How to get better mileage out of Glade

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Composite Widgets

- **GtkGrid**
  - **GtkButton**
  - **GtkEntry**

**Grid Properties - GtkGrid**

**General**
- ID: 
- Composite: 

**Grid Attributes**
- **Orientation:** Horizontal
- **Baseline Row:**
  - Count: 0
  - Spacing: 0
  - Homogeneous: 

- **Rows**
  - Count: 3
  - Spacing: 0
  - Homogeneous: 

- **Columns**
  - Count: 3
  - Spacing: 0
  - Homogeneous: 

**Control and Display**
- [Label]
Composite Widgets
Composite Widgets

- MyEntryPointWidget

- GtkGrid (template)
  - GtkButton
  - GtkEntry

- General Properties - GtkGrid [MyEntryPointWidget]
  - Class Name: MyEntryPointWidget
  - Grid Attributes:
    - Orientation: Horizontal
    - Baseline Row: 0
    - Count (Rows): 3
    - Spacing: 0
    - Homogeneous: Off
    - Count (Columns): 3
    - Spacing: 0
    - Homogeneous: Off
<?xml version="1.0" encoding="UTF-8"?>
<!-- Generated with glade 3.20.0 -->
<inteface>
  <requires lib="gtk+" version="3.20"/>
  <template class="MyEntryWidget" parent="GtkGrid">
    <property name="visible">True</property>
    <property name="can_focus">False</property>
    <child>
      <object class="GtkButton">
        <property name="label" translatable="yes">button</property>
        <property name="visible">True</property>
        <property name="can_focus">True</property>
        <property name="receives_default">True</property>
      </object>
    </child>
  </template>
</interface>
Custom Catalog

Pros:
- Easier to use than writing XML
- Good way to test your widgets
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Pros:
- Easier to use than writing XML
- Good way to test your widgets

Cons:
- Have to manually write catalog xml file
- Add support code for complex widget
<?xml version="1.0" encoding="UTF-8"?>
<glade-catalog name="custom"
    library="custom"
    depends="gtk+">
<?xml version="1.0" encoding="UTF-8"?>
<glade-catalog name="custom"
    library="custom"
    depends="gtk+">
    <init-function>custom_glade_init</init-function>
</glade-catalog>
<?xml version="1.0" encoding="UTF-8"?>
<glade-catalog name="custom"
    library="custom"
    depends="gtk+">
    <init-function>custom_glade_init</init-function>
</glade-catalog>
<?xml version="1.0" encoding="UTF-8"?>
<glade-catalog name="custom"
    library="custom"
    depends="gtk+">
    <init-function>custom_glade_init</init-function>

    <glade-widget-classes>
        <glade-widget-class name="CustomBox"
            generic-name="custombox"
            title="Custom Box"/>

    </glade-widget-classes>

</glade-catalog>
<?xml version="1.0" encoding="UTF-8"?>
<glade-catalog name="custom"
    library="custom"
    depends="gtk+">  
    <init-function>custom_glade_init</init-function>

    <glade-widget-classes>
        <glade-widget-class name="CustomBox"
            generic-name="custombox"
            title="Custom Box"/>
        
        <glade-widget-class name="CustomEntry"
            generic-name="customentry"
            title="Custom Entry"/>
        
    </glade-widget-classes>
</glade-catalog>
Custom Catalog

<?xml version="1.0" encoding="UTF-8"?>
<glade-catalog name="custom"
    library="custom"
    depends="gtk+">...
    <glade-widget-group name="custom"
        title="Custom Widgets">
    </glade-widget-group>
</glade-catalog>
<?xml version="1.0" encoding="UTF-8"?>
<glade-catalog name="custom"
    library="custom"
    depends="gtk+">...
    <glade-widget-group name="custom"
        title="Custom Widgets">
        <glade-widget-class-ref name="CustomBox"/>
    </glade-widget-group>
</glade-catalog>
<?xml version="1.0" encoding="UTF-8"?>
<glade-catalog name="custom"
    library="custom"
    depends="gtk+">

    ...

