Graphics and Visualization

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What are Athens?
aCanvas createPath: [:builder |
  builder
  absolute;
  moveTo: 70@100;
  lineTo: 330@100;
  cwArcTo: 350@120
  angle: 90 degreesToRadians;
  lineTo: 350@280;
  cwArcTo: 330@300
  angle: 90 degreesToRadians;
  lineTo: 70@300;
  cwArcTo: 50@280
  angle: 90 degreesToRadians;
  lineTo: 50@120;
  cwArcTo: 70@100
  angle: 90 degreesToRadians
p := aCanvas createPath:[ : b | b
  moveTo: 0.3@0.3;
  lineTo: 0.4@0;
  curveVia: 0.1@0 to: 0.1@0.1;
  lineTo: 0@0.2;
  curveVia: 0@0.1 to: -0.1@0.1;
  lineTo: -0.4@0;
  curveVia: -0.1@0 to: (0.1@0.1) negated;
  lineTo: 0@0.2 negated;
  curveVia: 0@0.1 negated to: 0.1@0.1 negated ].

aCanvas
  setPaint: self coloredCarColor;
  drawShape: p.

stroke width: 0.01.
aCanvas draw.

wheel := aCanvas createPath:[ : b | b
  moveTo: 0.3@0.3;
  cwArcTo: 0.15@0 angle: Float halfPi;
  moveTo: 0.1@0;
  cwArcTo: 0.15@0 angle: Float halfPi;
  moveTo: 0.0@0.4;
  cwArcTo: 0.15 negated@0 angle: Float halfPi;
  moveTo: -0.1@0;
  cwArcTo: 0.15 negated@0 angle: Float halfPi ].

aCanvas
  setPaint: self wheelColor;
  drawShape: wheel.

decorator := aCanvas createPath:[ : b | b
  moveTo: 0.2@0.45;
  lineTo: 0.225@0;
  cwArcTo: 0.15@0 angle: Float halfPi;
  lineTo: 0.225@0;
  lineTo: 0@0.1;
  lineTo: -0.225@0;
  cwArcTo: -0.15@0 angle: Float halfPi;
  lineTo: -0.225@0;
  lineTo: 0@0.1 negated].

stroke width: 0.01.
aCanvas drawShape: decorator.
aCanvas setPaint: self chasisLineColor.
aCanvas draw.
Roassal

Trachel

Athens

Amber stuff?
Trachel
Roassal
b := RTMondrian new.

b shape rectangle
  size: #numberOfMethods.

b nodes: R TObject withAllSubclasses.

b edges
  connectFrom: #superclass.

b layout cluster.

"We first visualize some numbers. Nothing exciting for now.
The Roassal application is then visualized in Roassal itself.

More info on:
http://ObjectProfile.com
http://AgileVisualization.com
http://facebook.com/ObjectProfile
http://MooseTechnology.org"
floor := WDSceneNode new.
floorShape := WDCubeGeometryBuilder new
currentMaterial: floorMaterial;

"Bottom"
translationX: 0.0 y: -2.0 z: 0.0;
addCubeWithWidth: 5.0 height: 0.1 depth: 5.0;
elements lay |
elements := (1 to: 500) collect: [ :ob | (R3CubeShape new
      width: 6 atRandom;
      height: 3 atRandom;
      depth: 6 atRandom;
      color: (Color random);
      yourself) elementOn: ob ].

lay := R3WallLayout new.
lay on: elements.

UberPresenter present: elements
Arc de Triomphe

Champs-Élysées

Nicolas Lusa
Michele Lanza
Bloc

A new 2D graphics framework for Pharo
Bloc

Bloc = new Morphic implementation
+ OSWindows + Athens + TxtText

• a new Morph hierarchy
• a new event framework
• new layout strategies
• a new Halo framework
• new World management
• new widgets
New Morph hierarchy

- **BIView** for the rendering
- **BIIMorph** for events management
Less Morph subclasses

A Morph is associated with a View
A View can be a composite
New layout strategies
Anchors, Box, Border, Stack
An more to come:
We are ready to build new widgets

Stay tuned!
Telescope