

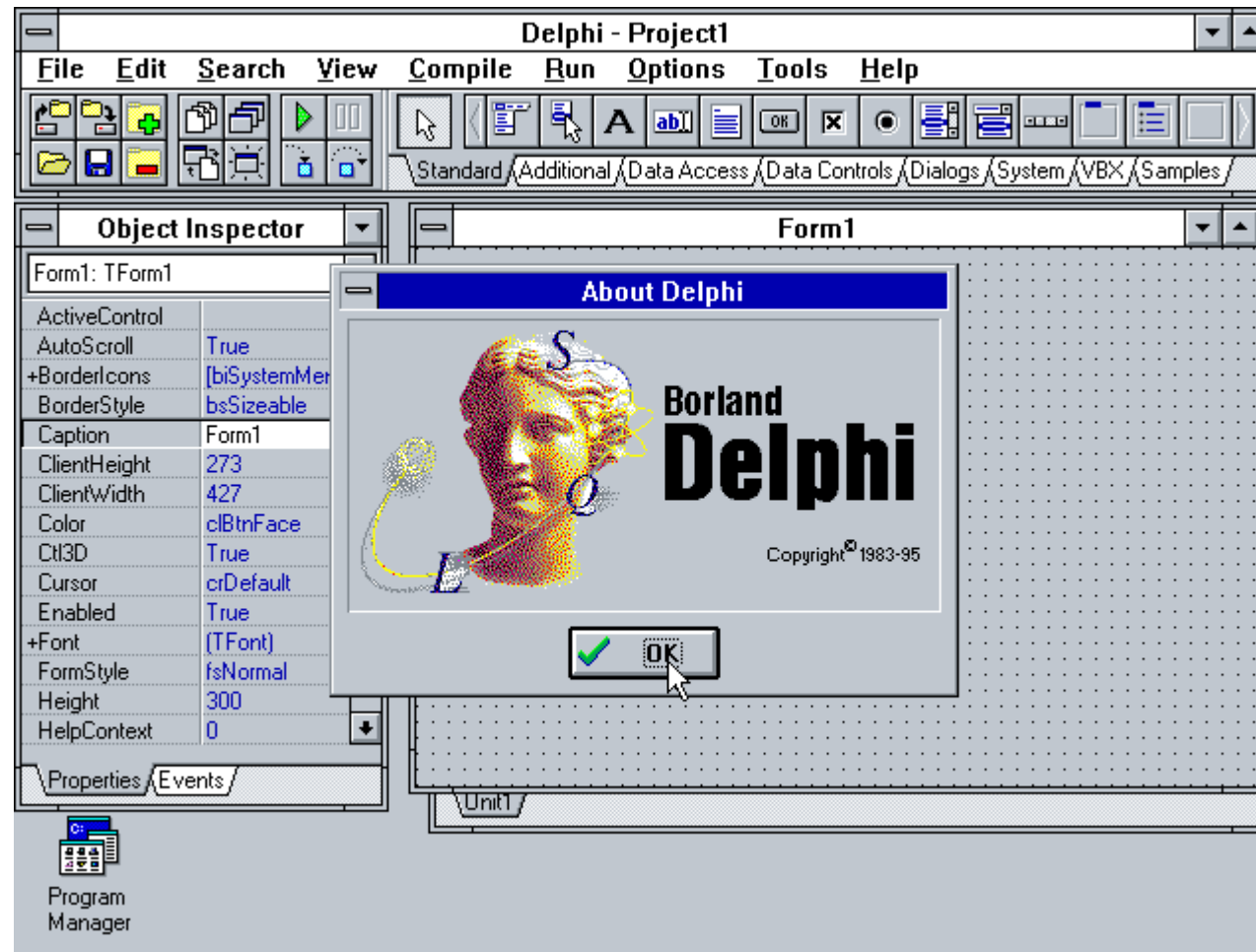
apart

form editor

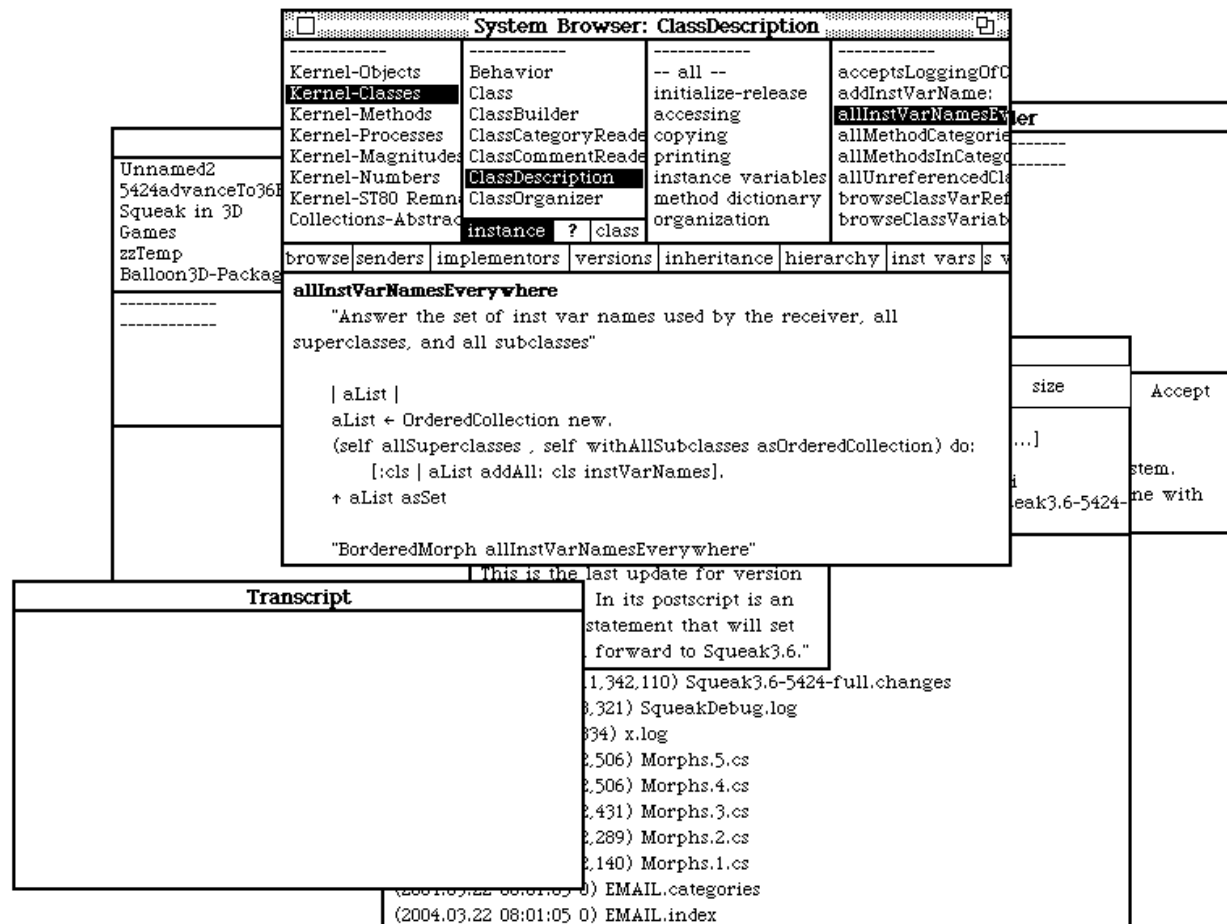
Pavel Krivanek
Benedikt Ehl



1994



1996



System Browser: ClassDescription

Kernel-Objects	Behavior	-- all --	acceptsLoggingOfC
Kernel-Classes	Class	initialize-release	addInstVarName:
Kernel-Methods	ClassBuilder	accessing	allInstVarNamesEverywhere
Kernel-Processes	ClassCategoryReader	copying	allMethodCategorie
Kernel-Magnitudes	ClassCommentReader	printing	allMethodsInCatego
Kernel-Numbers	ClassDescription	instance variables	allUnreferencedCl
Kernel-ST80 Remn	ClassOrganizer	method dictionary	browseClassVarRef
Collections-Abstrac	instance ? class	organization	browseClassVariab

browse | senders | implementors | versions | inheritance | hierarchy | inst vars | s v

allInstVarNamesEverywhere

"Answer the set of inst var names used by the receiver, all superclasses, and all subclasses"

```

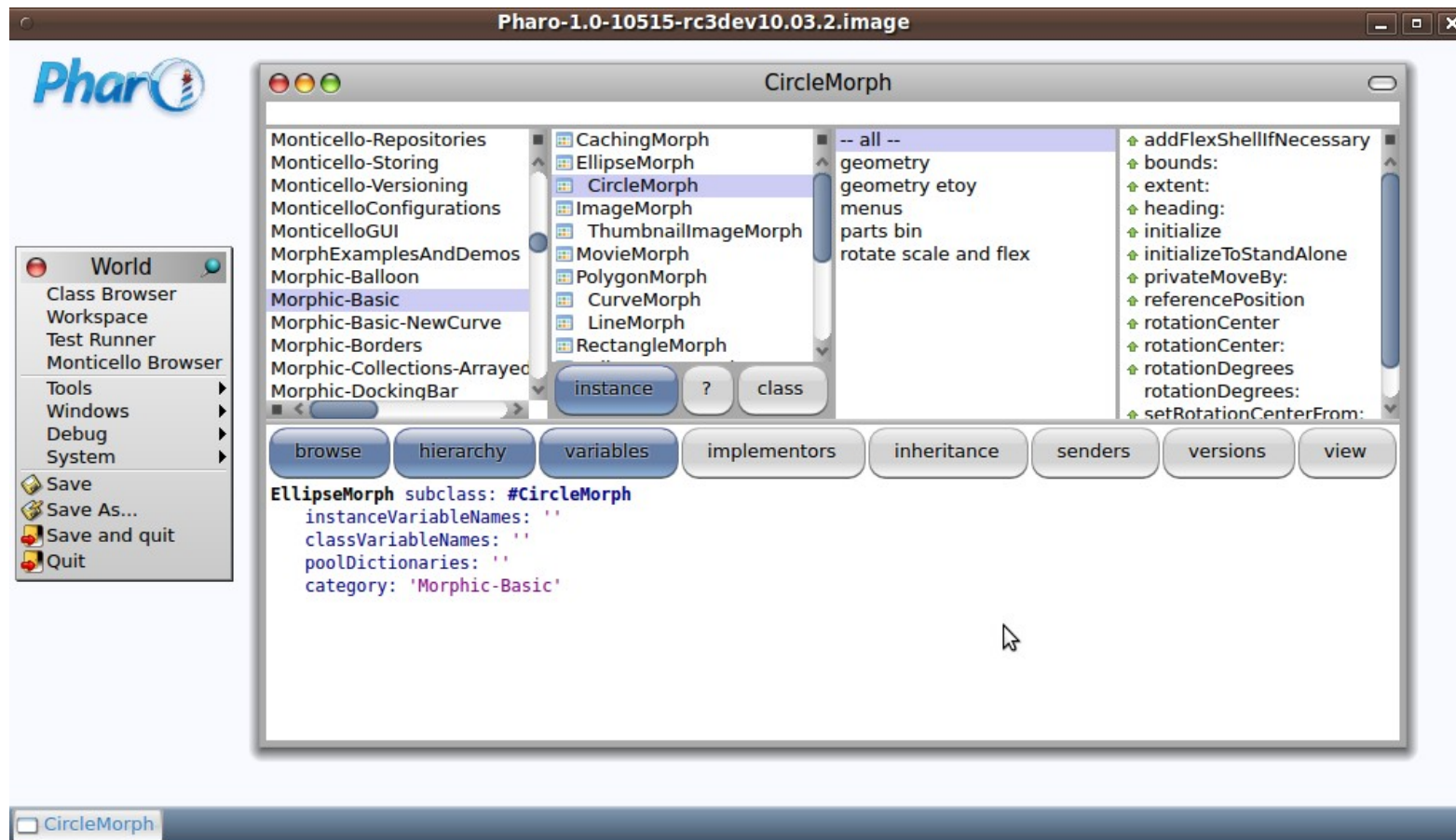
| aList |
aList ← OrderedCollection new.
(self allSuperclasses , self withAllSubclasses asOrderedCollection) do:
  [:cls | aList addAll: cls instVarNames].
↑ aList asSet
  