    <glade-widget-group name="custom"
        title="Custom Widgets">
        <glade-widget-class-ref name="CustomBox"/>
        <glade-widget-class-ref name="CustomEntry"/>
    </glade-widget-group>

</glade-catalog>
Catalogs Places

Catalogs should be installed in:

`pkg-config --variable=catalogdir gladeui-1.0`
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`pkg-config --variable=catalogdir gladeui-1.0`

And the plugin library in:

`pkg-config --variable=moduledir gladeui-1.0`
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Env

GLADE_CATALOG_SEARCH_PATH
GLADE_MODULE_SEARCH_PATH
Catalogs Places

Catalogs should be installed in:

```
`pkg-config --variable=catalogdir gladeui-1.0`
```

And the plugin library in:

```
`pkg-config --variable=moduledir gladeui-1.0`
```

Env

- GLADE_CATALOG_SEARCH_PATH
- GLADE_MODULE_SEARCH_PATH

Glade

Edit -> Preferences -> Extra Catalog Paths
Real World Example

Webkit2Gtk
Real World Example

<glade-catalog name="webkit2gtk"
    library="webkit2gtk-4.0"
    depends="gtk+">

    <glade-widget-classes>

    </glade-widget-classes>

</glade-catalog>
Real World Example

```xml
<glade-catalog name="webkit2gtk"
    library="webkit2gtk-4.0"
    depends="gtk+">;

    <glade-widget-classes>
        <glade-widget-class name="WebKitWebView"
            generic-name="webview"
            title="WebKit Web View" />
    </glade-widget-classes>

</glade-catalog>
```
Real World Example

<glade-catalog name="webkit2gtk"
library="webkit2gtk-4.0"
dePENDs="gtk+">
Real World Example

<glade-catalog name="webkit2gtk"
    library="webkit2gtk-4.0"
    depends="gtk+">

    <glade-widget-classes>
        <glade-widget-class name="WebKitWebView"
            generic-name="webview"
            title="WebKit Web View"
            get-type-function="webkit_web_view_get_type" />

        <glade-widget-class name="WebKitSettings"
            generic-name="settings"
            title="WebKit Settings"
            toplevel="True"
            get-type-function="webkit_settings_get_type"/>  
    </glade-widget-classes>

</glade-catalog>
Real World Example

Do not forget to add supported classes to a group!

<glade-widget-group name="webkit2gtk"
title="WebKit2GTK+ Widgets">
  <glade-widget-class-ref name="WebKitWebView"/>
  <glade-widget-class-ref name="WebKitSettings"/>
</glade-widget-group>
Catalog Features

- Disable/remove properties
- Disable properties in runtime
- Set default values
- Add human readable enumeration values
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- Disable/remove properties
- Disable properties in runtime
- Set default values
- Add human readable enumeration values

Runtime support
- Override set/get property methods
- Post create functions
- Custom features serialization
How did we got here?
Ported from Gtk+ 1.2
- Each component had its own window
- Toplevels were not embedded
Almost the same as Glade 2

But eventually we managed to fit everything in one window!
Lots of people complained about the new UI
<- That's why you can still undock things!
Glade UI Issues

*Unsaved 1

Toplevels

Containers

Control and Di...

<Search Widgets>

- GtkWindow

- GtkGrid

- GtkButton

General

Packing

Common

ID:

Grid Attributes

Orientation: Horizontal

Rows

Count: 3

Spacing: 0

Column:

Count:

Spacing:

Homogeneous

Horizontal
Glade UI Issues

Not enough space -> for inspector
Glade UI Issues

Not enough space → for inspector

or the property → editor
But the most annoying thing is trying to guess which icon correspond to the class you are looking for!!!
- Double click on placeholder
- Double click on placeholder
- Search for a class name
- Double click on placeholder
- Search for a class name
- And create a new instance!
- Double click on placeholder
- Search for a class name
- And create a new instance!

- Never really told anyone about this, my bad!
How can we improve this?
How can we improve this?

REMOVE THIS!!!
To make room for properties!
Replace MenuBar and ToolBar with HeaderBar
Live demo

What could possibly go wrong?
$ git clone git://git.gnome.org/glade
$ cd glade
$ git checkout modern-ui
$ ./autogen.sh && make && make install
- **glade-catalog-tool**
  Script to create/update Glade catalogs from introspection data

- Polish new UI

- Make devel release

- More polish

- Bug hunting
Thank You
Gracias
Thank You
Gracias

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