

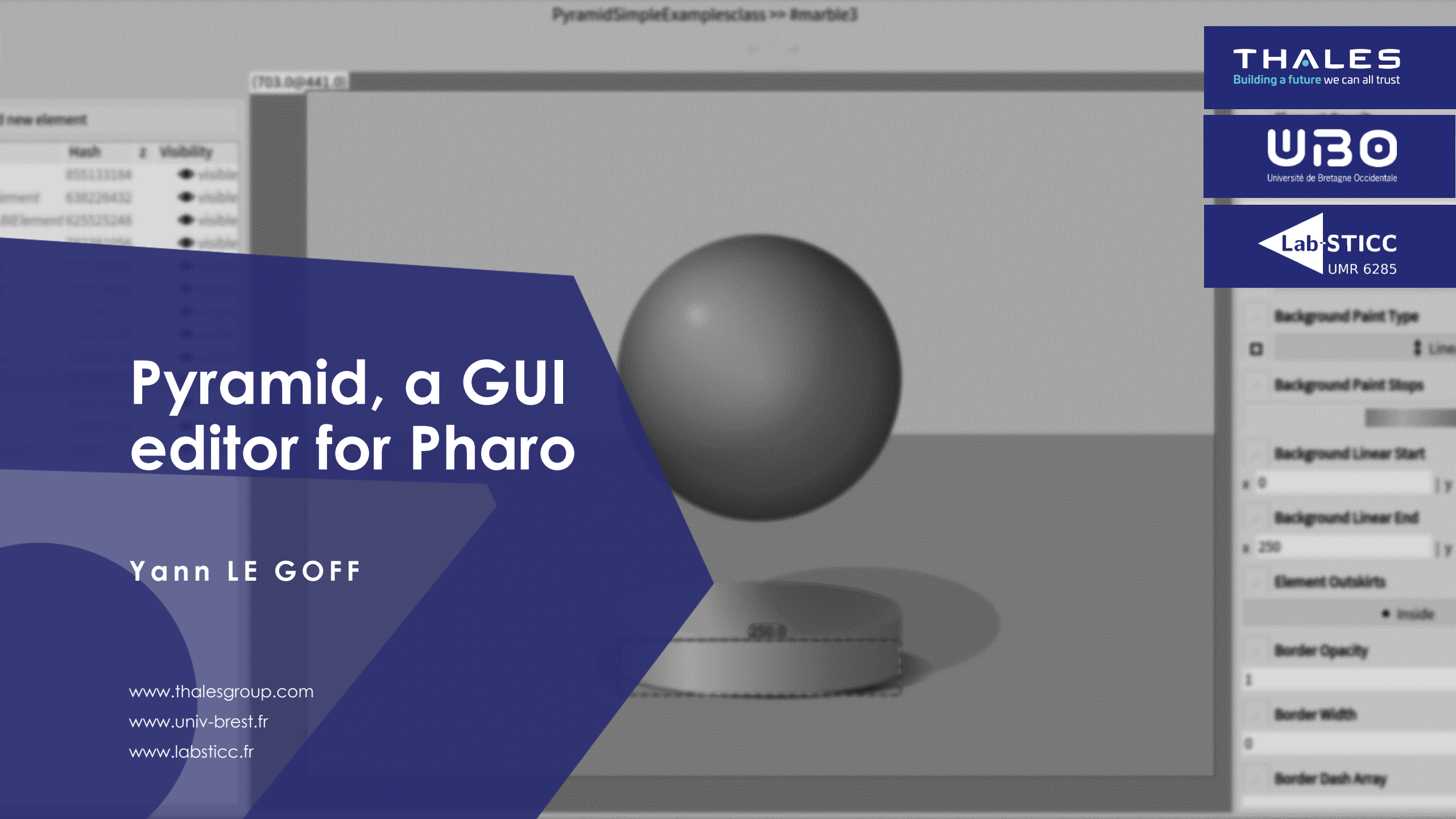
Pyramid, a GUI editor for Pharo

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This talk

- > Part 1 – Why do we need a GUI editor ?
- > Part 2 – What the GUI editor can do and cannot do ?
- > Part 3 – Future plan

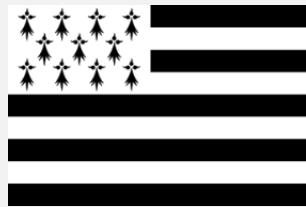
What i have ...