```

"BorderedMorph allInstVarNamesEverywhere"

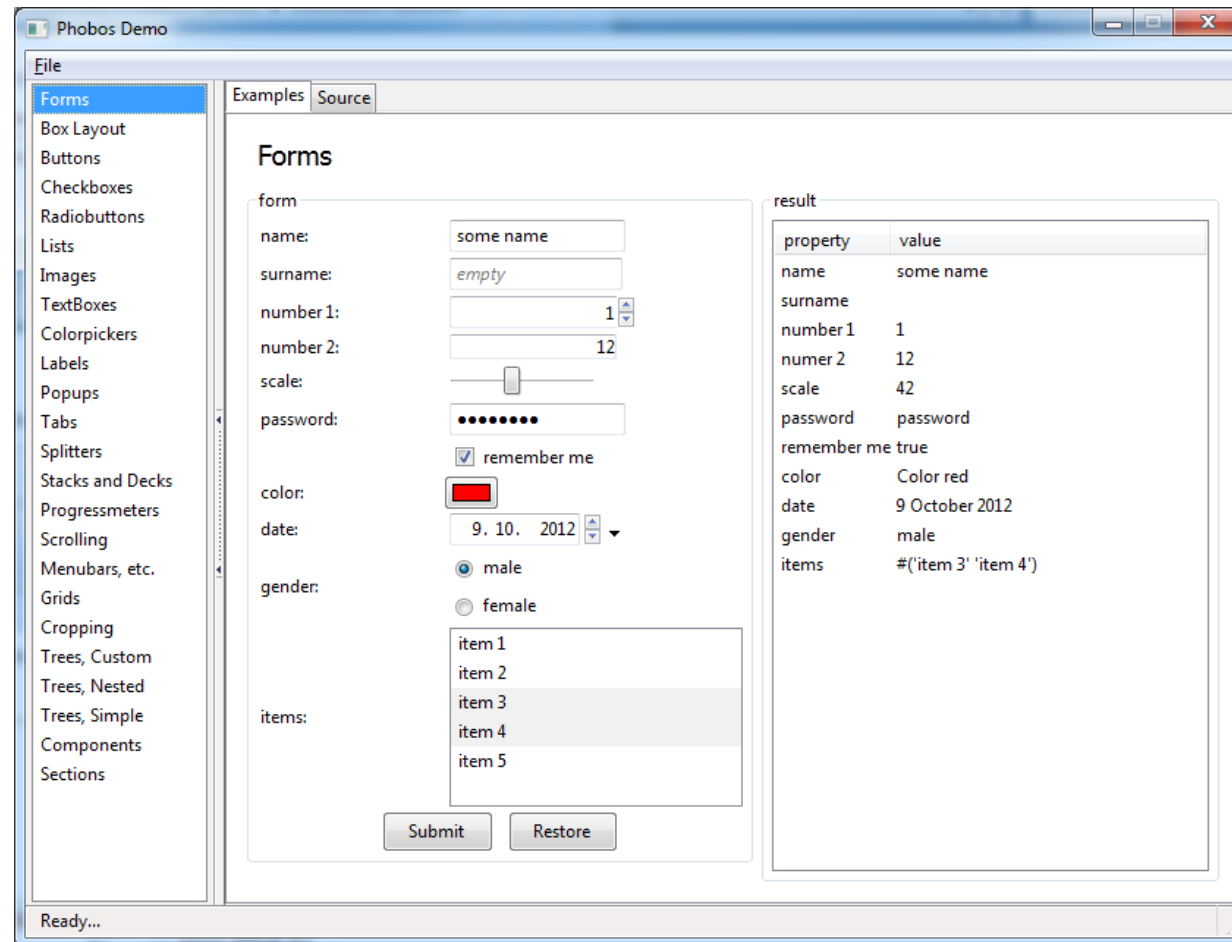
This is the last update for version
 In its postscript is an
 statement that will set
 forward to Squeak3.6."

(1,342,110) Squeak3.6-5424-full.changes
 (1,321) SqueakDebug.log
 (1,314) x.log
 (2,506) Morphs.5.cs
 (2,506) Morphs.4.cs
 (2,431) Morphs.3.cs
 (2,289) Morphs.2.cs
 (2,140) Morphs.1.cs
 (2004.03.22 08:01:05 0) EMAIL.categories
 (2004.03.22 08:01:05 0) EMAIL.index

2010



2012



2014

Terminating xulrunner? 1836 views



Mike Hommey

to bsme...@mozilla.com, dev-pl...@lists.mozilla.org

Hi,

Let's face it: xulrunner is hardly maintained, we barely build and test it on automation, and the result is that it is often broken for long periods of time.

I propose that we just stop pretending, and terminate xulrunner, considering the following:

- Xulrunner is lagging behind Firefox: DLL block list, startup telemetry, etc.
- Since bug 755724, running firefox -app application.ini is 99% the same as running xulrunner application.ini, except for a few details that should be considered bugs. Before that bug, it was quite different, as browser-specific files were available to the xul application.
- There is no reason we can't generate the sdk from firefox instead of xulrunner. Moreover that would make firefox-specific interfaces available in the sdk that aren't currently (which may or may not be a good thing, arguably)
- We could include the xulrunner and xulrunner-stub executables as part of firefox. xulrunner-stub is small and self-contained, and xulrunner could be replaced by something that calls firefox -app. Or we could make the firefox executable check under what name it's called and act accordingly.

Thoughts?

Mike

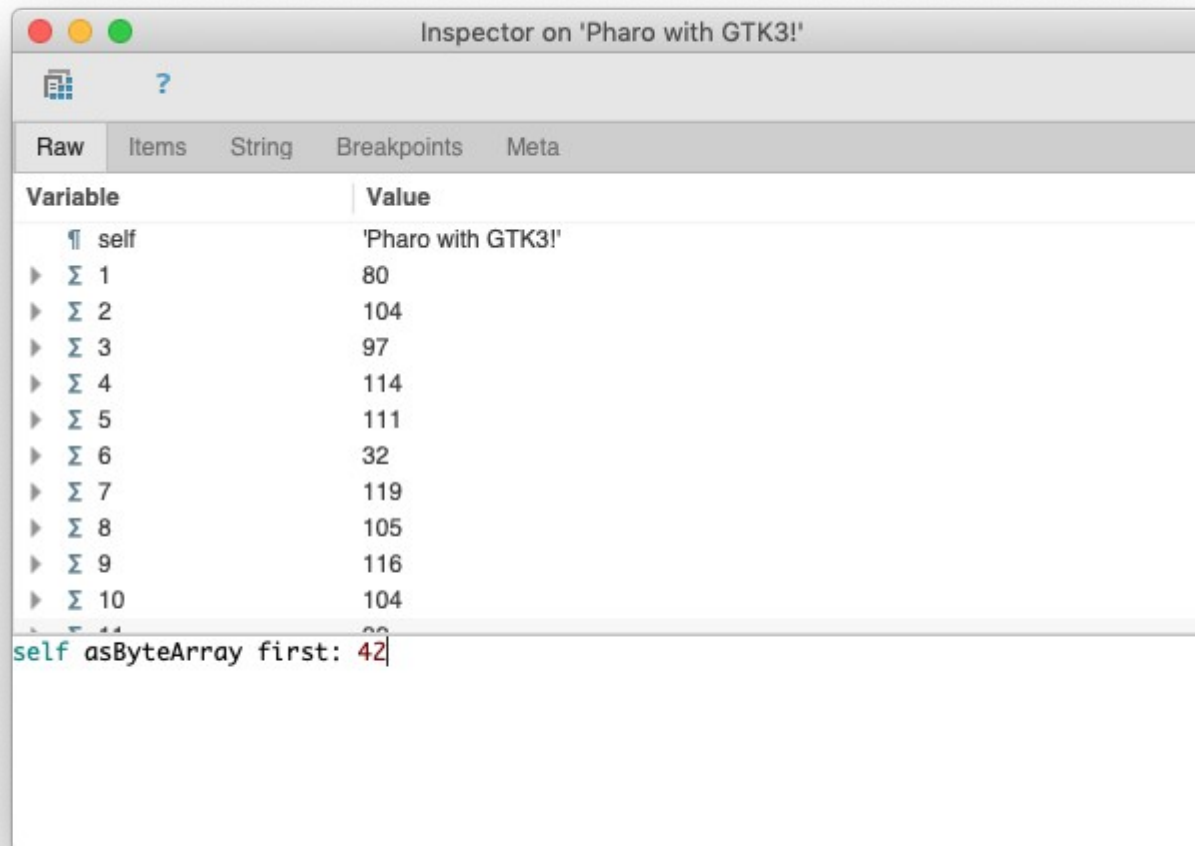
Unusability preservation law

§

Whenever a technology gets into a state where it becomes usable, when it starts to suit you, you get into it and you are satisfied with it, something always happens that either completely impairs it or makes working with it significantly uncomfortable.

§

2019



2022

**...and still no reasonable
UI Builder for Pharo...**

UI Builder not needed because...

