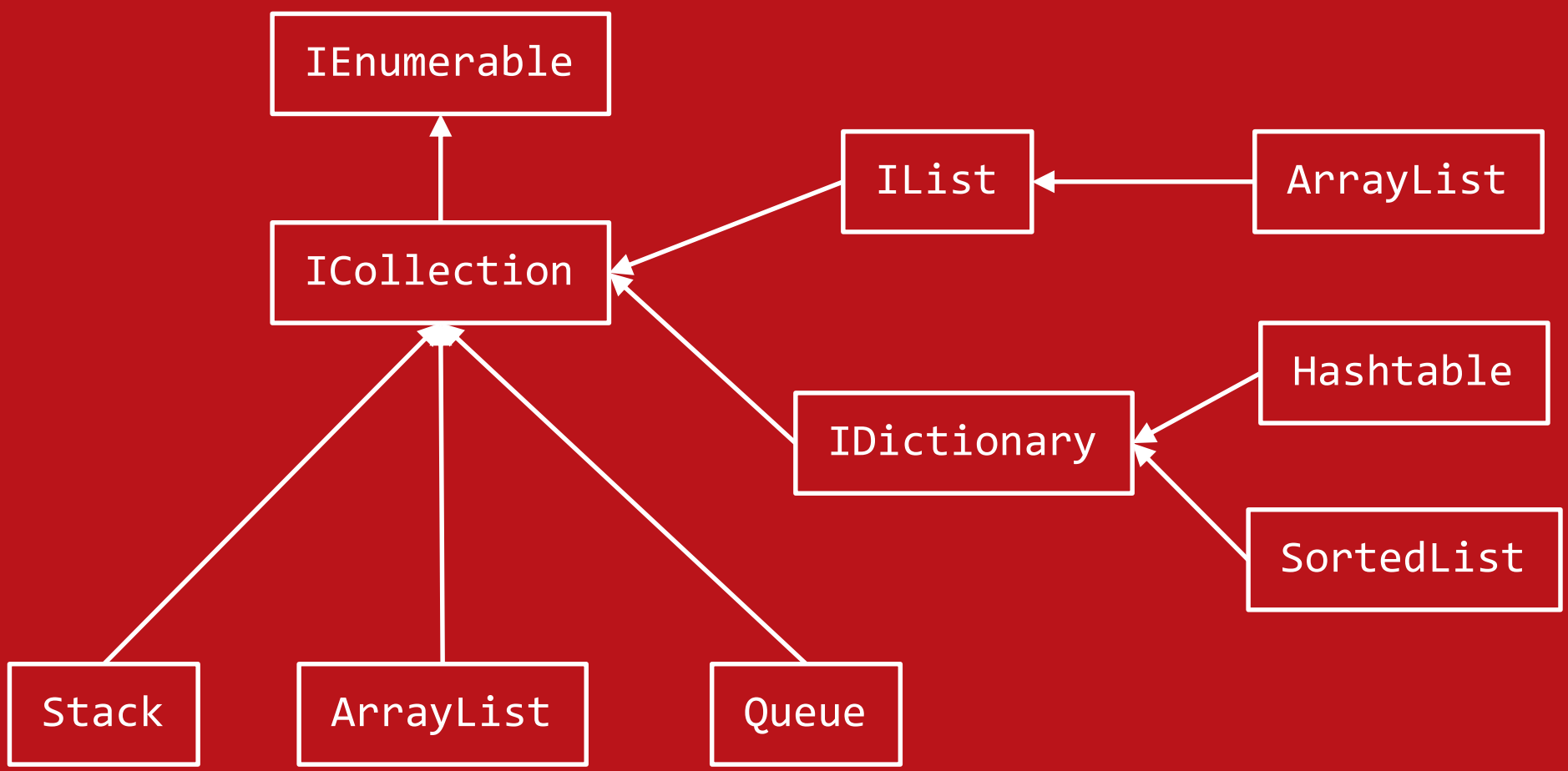
Building block for Linq

```
yield return T;
```