Countries.json

```
{  
  "Afghanistan": "AF",  
  "Aland Islands": "AX",  
  "Albania": "AL",  
  ...  
  "Yemen": "YE",  
  "Zambia": "ZM",  
  "Zimbabwe": "ZW"  
}
```



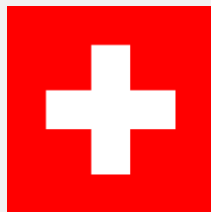
al.png



zw.png



ch.png



bzh.png

... and what i want

The screenshot shows a game interface with three panels. The left panel is titled 'GeoGame' and has a 'Start new game' button. The middle panel shows '10 question(s) left' and a flag of France. Below the flag are four input fields containing the text 'France', 'Italy', 'Brasil', and 'Spain'. The right panel shows '5 / 10' and a 'Return to start menu' button.

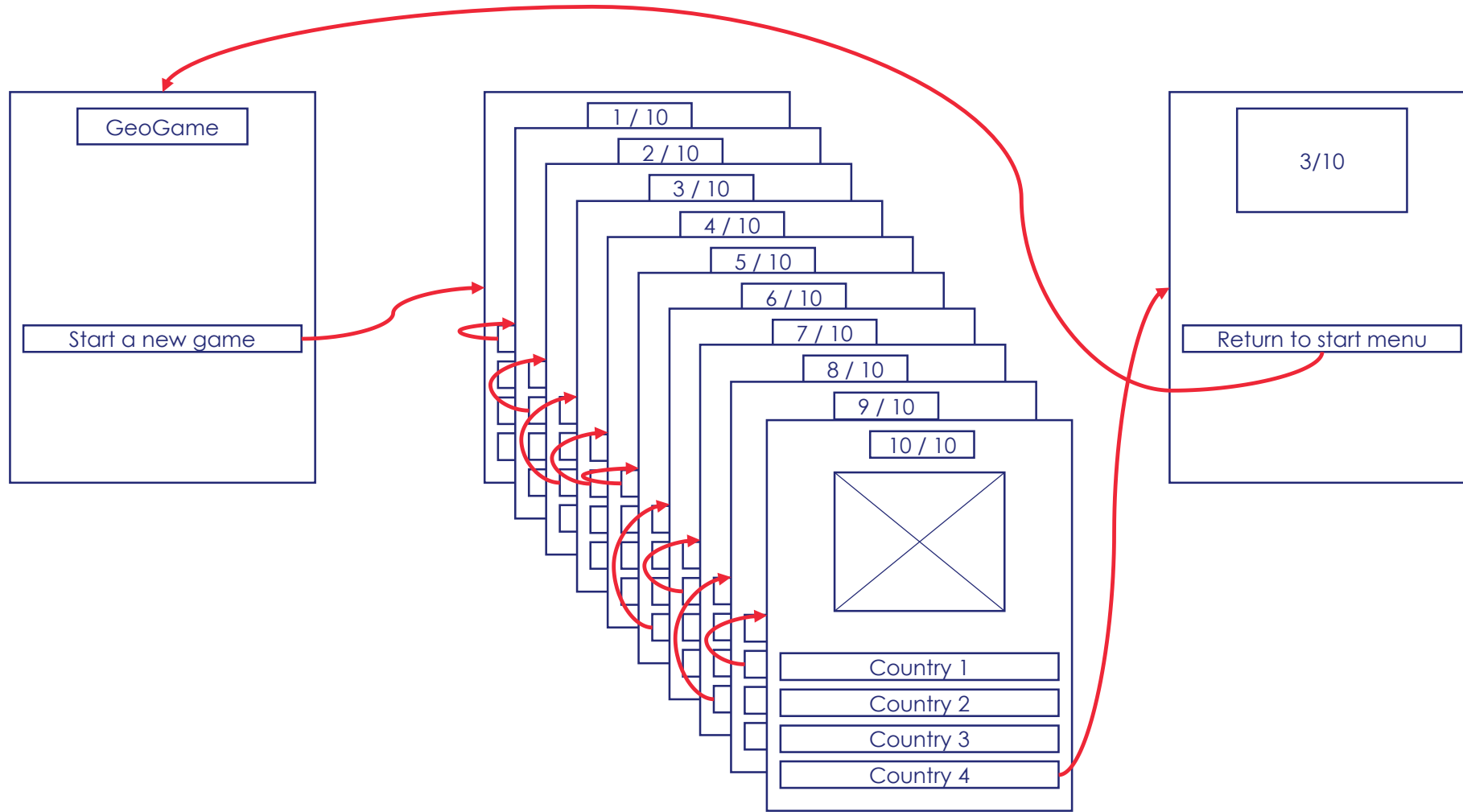
> Start menu

> 10 questions

- ▶ 1 picture of a flag
- ▶ 4 possible answers (only one is correct)

> Score menu

What i want



What i already made



> CountryModel

- › Flags and Name

> Question Model

- › 1 correct answer
- › 3 false answers

> Game Model

- › 10 question models
- › score



> Start view

- › TODO

> Questions view

- › TODO

> End view

- › TODO



> Switch between the views

> Update the score

> Update the views

- › Update the image
- › Update the buttons label
- › Update the questions left label
- › Update the score label
- › Add behaviour to the buttons