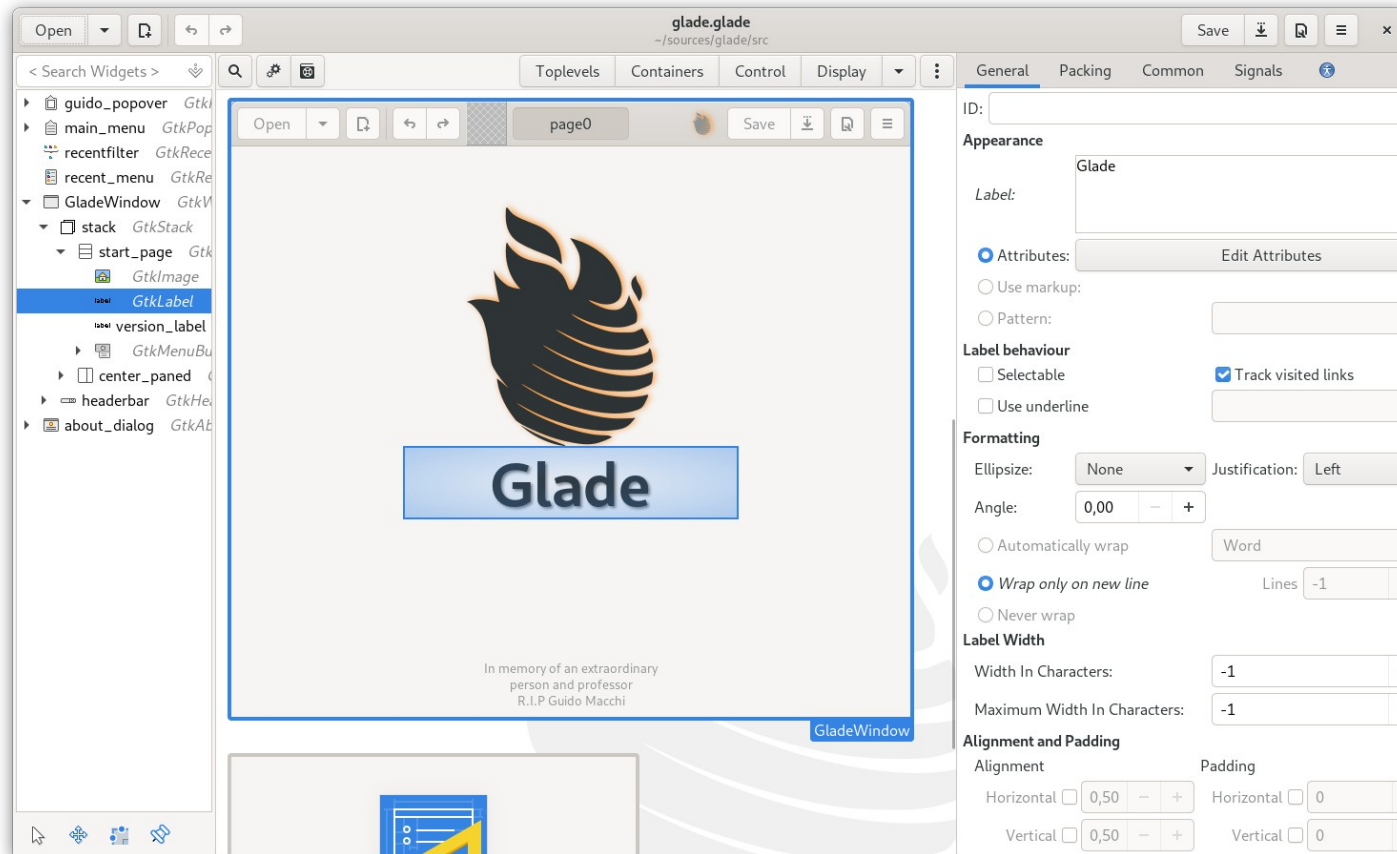
- good for fixed-size pixel perfect forms (obsolete)
- declarative (like XML...) vs. procedural UI generation
- Spec code defined UI:
 - more control
 - easier for versioning (standard source, no external files)
 - more flexible
 - more platform independent UI description
 - no UI Builder code to maintain
 - moving target

Why UI Builder

- “Hey, it’s 2022!”
- expected part of every good IDE
- immediate visual feedback
- Spec layouts need some experiences to get nice results
- power users can alter the default application UI