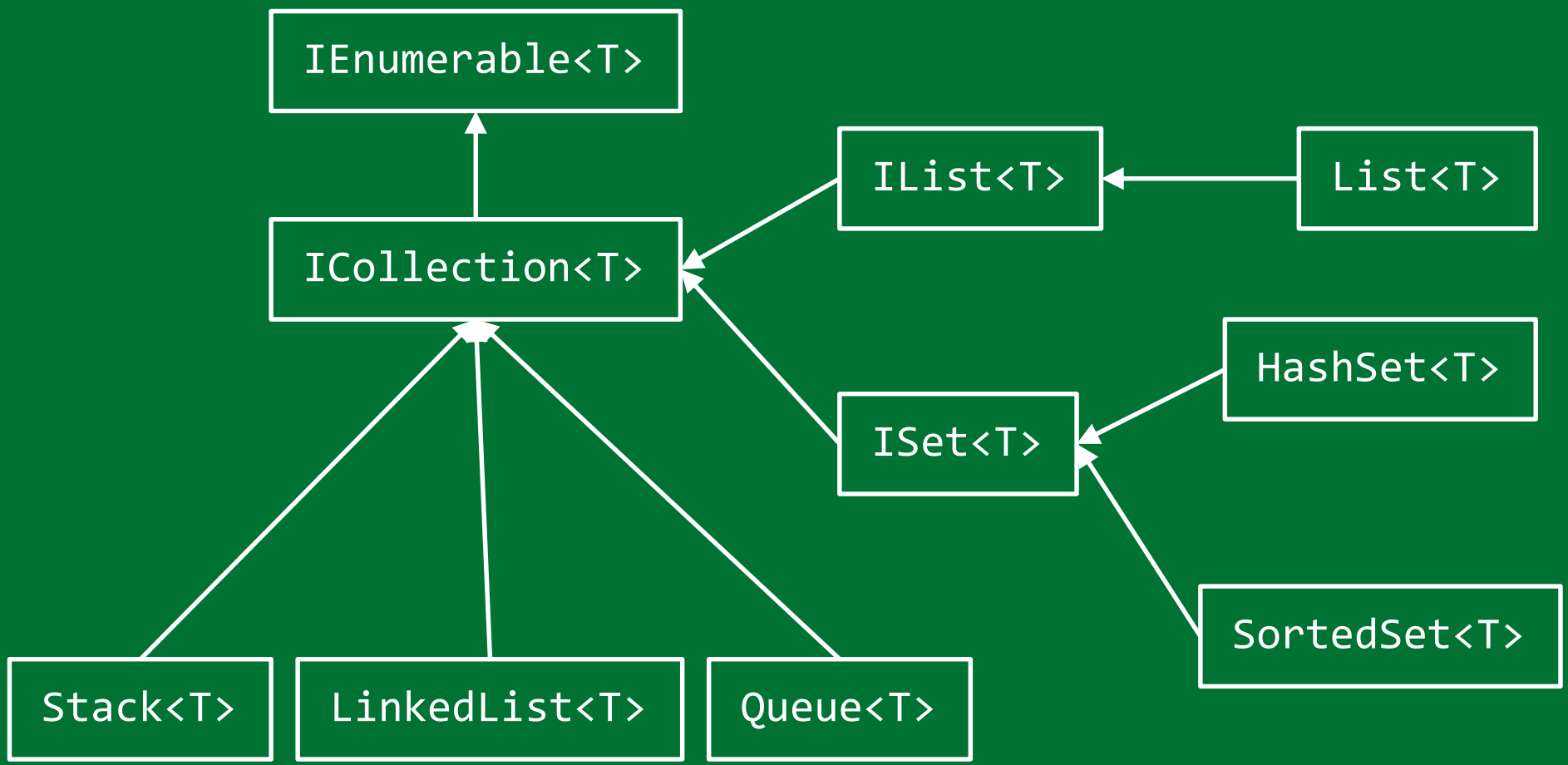
```
yield break;
```

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

