

C# 繼承、介面

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2019/10/29

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- ▶ Type

- ▶ Reference type
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- ▶ Primitive

- ▶ Access Modifiers

- ▶ static class

- ▶ Class

- ▶ Constructor
- ▶ Field
- ▶ Property
- ▶ Constants
- ▶ Method
- ▶ Indexer
- ▶ Nested Type

Field vs Property vs Method

- ▶ 什麼時候適合使用哪個？



Constants vs Readonly Field

- ▶ 什麼時候適合使用哪個？



Interface

介面



Interface

- ▶ Member

- ▶ Method
- ▶ Property
- ▶ Event
- ▶ Indexer

- ▶ 存取修飾詞

- ▶ Member

InterfaceSample_1

The background of the slide features a complex, abstract design composed of various shades of green. These shades are arranged in overlapping, angular, and polygonal shapes that create a sense of depth and movement. The colors range from a light, pale green to a deep, forest green. The overall effect is modern and artistic, typical of a corporate or technical presentation.

Interface

- ▶ implementation
 - ▶ 實做
- ▶ Has-a

InterfaceSample_2

An abstract geometric design on the right side of the slide, featuring overlapping triangles in various shades of green and yellow. A thin grey line extends from the text 'InterfaceSample_2' towards the design.

Interface

- ▶ Property in interface.

InterfaceSample_5

The background of the slide is composed of several overlapping, semi-transparent green triangles and polygons of various shades, ranging from a light lime green to a dark forest green. These shapes are arranged in a way that creates a sense of depth and movement, particularly on the right side of the slide. A thin, light gray line extends from the bottom left towards the center, passing behind the text 'InterfaceSample_5'.

Interface

- ▶ 變數賦值
- ▶ 多型

InterfaceSample_3

The right side of the slide features a large, abstract graphic composed of overlapping, semi-transparent green triangles and polygons in various shades, ranging from light lime green to dark forest green. A thin, light gray line extends from the bottom left towards the center of this graphic.

Interface

- ▶ 方法參數
- ▶ 方法回傳值

InterfaceSample_4

An abstract graphic on the right side of the slide, composed of several overlapping, semi-transparent green triangles and polygons in various shades of green, creating a dynamic, layered effect.

Interface

- ▶ 不可具現化
- ▶ 不可方法的實做(C# 8.0前)
- ▶ 實做多個介面

InterfaceSample_6

An abstract graphic on the right side of the slide, consisting of several overlapping, semi-transparent green triangles and polygons of various shades, creating a dynamic, layered effect.

Interface

- ▶ 明確實做
 - ▶ in interface
 - ▶ in class

InterfaceSample_7

The right side of the slide features a large, abstract graphic composed of overlapping, semi-transparent green triangles and polygons in various shades, creating a dynamic, layered effect.

Interface

- ▶ 明確實做
 - ▶ how to use?

InterfaceSample_8

An abstract graphic on the right side of the slide, consisting of several overlapping, semi-transparent green triangles and polygons of various shades, creating a layered, geometric effect.

Inheritance

繼承



Inheritance

- ▶ base class
 - ▶ 基底類別
- ▶ derived class
 - ▶ 衍生類別
- ▶ is-a
- ▶ protected

InheritanceSample_1

一個自定義的class有default的繼承嗎？

InheritanceSample_2

Inheritance

- ▶ Constructor
- ▶ base

InheritanceSample_3

The background of the slide is composed of several overlapping, semi-transparent green triangles and polygons of various shades, creating a modern, abstract geometric pattern. The colors range from light lime green to dark forest green. The shapes are layered, with some appearing in front of others, creating a sense of depth.

Inheritance

- ▶ Constructor
- ▶ field

InheritanceSample_4

The background of the slide features abstract, overlapping green geometric shapes, primarily triangles and polygons, in various shades of green, creating a modern and dynamic visual effect.

Inheritance

- ▶ 變數賦值
- ▶ 方法呼叫
- ▶ 方法返回
- ▶ 多型

InheritanceSample_5

An abstract graphic on the right side of the slide, composed of several overlapping, semi-transparent green triangles and polygons of various shades, creating a dynamic, layered effect.

Inheritance

- ▶ virtual
- ▶ override

InheritanceSample_6

An abstract graphic design on the right side of the slide. It features a large, dark green triangle pointing downwards, which is partially overlaid by a lighter green, semi-transparent triangle pointing upwards. The intersection of these two triangles creates a complex, layered effect. The background of the right side is a light gray gradient.

如果不寫override?

InheritanceSample_7

The background of the slide features abstract, overlapping green geometric shapes, primarily triangles and polygons, in various shades of green, creating a modern, layered effect.

Inheritance

- ▶ new修飾詞
 - ▶ 特性

InheritanceSample_8

Inheritance

- ▶ new修飾詞
 - ▶ 方法簽章

InheritanceSample_9

Inheritance

- ▶ abstract(抽象)
 - ▶ class
 - ▶ method

InheritanceSample_10

Inheritance

- ▶ sealed(密封)
 - ▶ class
 - ▶ method

InheritanceSample_11

類型轉換



“明確轉換”和“as關鍵字”有什麼差異點？

TypeConvertSample_1

類型轉換

- ▶ as 關鍵字
- ▶ is 關鍵字

TypeConvertSample_2

Q&A



繼承 vs 介面

- ▶ 什麼情境下適合用哪個？



明確轉換 vs “as”

- ▶ 什麼情境下適合用哪個？



End