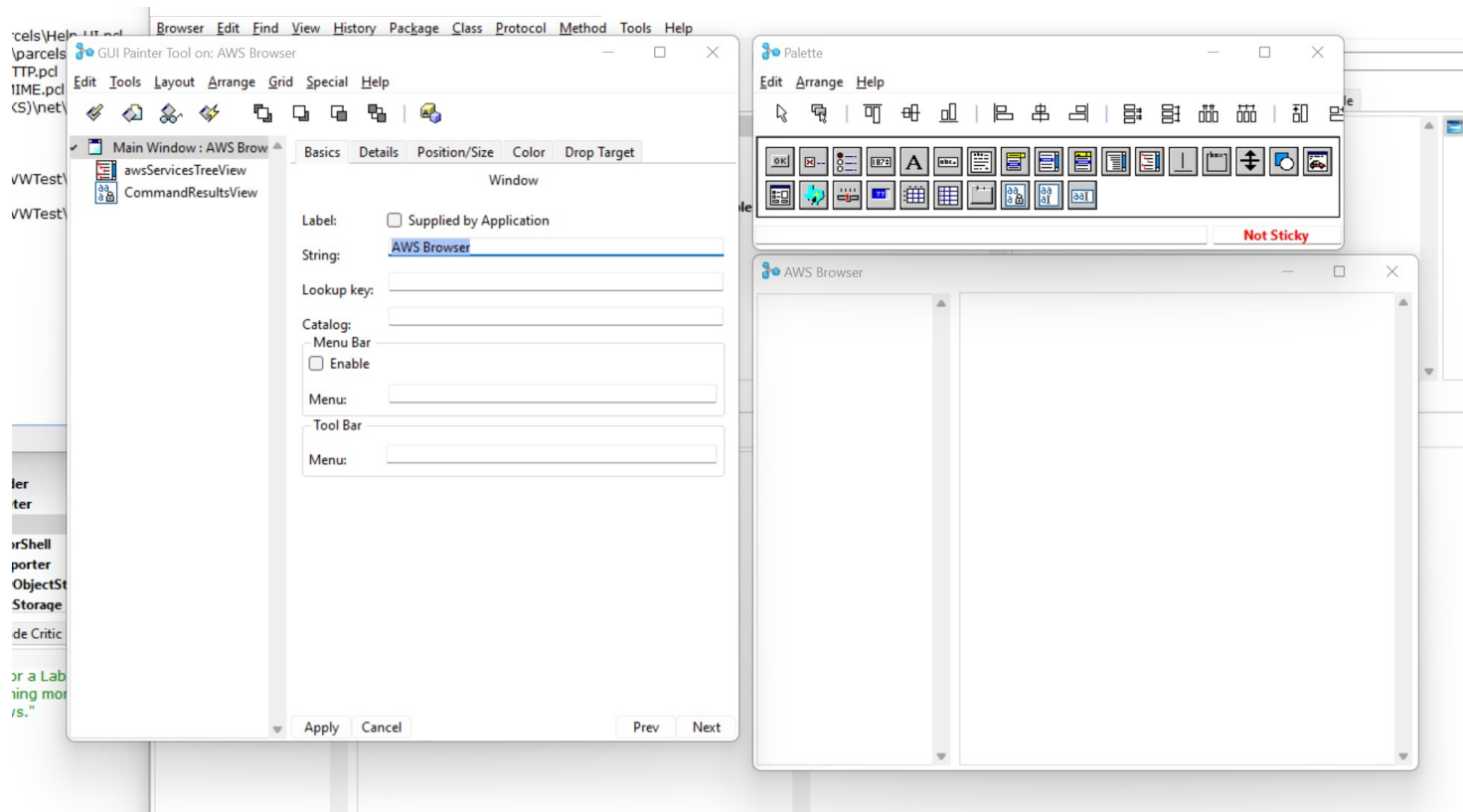


Gtk Glade



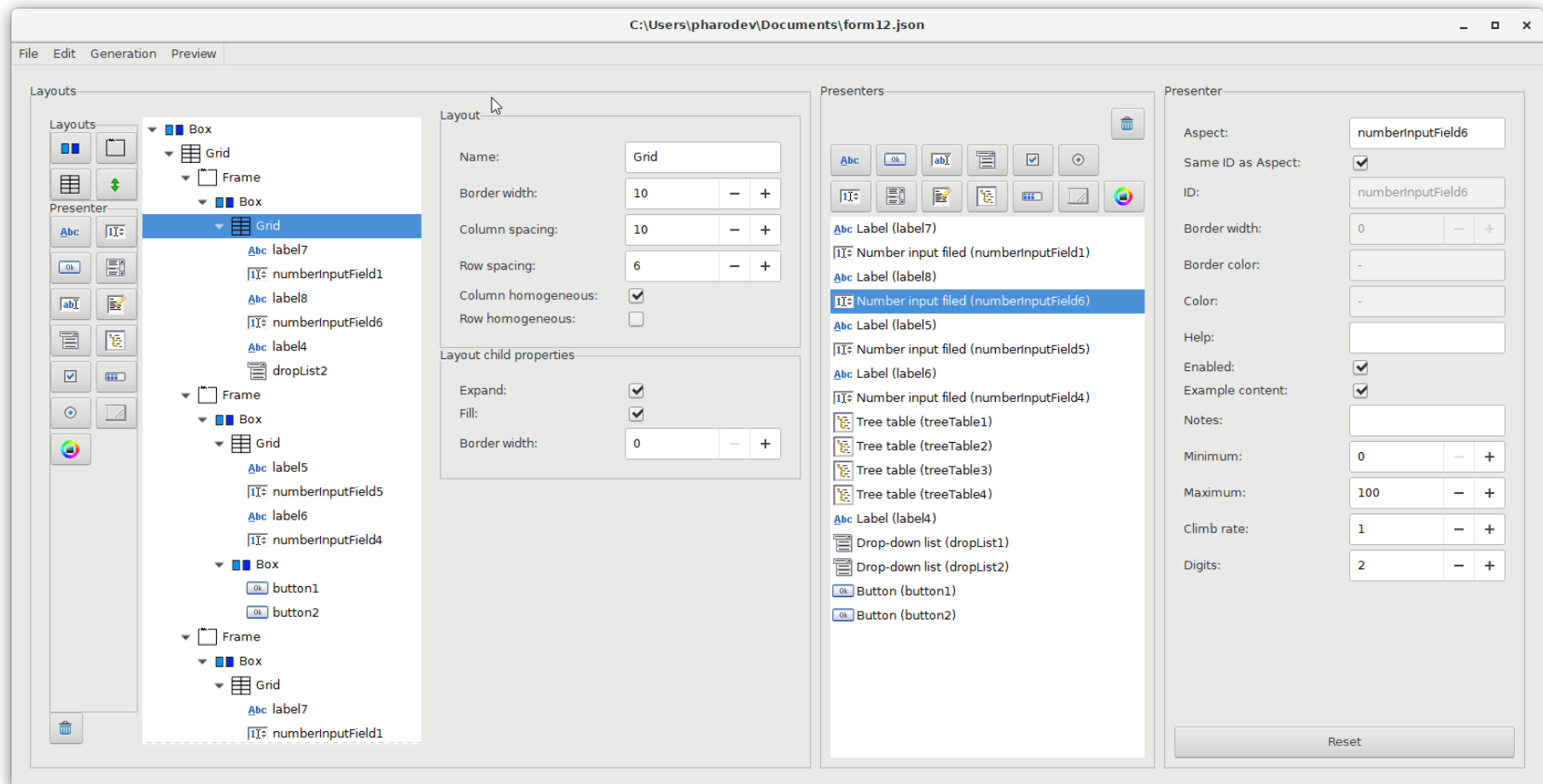
not Spec friendly

Other implementations



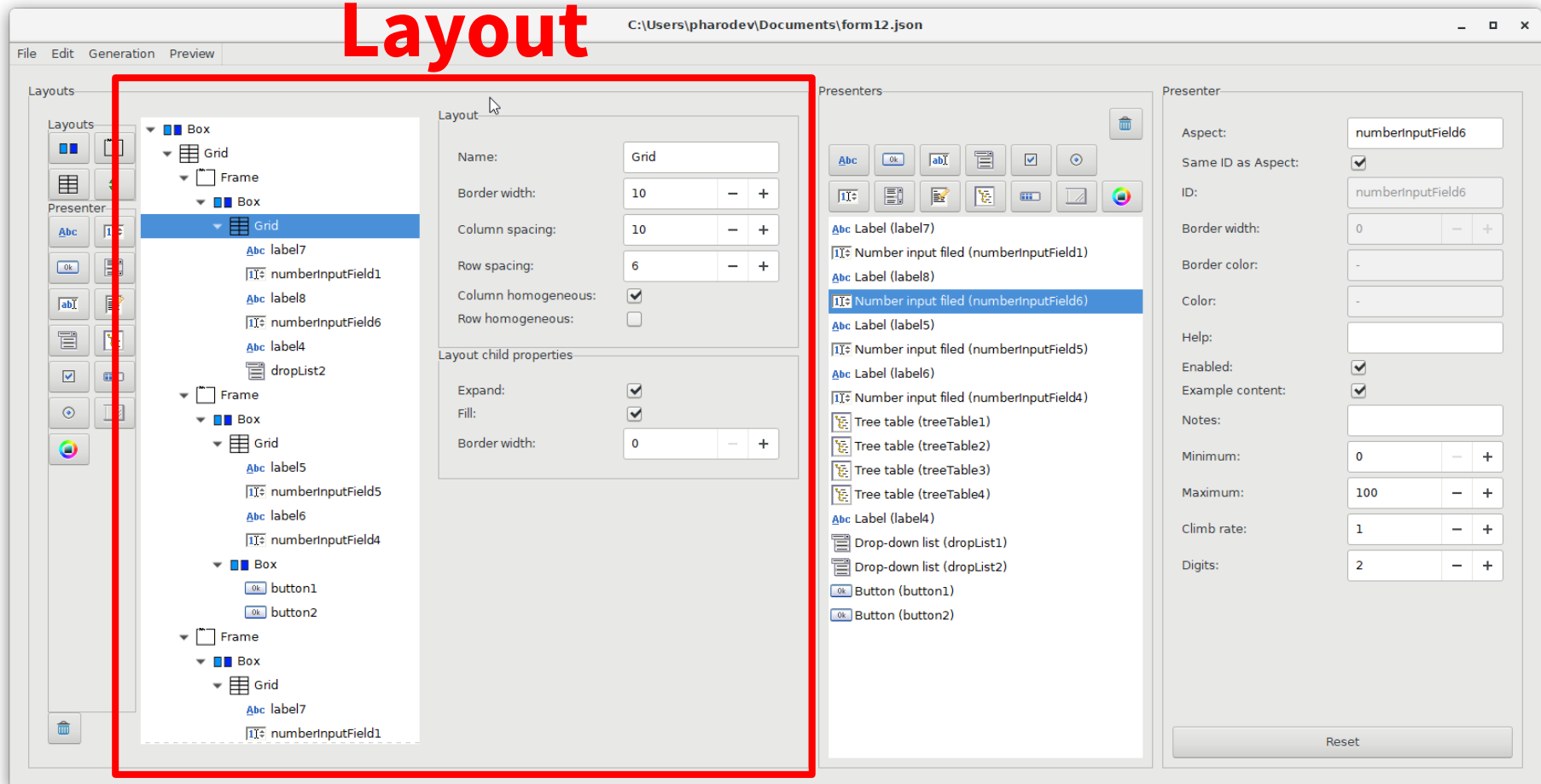
VisualWorks GUI Painter

apart form editor



apart form editor

Layout



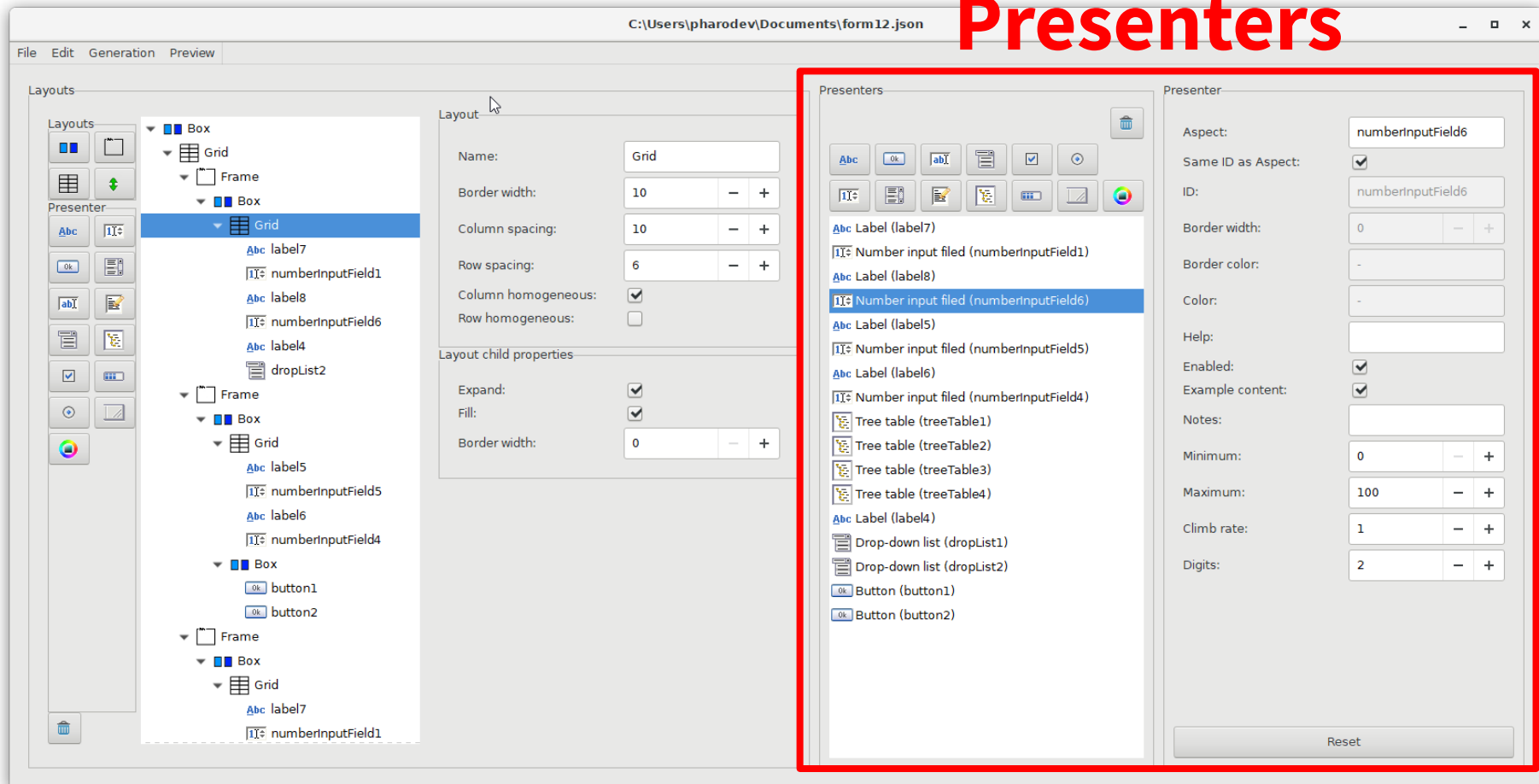
The screenshot shows the 'apart form editor' interface. A red box highlights the 'Layout' configuration panel for a 'Grid' widget. The panel includes the following settings:

- Name:** Grid
- Border width:** 10
- Column spacing:** 10
- Row spacing:** 6
- Column homogeneous:**
- Row homogeneous:**
- Layout child properties:**
 - Expand:**
 - Fill:**
 - Border width:** 0

The interface also shows a tree view of the form structure on the left, a 'Presenters' list in the middle, and a 'Presenter' configuration panel on the right for the selected 'Number input filed (numberInputField6)'.

apart form editor

Presenters



The screenshot shows the apart form editor interface. The main window title is "C:\Users\pharodev\Documents\form12.json". The interface is divided into several panels:

