

GraphicsPath と戯れる with Flex 4

taiga (taiga.jp)

new Graphics APIs

- `beginShaderFill()`
- `drawGraphicsData()`
- `drawPath()`
- `drawTriangles()`
- `lineBitmapStyle()`
- `lineShaderStyle()`

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GraphicsPath

- Package
 - flash.display
- Argument
 - commands:Vector.<int> = null
 - data:Vector.<Number> = null
 - winding:String = "evenOdd"

Example

```
var commands:Vector.<int> = new Vector.<int>();
commands[0] = GraphicsPathCommand.MOVE_TO;
commands[1] = GraphicsPathCommand.LINE_TO;
...

var data:Vector.<Number> = new Vector.<Number>();
data[0] = 0;
data[1] = 0;
data[2] = 100;
data[3] = 0;
...

graphics.beginFill(0xffff00);
graphics.drawPath(commands, data, GraphicsPathWinding.EVEN_ODD);
graphics.endFill();
```

Example

```
var commands:Vector.<int> = new Vector.<int>();
commands[0] = GraphicsPathCommand.MOVE_TO;
commands[1] = GraphicsPathCommand.LINE_TO;
...

var data:Vector.<Number> = new Vector.<Number>();
data[0] = 0;
data[1] = 0;
data[2] = 100;
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...

graphics.beginFill(0xffff00);
graphics.drawPath(commands, data, GraphicsPathWinding.EVEN_ODD);
graphics.endFill();
```

GraphicsPathCommand

- CURVE_TO : int = 3
- LINE_TO : int = 2
- MOVE_TO : int = 1
- NO_OP : int = 0
- WIDE_LINE_TO : int = 5
- WIDE_MOVE_TO : int = 4

GraphicsPathWinding

- `EVEN_ODD : String = "evenOdd"`
- `NON_ZERO : String = "nonZero"`

Reference

- Graphics.drawPath()
[http://help.adobe.com/ja_JP/AS3LCR/Flash_10.0/flash/display/Graphics.html#drawPath\(\)](http://help.adobe.com/ja_JP/AS3LCR/Flash_10.0/flash/display/Graphics.html#drawPath())
- GraphicsPath
http://help.adobe.com/ja_JP/AS3LCR/Flash_10.0/flash/display/GraphicsPath.html
- GraphicsPathCommand
http://help.adobe.com/ja_JP/AS3LCR/Flash_10.0/flash/display/GraphicsPathCommand.html
- GraphicsPathWinding
http://help.adobe.com/ja_JP/AS3LCR/Flash_10.0/flash/display/GraphicsPathWinding.html

Path.as

- <Flex 4 SDK folder >\frameworks\projects\flex4\src\mx\graphics
(used in FXG)
- SVG path syntax -> Flex paths
- following classes used in Path.as
 - mx.graphics.MoveSegment
 - mx.graphics.LineSegment
 - mx.graphics.CubicBezierSegment
 - mx.graphics.QuadraticBezierSegment

Reference

- mx.graphics.Path
<http://livedocs.adobe.com/flex/gumbo/langref/mx/graphics/Path.html>

FXG Paths

- Attributes
 - data <path data>
 - x <Number>
 - y <Number>
 - transformX <Number>
 - transformY <Number>
 - rotation <Number>
 - scaleX <Number>
 - scaleY <Number>
 - blendMode <String>
 - visible <Boolean>
 - winding <String>

FXG Paths

- Children
 - fill
 - stroke
 - filters
 - transform

SVG indicators

- The “moveto” command
 - M (absolute)
 - m (relative)
- The “closepath” command
 - Z or z

SVG indicators

- The “lineto” commands
 - L (absolute)
 - l (relative)
 - H (absolute)
 - h (relative)
 - V (absolute)
 - v (relative)

SVG indicators

- The cubic Bezier commands
 - C (absolute)
 - c (relative)
 - S (absolute)
 - s (relative)

SVG indicators

- The quadratic Bezier commands
 - Q (absolute)
 - q (relative)
 - T (absolute)
 - t (relative)