LET'S DO IT

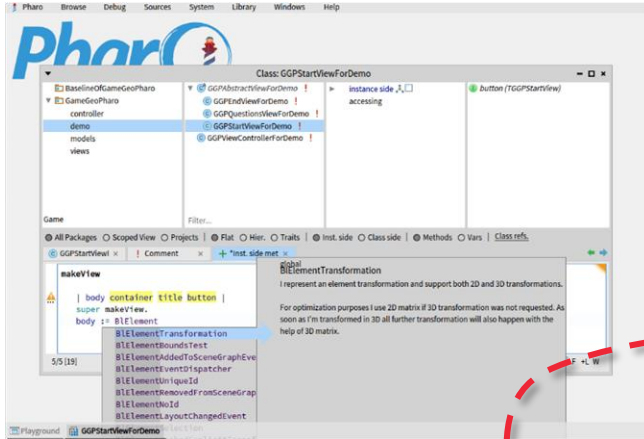


DEMO

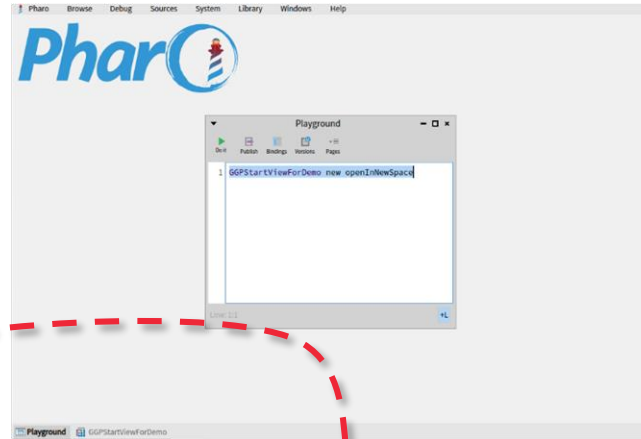


Whithout a GUI editor

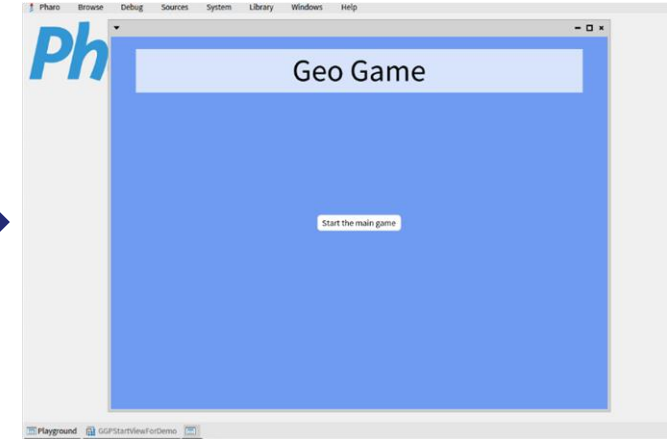
Code



Playground

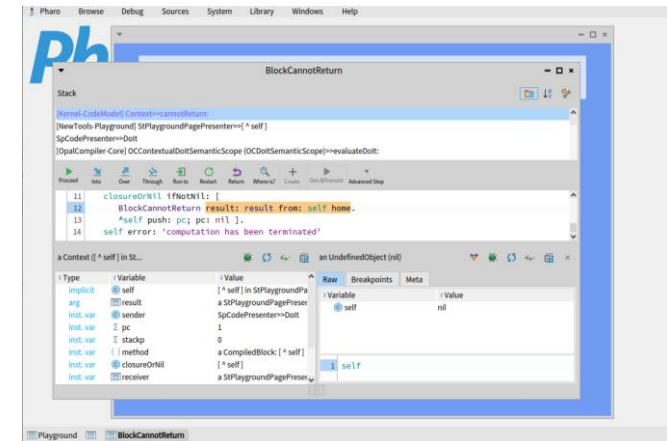


Visualize



> Master the API

- Or you will introduce bugs
- The time spend in the debugger is not time use for design