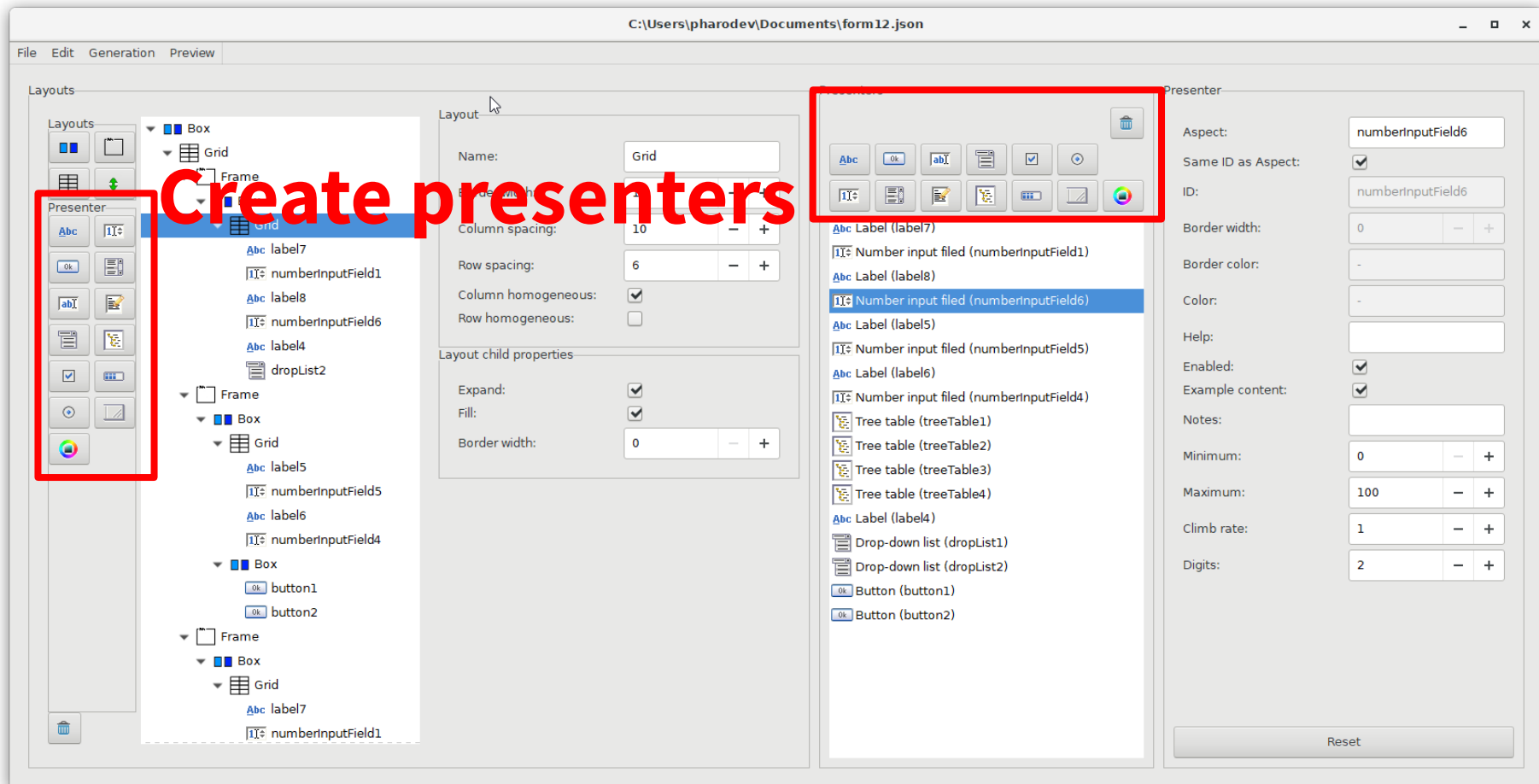
- Layouts:** A tree view on the left showing a hierarchy of components: Box > Grid > Frame > Box > Grid. The selected component is "Grid".
- Layout:** A panel on the right showing properties for the selected "Grid" component, such as Name, Border width, Column spacing, Row spacing, and homogeneity options.
- Presenters:** A central panel, highlighted with a red box, showing a list of available presenter components. The selected presenter is "Number input filed (numberInputField6)".
- Presenter:** A panel on the right showing configuration options for the selected presenter, including Aspect, Same ID as Aspect, ID, Border width, Border color, Color, Help, Enabled, Example content, Notes, Minimum, Maximum, Climb rate, and Digits.

apart form editor

Create layout

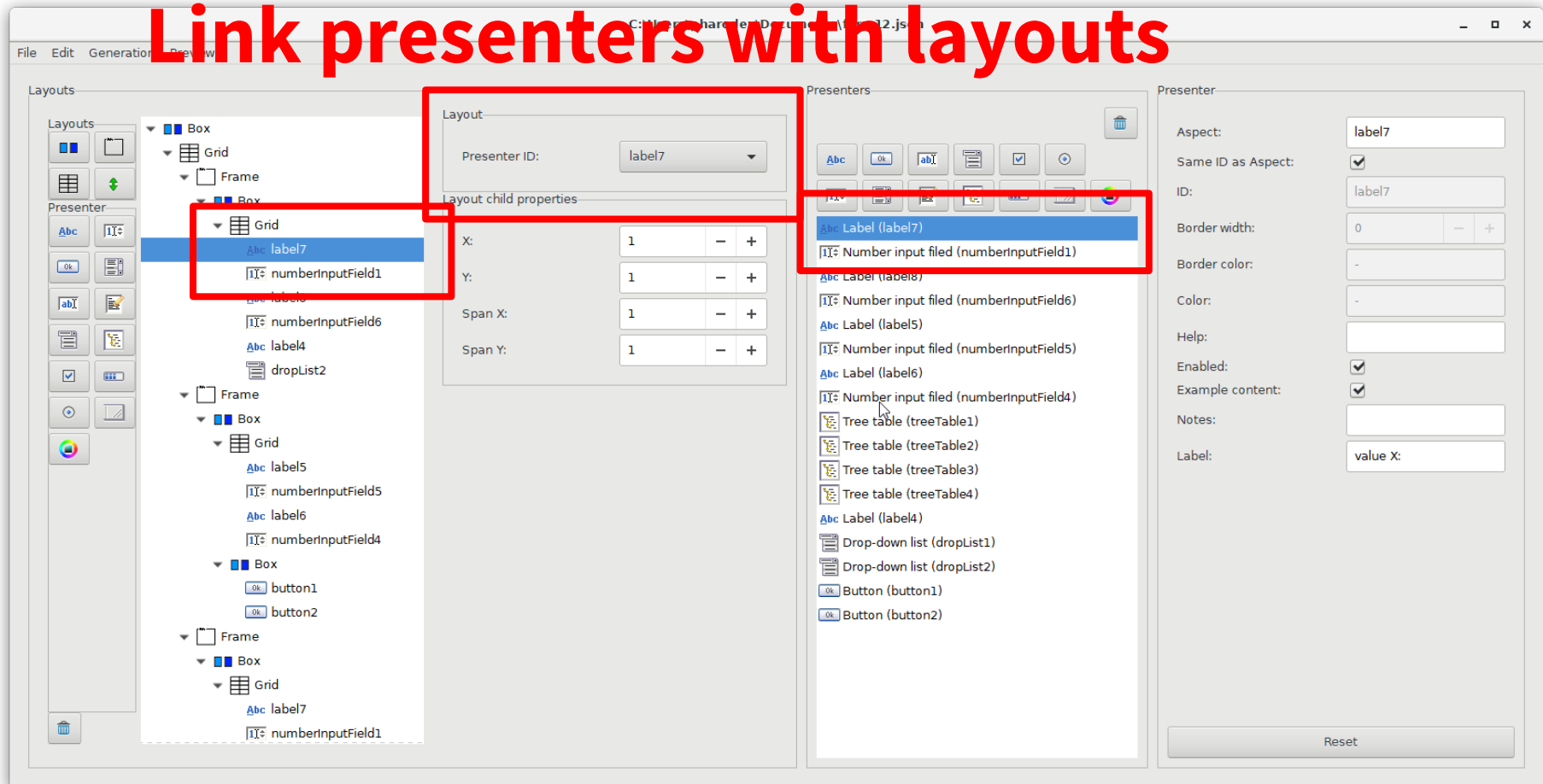
The screenshot displays the 'apart form editor' interface. On the left, a 'Layouts' panel is highlighted with a red box, showing a tree view of layout types: Box, Grid, Frame, and another Box. The 'Grid' layout is selected. Below this, a 'Presenter' panel shows various widget icons. The main workspace is divided into three sections: 'Layout' (showing 'Grid' with properties like border width, spacing, and spacing), 'Presenters' (a list of widgets including labels, number input fields, tree tables, drop-down lists, and buttons), and 'Presenter' (configuration options for the selected widget, such as 'Aspect', 'Same ID as Aspect', 'ID', 'Border width', 'Color', 'Help', 'Enabled', 'Example content', 'Notes', 'Minimum', 'Maximum', 'Climb rate', and 'Digits'). A 'Reset' button is located at the bottom right of the configuration panel.

apart form editor



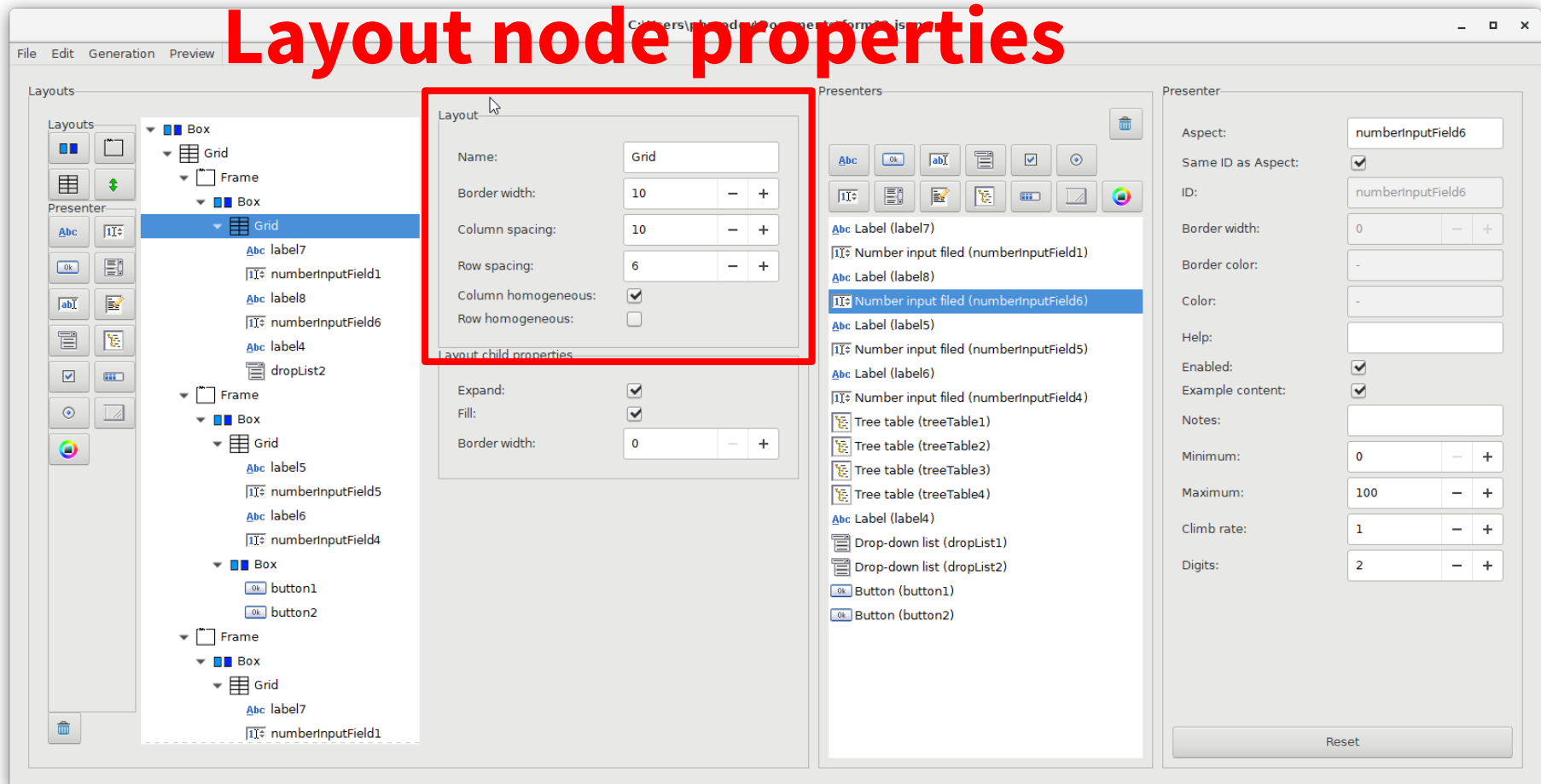
apart form editor

Link presenters with layouts



apart form editor

Layout node properties



The screenshot displays the apart form editor interface. A red box highlights the 'Layout' properties panel for a selected 'Grid' widget. The properties shown are:

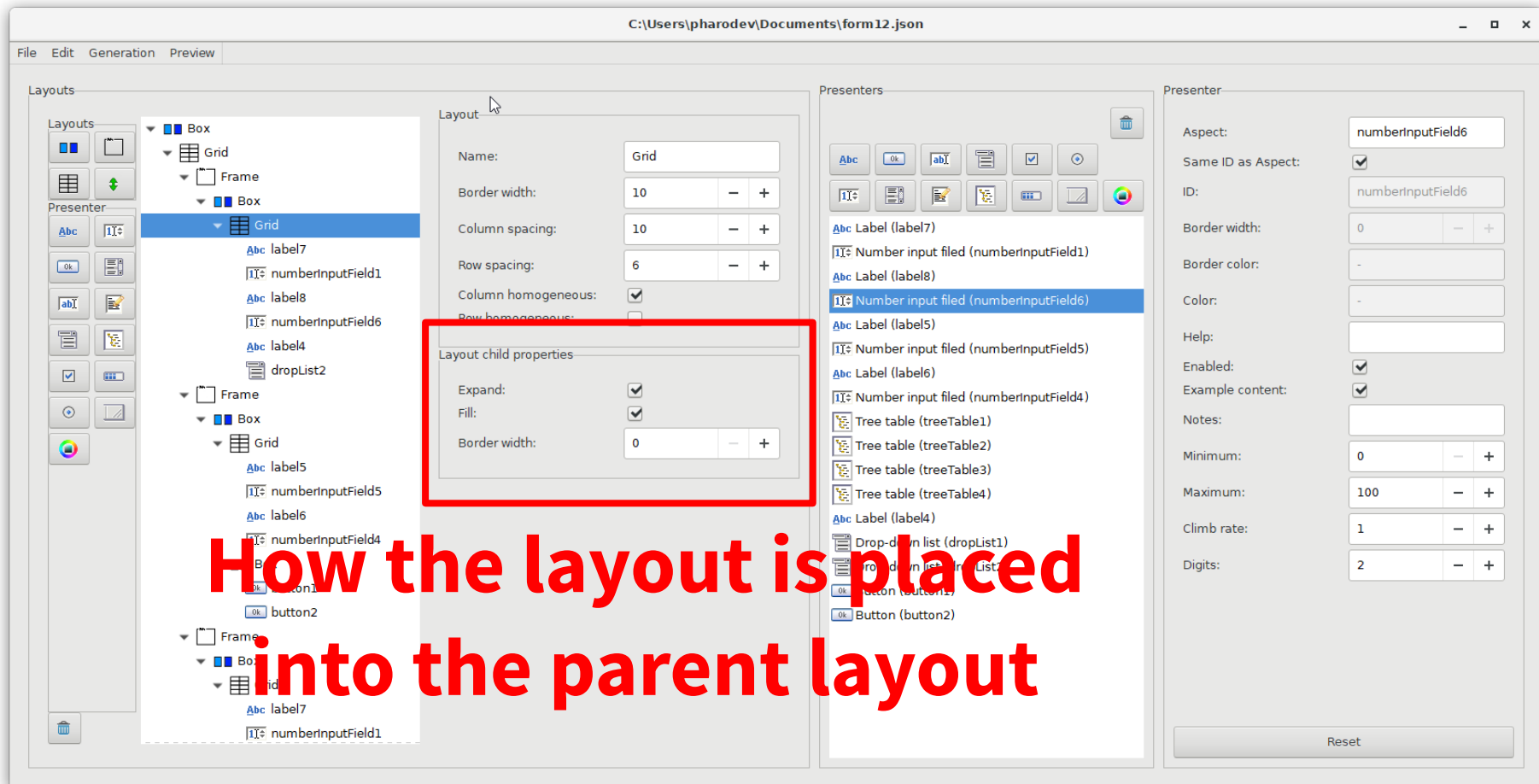
- Name: Grid
- Border width: 10
- Column spacing: 10
- Row spacing: 6
- Column homogeneous:
- Row homogeneous:

Below the main properties, there is a section for 'Layout child properties' with the following settings:

- Expand:
- Fill:
- Border width: 0

The interface also shows a tree view of the form structure on the left, a list of presenters in the center, and a detailed presenter configuration panel on the right for the selected 'numberInputField6' widget.

apart form editor

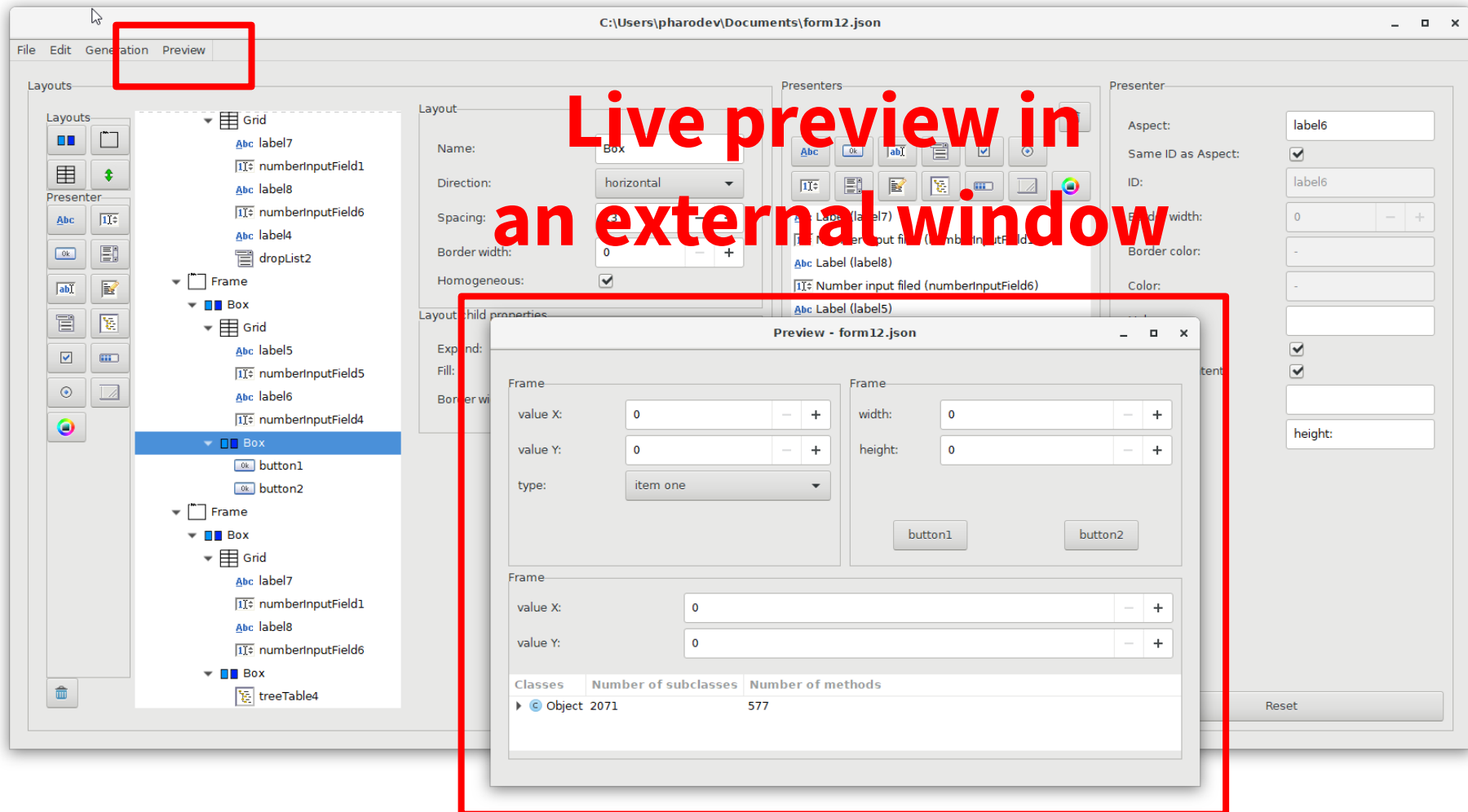


The screenshot displays the apart form editor interface. The main window title is "C:\Users\pharodev\Documents\form12.json". The interface is divided into several panels:

- Layouts:** A tree view on the left showing a hierarchy of layouts: Box > Grid > Frame > Box > Grid. The selected layout is "Grid".
- Layout Properties:** A central panel showing properties for the selected "Grid" layout:
 - Name: Grid
 - Border width: 10
 - Column spacing: 10
 - Row spacing: 6
 - Column homogeneous:
 - Row homogeneous:
 - Layout child properties (highlighted with a red box):
 - Expand:
 - Fill:
 - Border width: 0
- Presenters:** A list of presenters on the right, including "Number input filed (numberInputField1)", "Label (label7)", "Label (label8)", "Label (label5)", "Label (label6)", "Tree table (treeTable1)", "Tree table (treeTable2)", "Tree table (treeTable3)", "Tree table (treeTable4)", "Label (label4)", "Drop-down list (dropList1)", "Drop-down list (dropList2)", "Button (button1)", and "Button (button2)".
- Presenter Properties:** A panel on the far right showing properties for the selected presenter "numberInputField6":
 - Aspect: numberInputField6
 - Same ID as Aspect:
 - ID: numberInputField6
 - Border width: 0
 - Border color: -
 - Color: -
 - Help: (empty field)
 - Enabled:
 - Example content:
 - Notes: (empty field)
 - Minimum: 0
 - Maximum: 100
 - Climb rate: 1
 - Digits: 2

