Interfaces

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Overview

- **Default Interfaces**

- **Declared Interfaces**

- **Implementing an Interface**

- **Multiple Implementations**

- **Multiple Interfaces**
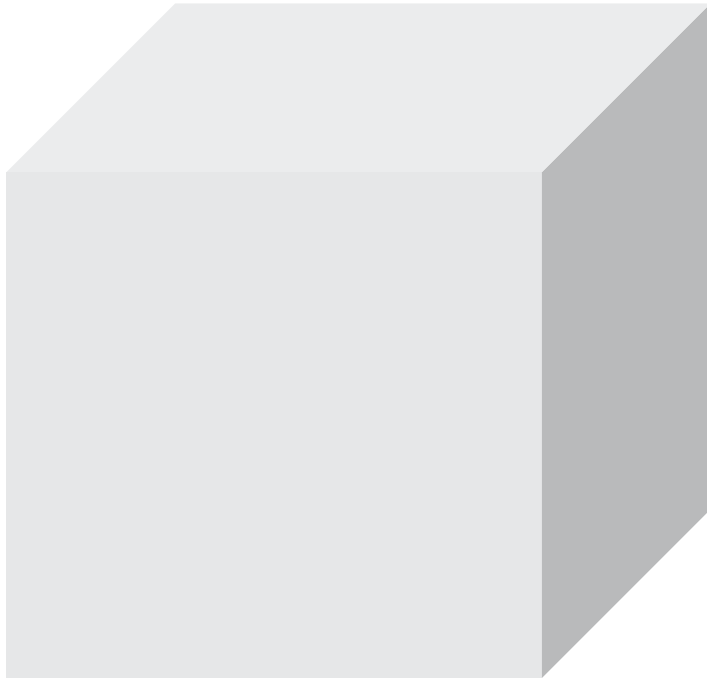
Default Interfaces

The Default Interface

- **Using the name of the UserForm for the type tells the code to use the default interface for this form**

- **The default interface consists of all declared public properties, methods, events, and controls.**

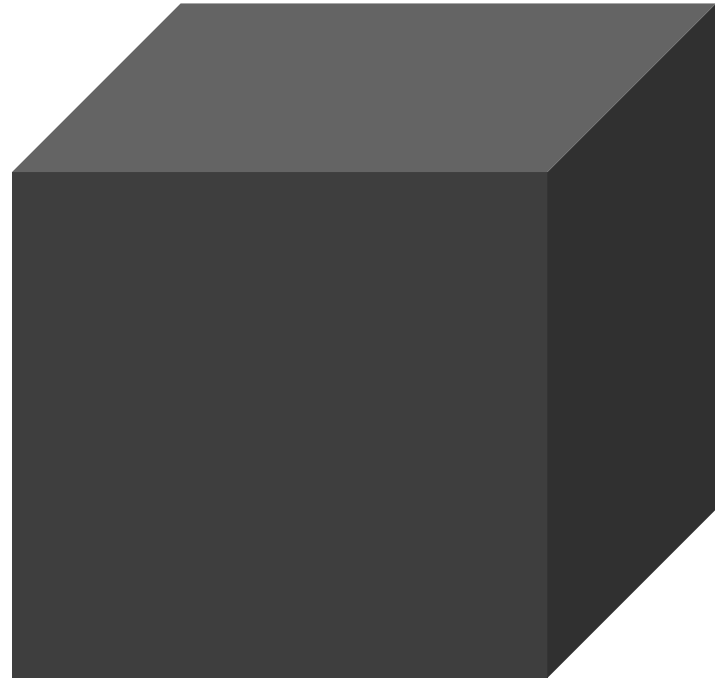- **The IntelliSense feature builds its list from the interface**

Declared Interfaces

White Box, Black Box

Default Interface
"White Box"

Declared Interface
"Black Box"

Everything inside is known

Only interface members are known

IFName Interface

Implementing an Interface

Adding Members to the Module

- The 'Implements' statement must appear in the Declarations section of the Class or UserForm implementing the Interface

- After being declared, the Interface is listed in the Objects box

- The members will be available on the procedures drop-down

- After selecting the members from the procedures drop-down, they are now considered implemented

- Names of parameters are changed to RHS (right-hand-side), but can be renamed

Adding Code

- Once the members are added, we can add the implementation code

- This may include validation, capitalization, etc.

- The variable type for the object is declared as the Interface name

- This is called 'Coding by Contract'

- The Interface guarantees that all of the Interface members will be implemented

IntelliSense

- The IntelliSense now shows only Interface members

- Objects should take care of themselves, not manipulated by code

Benefits of Using Interfaces

- Access differing classes by using common Interface

Multiple Implementations

IProgressBar Interface

CProgressBar Implementation

FProgressBar Implementation (Basic)

FProgressBar Implementation (Deluxe)

Multiple Interfaces

Multiple Interface Example

Combining Interfaces

ISortableObject Demo

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