
Subject: Re: overload init function in class/object ?
Posted by [David Fanning](#) on Tue, 06 May 2003 20:26:13 GMT
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paul wisehart (wisehart@runbox.com) writes:

> (So technically speaking you cannot overload functions in
> IDL? You just use optional parameters to get the same effect?)

Isn't that a distinction without a difference?

When your parameters can be anything you would like them to be, and you can have as many as you like, what else could possibly be meant by "overloading".

Here is code for a GETCOLOR method on my ColorTool object. The variable theColor can be absent, a scalar string, or a string array. The variable colorIndex can be absent, a scalar, or an array.

```
FUNCTION ColorTool::GetColor, theColor, colorIndex, $
  AllColors=allcolors, $
  Cancel=cancelled, $
  Decomposed=decomposedState, $
  _Extra=extra, $
  Names=names, $
  Row=row, $
  Triple=triple, $
  _Extra=extraKeywords

  @cat_error_handler

; Make sure you have a color name and color index.

CASE N_Elements(theColor) OF
  0: BEGIN
    theColor = 'White'
    IF N_Elements(colorIndex) EQ 0 THEN $
      colorIndex = !P.Color < (!D.Table_Size - 1) $
    ELSE colorIndex = 0 > colorIndex < (!D.Table_Size - 1)
    ENDCASE

  1: BEGIN
    type = Size(theColor, /TNAME)
    IF type NE 'STRING' THEN $
      Message, 'The color must be expressed as a color name.'
    IF N_Elements(colorIndex) EQ 0 THEN $
      colorIndex = !P.Color < (!D.Table_Size - 1) $
```

```
ELSE colorIndex = 0 > colorIndex < (!D.Table_Size - 1)
ENDCASE
```

```
ELSE: BEGIN
```

```
type = Size(theColor, /TNAME)
```

```
IF type NE 'STRING' THEN $
```

```
Message, 'The colors must be expressed as color names.'
```

```
ncolors = N_Elements(theColor)
```

```
CASE N_Elements(colorIndex) OF
```

```
0: colorIndex = Indgen(ncolors) + $
```

```
(!D.Table_Size - (ncolors + 1))
```

```
1: colorIndex = Indgen(ncolors) + colorIndex
```

```
ELSE: IF N_Elements(colorIndex) NE ncolors THEN $
```

```
Message, 'Index vector must be the same ' + $
```

```
'length as color name vector.'
```

```
ENDCASE
```

```
ENDCASE
```

Cheers,

David

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