How the layout is placed into the parent layout

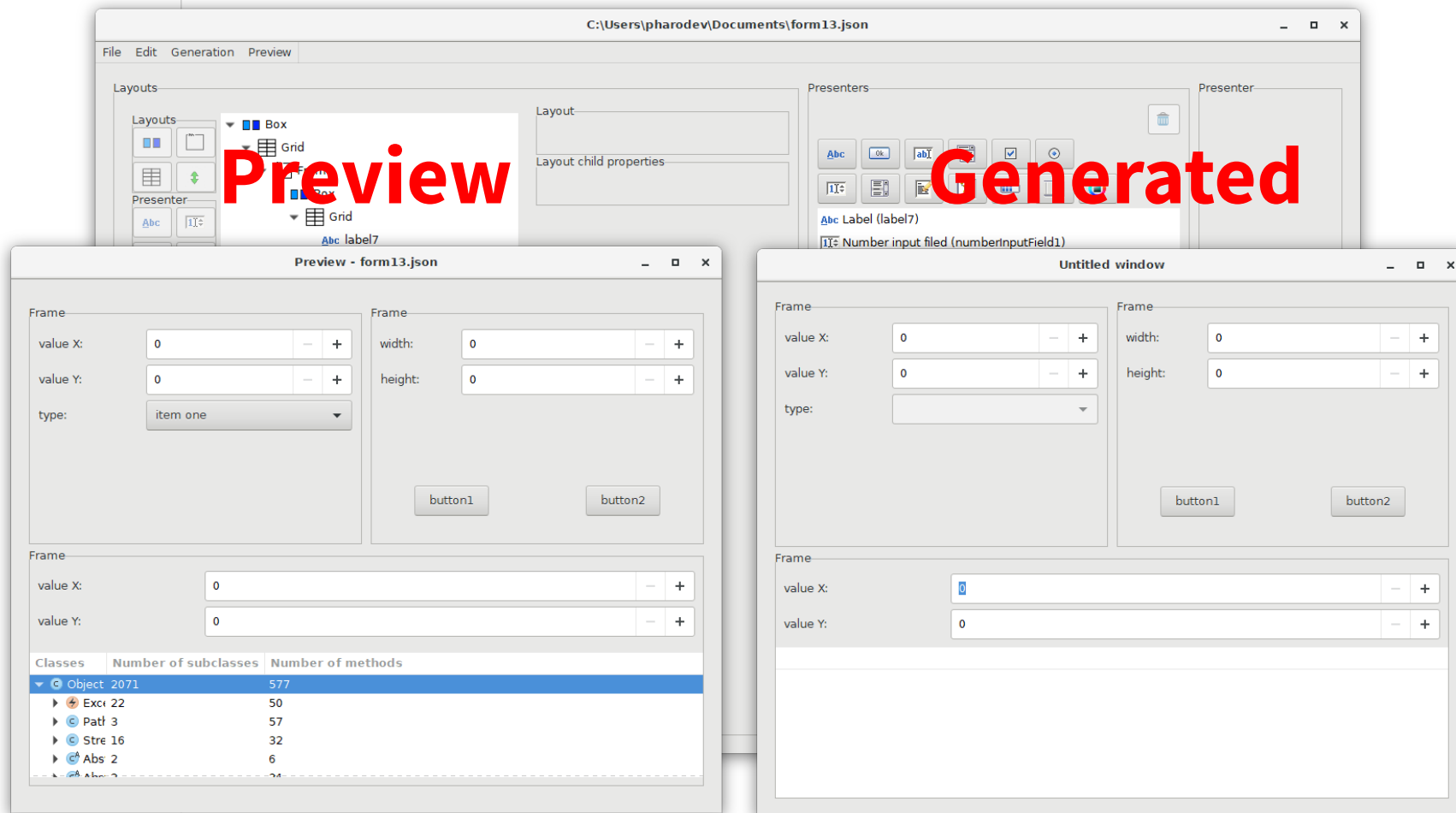
apart form editor



- serialization to JSON
- native file dialogs on Windows
- clipboard support
 - paste (copy)
 - paste (reuse)
- apart models can take the JSON file and build presenters

```
{
  "className": "ApedFormPart",
  "elements": [
    {
      "className": "ApedLabelPresenterPart",
      "aspect": "label7",
      "presenterId": "label1",
      "sameIdAsAspect": true,
      "visible": true,
      "borderWidth": null,
      "borderColor": null,
      "color": null,
      "help": null,
      "enabled": true,
      "exampleContent": true,
      "notes": null,
      "label": "value X:"
    },
    {
      "className": "ApedNumberInputFieldPresenterPart",
      "aspect": "numberInputField1",
      "presenterId": "numberInputField1",
      "sameIdAsAspect": true,
      "visible": true,
      "borderWidth": null,
      "borderColor": null,
      "color": null,
      "help": null,
      "enabled": true,
      "exampleContent": true,
      "notes": null,
      "isPassword": false,
      "maxLength": 0,
      "placeholder": "",
      "exampleText": "",
      "editable": true,
      "minimum": 0,
      "maximum": 100,
      "climbRate": 1,
      "digits": 2
    },
    {
      "className": "ApedLabelPresenterPart",
      "aspect": "label7",
      "presenterId": "label1",
      "sameIdAsAspect": true,
      "visible": true,
      "borderWidth": null,
      "borderColor": null,
      "color": null,
      "help": null,
      "enabled": true,
      "exampleContent": true,
      "notes": null,
      "label": "value X:"
    }
  ]
}
```


Spec presenters generation

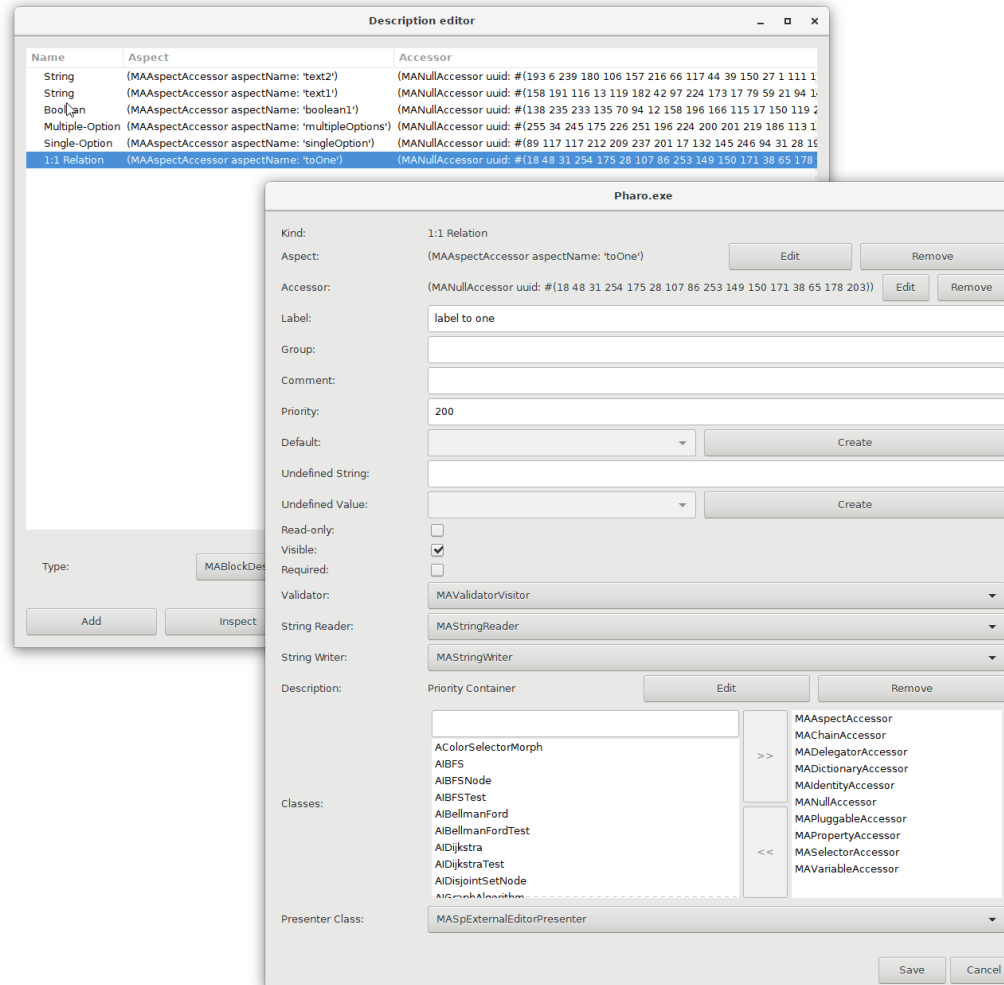


The image illustrates the process of generating spec presenters in the apart framework. It shows a main application window with a 'Layouts' tree on the left and a 'Presenters' list on the right. Two preview windows are displayed: 'Preview - form13.json' and 'Untitled window'. The 'Preview' window shows a form with two frames, each containing input fields for 'value X', 'value Y', and 'type', and two buttons labeled 'button1' and 'button2'. The 'Untitled window' shows a similar form but with a different layout. A large red 'Preview' watermark is overlaid on the top-left, and a large red 'Generated' watermark is overlaid on the top-right.

Magritte Meta-Model Spec Binding



Magritte-Spec



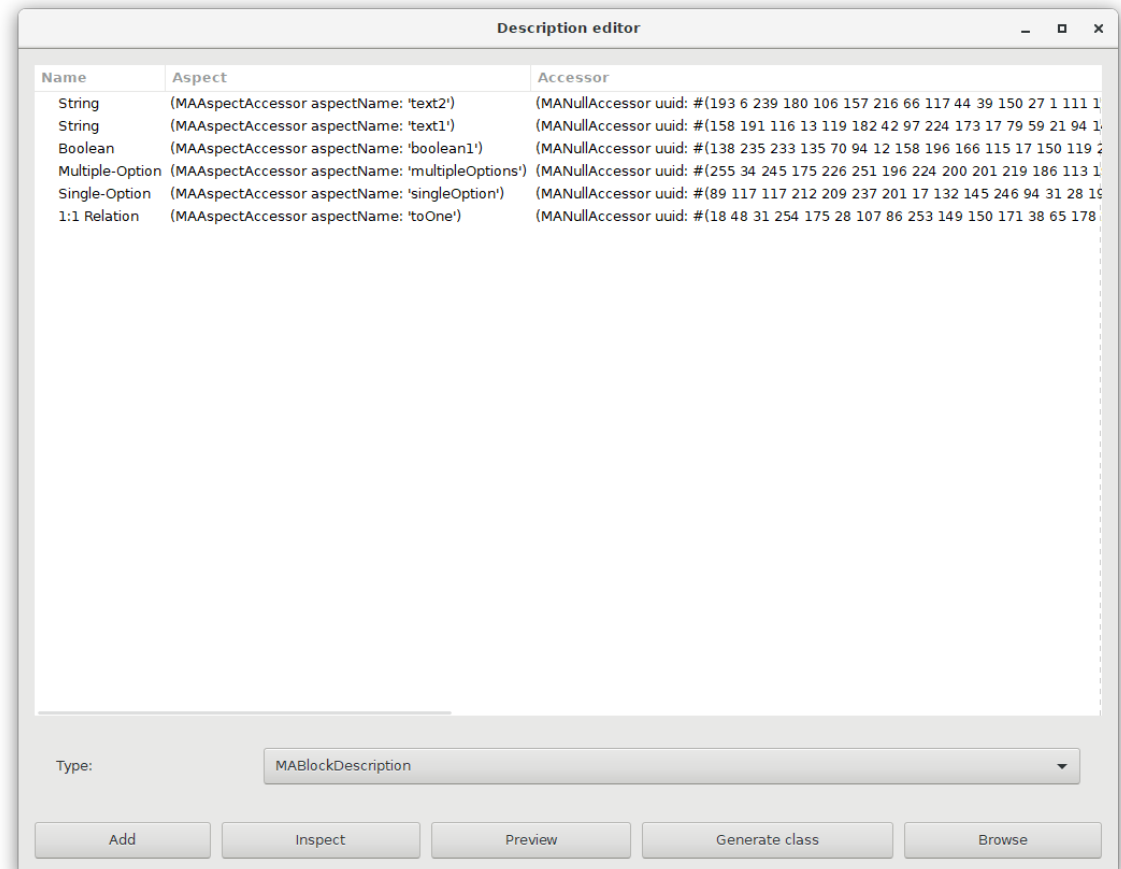
The image shows two overlapping windows from the Magritte-Spec application. The background window is the 'Description editor', which contains a table listing various aspects and their corresponding accessor classes. The foreground window is the configuration editor for a specific aspect named '1:1 Relation'.