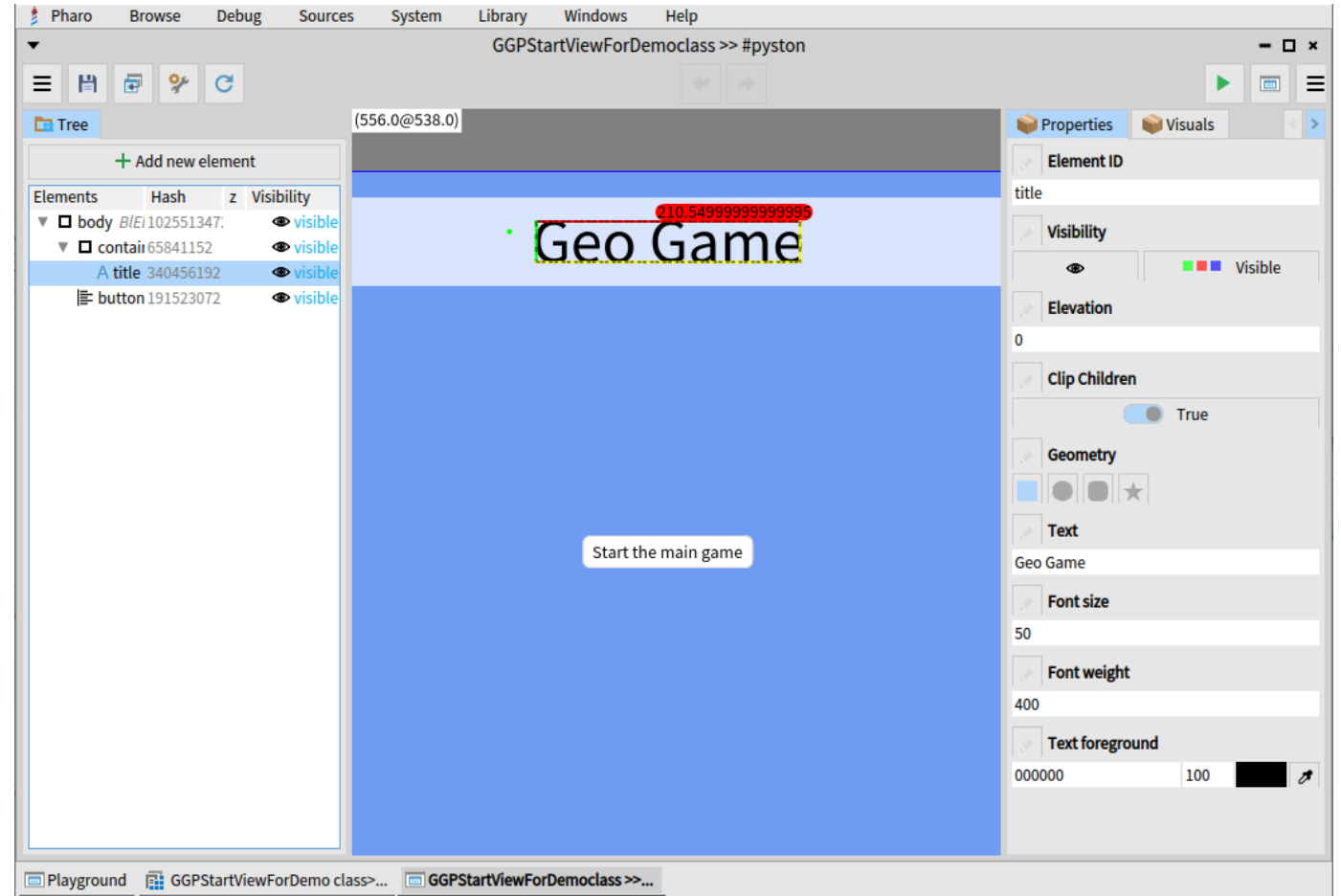


Debug

With a GUI editor







- > You always visualize what you are doing
- > The editor uses the API for you
 - ▶ You do not need to know the syntax
 - ▶ Easy to test different options.
 - ▶ You are limited but no bugs
- > Because we are working with Smalltalk we can use the playground so we are not really limited.
 - ▶ Be carefull you could add bugs.

Code and Visualize



WHAT PYRAMID IS ABOUT ?



-  To create the **skeleton** of new application 
-  To quickly test **new ideas** 
-  To **understand** and **debug** a UI 

LIMITATIONS OF PYRAMID



Dynamic view (tabulations, infinite layout, menu)

No event handler



Coding vs Pyramid

Coding

- You learn the API
- You have a higher precision

- You are slow

Pyramid

- You are fast
- You have direct feedbacks
- You don't need knowledge

- You will not learn the API
- You are limited by the tool

FUTURE PLAN



Better serialization

Bloc fully integrated

Toplo fully integrated

Questions ?

PyramidSimpleExamplesclass >> #marble3

The screenshot shows a 3D rendering application window titled "PyramidSimpleExamplesclass >> #marble3". The interface is divided into three main sections:

- Tree View (Left):** A hierarchical list of elements. The "bottom" element is selected. The list includes:

Elements	Hash	z	Visibility
background BElement	855133184		visible
background-top BElement	638226432		visible
background-bottom BElement	625525248		visible