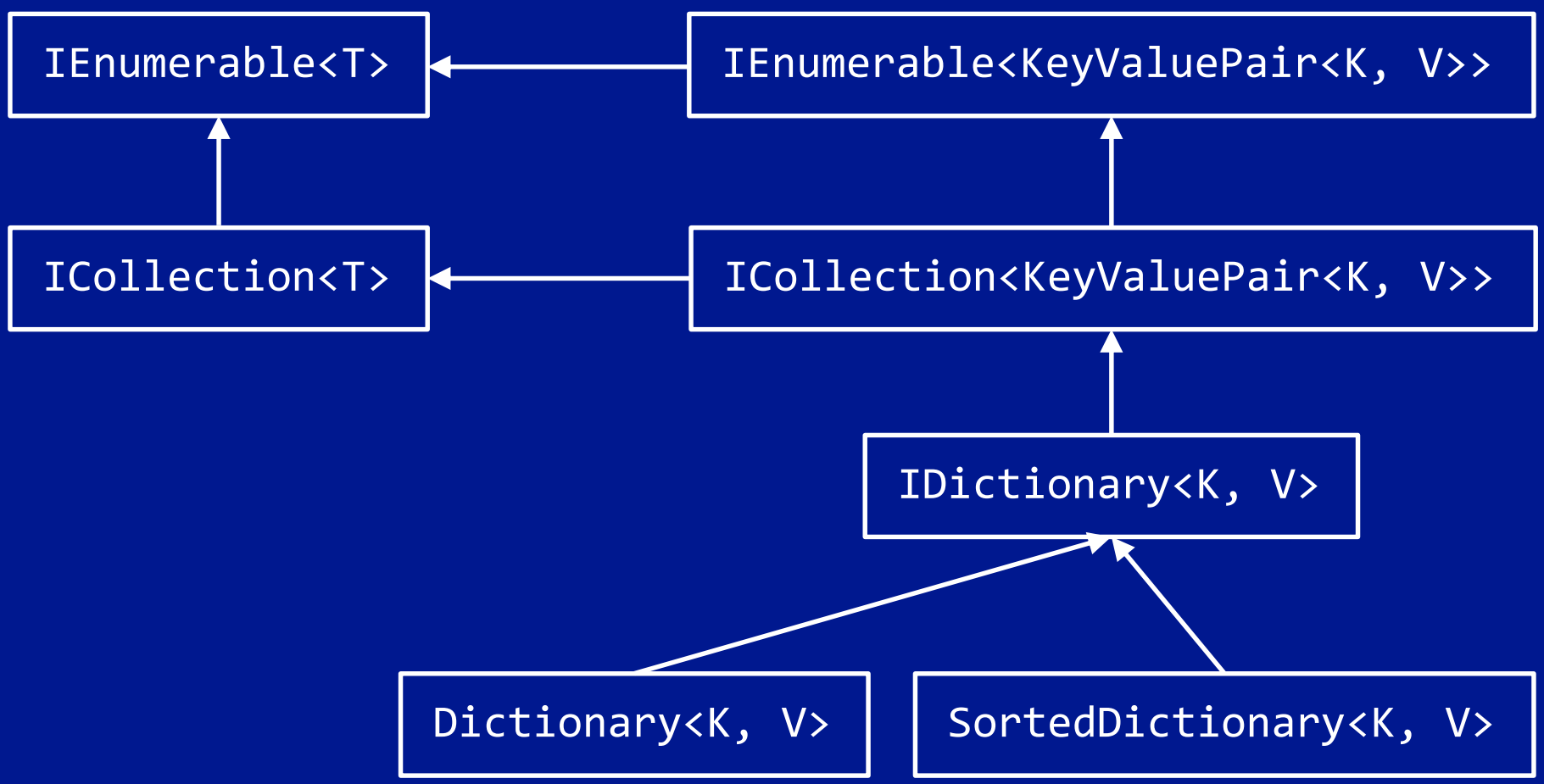
System.Collections



System.Collections.Generic



System.Collections.Generic 2



System.Collections.Concurrent