Name	Aspect	Accessor
String	(MAAspectAccessor aspectName: 'text2')	(MANullAccessor uuid: #(193 6 239 180 106 157 216 66 117 44 39 150 27 1 111 1
String	(MAAspectAccessor aspectName: 'text1')	(MANullAccessor uuid: #(158 191 116 13 119 182 42 97 224 173 17 79 59 21 94 1
Boolean	(MAAspectAccessor aspectName: 'boolean1')	(MANullAccessor uuid: #(138 235 233 135 70 94 12 158 196 166 115 17 150 119 2
Multiple-Option	(MAAspectAccessor aspectName: 'multipleOptions')	(MANullAccessor uuid: #(255 34 245 175 226 251 196 224 200 201 219 186 113 1
Single-Option	(MAAspectAccessor aspectName: 'singleOption')	(MANullAccessor uuid: #(89 117 117 212 209 237 201 17 132 145 246 94 31 28 15
1:1 Relation	(MAAspectAccessor aspectName: 'toOne')	(MANullAccessor uuid: #(18 48 31 254 175 28 107 86 253 149 150 171 38 65 178

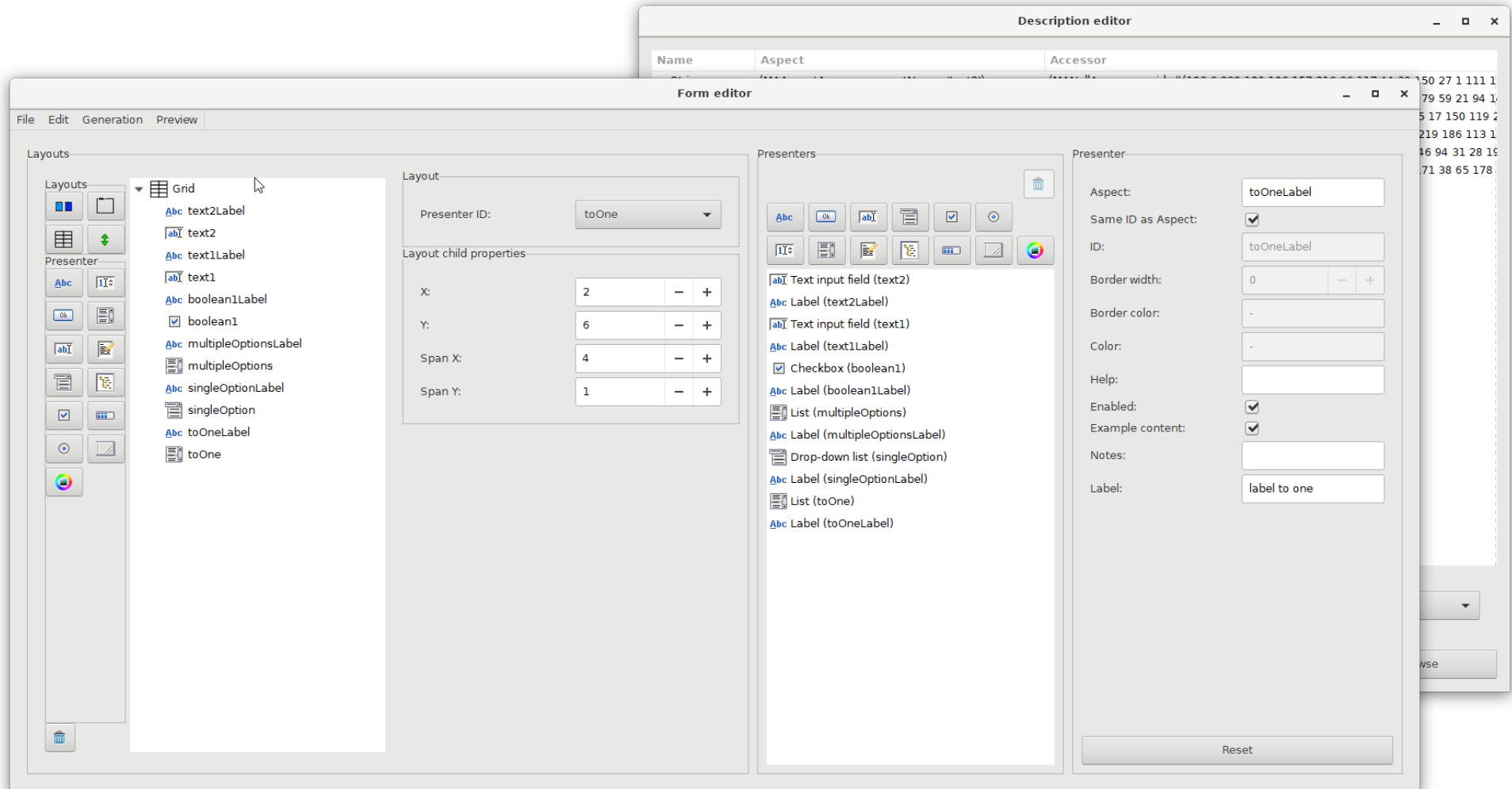
The foreground window 'Pharo.exe' shows the configuration for the selected '1:1 Relation' aspect:

- Kind: 1:1 Relation
- Aspect: (MAAspectAccessor aspectName: 'toOne')
- Accessor: (MANullAccessor uuid: #(18 48 31 254 175 28 107 86 253 149 150 171 38 65 178 203))
- Label: label to one
- Group: (empty)
- Comment: (empty)
- Priority: 200
- Default: (empty)
- Undefined String: (empty)
- Undefined Value: (empty)
- Read-only:
- Visible:
- Required:
- Validator: MAValidatorVisitor
- String Reader: MAsStringReader
- String Writer: MAsStringWriter
- Description: Priority Container
- Classes: AColorSelectorMorph, AIBFS, AIBFSNode, AIBFSTest, AIBellmanFord, AIBellmanFordTest, AIDijkstra, AIDijkstraTest, AIDisjointSetNode, AIGraphAlgorithms
- Presenter Class: MASpExternalEditorPresenter

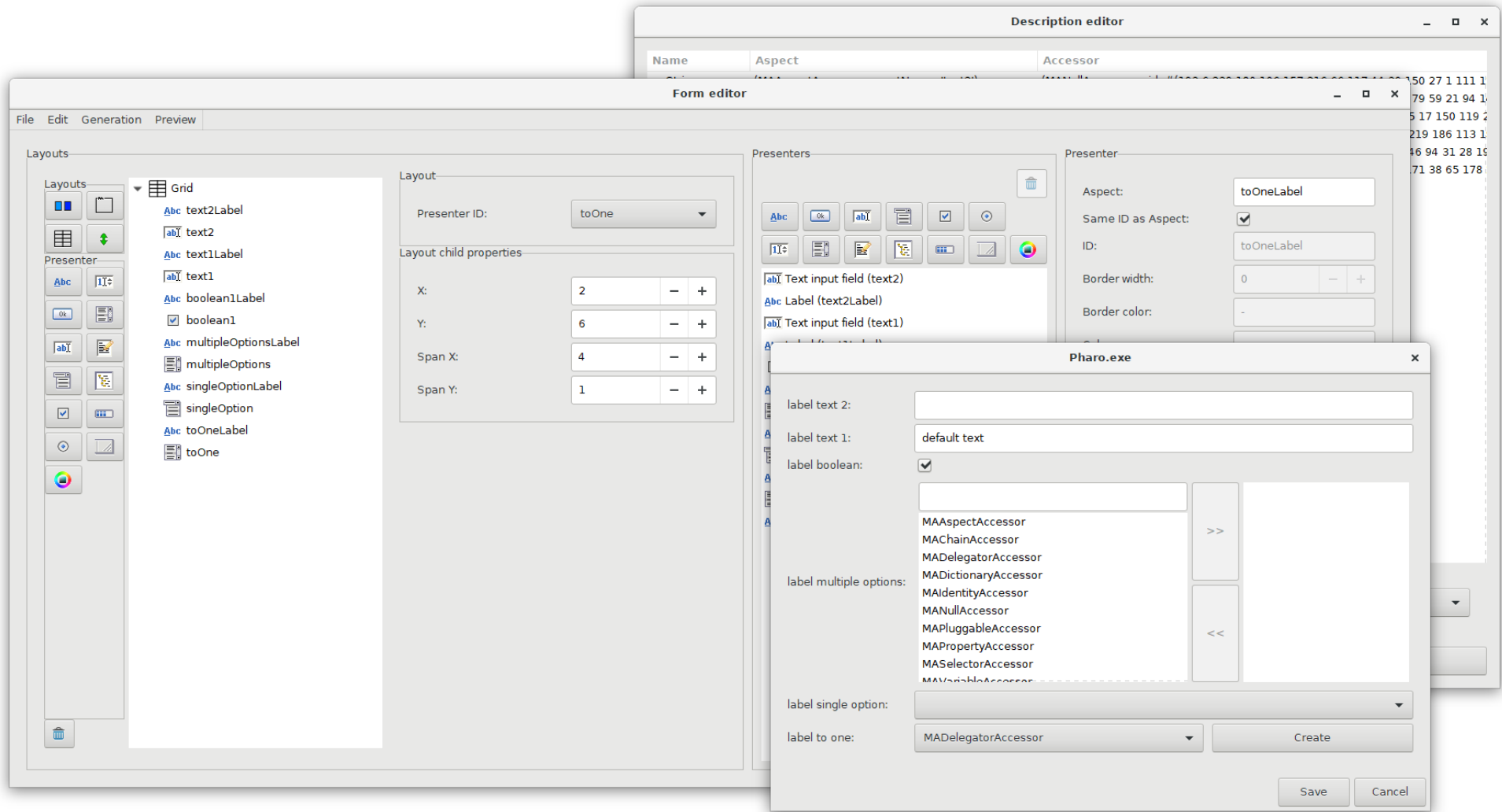
Create Magritte description



Edit look in the form editor



Use the altered layout



Status

- apart framework dependent
- currently, only form elements
 - no menus, toolbars...
- no frame layout in Morphic
- Spec-Gtk leaks attractor (heavy use of dynamic layouts)
 - stable as roentgenium (^{282}Rg)



<https://github.com/bauing-schmidt/APart>

fighting Unusability preservation law

<https://github.com/bauing-schmidt/APart>