ball BElement	782381056		visible
darkShade BElement	532165632		visible
lightShade BElement	703524864		visible
ballShadow BElement	605760512		visible
table BElement	531425280		visible
tableShadow BElement	336864256		visible
bottom BElement	592684032		visible
medium BElement	766533632		visible
top BElement	532847616		visible
ballShadow BElement	586831872		visible
- Viewport (Center):** A 3D scene with a red background. A blue sphere is positioned in the upper center. Below it, a blue cylindrical table is shown. The table has a red dashed line indicating a diameter of 250.0 and a green dashed line indicating a height of 50.0. A shadow is cast by the table onto the ground.
- Properties Panel (Right):** A panel with tabs for "Properties", "Visuals", "Layout", and "Playground". The "Visuals" tab is active. It shows settings for:
 - Element Opacity: 1
 - Background Opacity: 1
 - Background Type: Paint
 - Background Paint Type: Linear
 - Background Paint Stops: A gradient bar from light to dark blue.
 - Background Linear Start: x 0, y 0
 - Background Linear End: x 250, y 0
 - Element Outskirts: Inside
 - Border Opacity: 1
 - Border Width: 0
 - Border Dash Array: (empty)

repositories

- > The flag game i created
 - > Pyramid the GUI editor
 - > Stash a code serializer for Bloc/Pharo
- > <https://github.com/Nyan11/GeoPharo>
 - > <https://github.com/OpenSmock/Pyramid>
 - > <https://github.com/Nyan11/Stash>