




More than windows: a path for a GTK+3 tutorial

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GUADEC 2013



New to GTK+? Me too!



Would you like to learn?
Maybe starting with Python?

A paper mache rhinoceros, constructed from brown paper, stands on a green surface against a green background. The rhino is facing left and has a prominent horn. A semi-transparent black rectangular box is overlaid on the center of the image, containing white text.

A long, long time ago...
(that is: 2 years ago)

A paper model of a rhinoceros, constructed from brown paper, is shown against a green background. The model is standing and facing left. A dark horizontal bar is overlaid on the middle of the image, containing white text.


GTK+ 3 Reference Manual
(in C, long, assumed some knowledge)

A paper mache rhinoceros, constructed from brown paper, stands on a green surface against a green background. The rhino is facing left. A dark semi-transparent rectangular box is overlaid on the center of the image, containing white text.

Tutorials for GTK+ 2 in Python (outdated, everywhere)

A paper tiger sculpture made of brown paper, standing on a green background. The tiger is facing left and has a dark brown rectangular box overlaid on its body containing white text.

GTK+ 3 Python tutorial
by Sebastian Pölsterl
(beautiful, but not on gnome.org)

A detailed paper model of a rhinoceros, constructed from brown paper. The model is shown in profile, facing left, and stands on a green surface against a green background. The rhinoceros has a prominent horn on its snout and a textured, folded paper body. A dark horizontal bar is overlaid across the middle of the image, containing white text.

Video tutorials
(not on gnome.org, hard to follow)

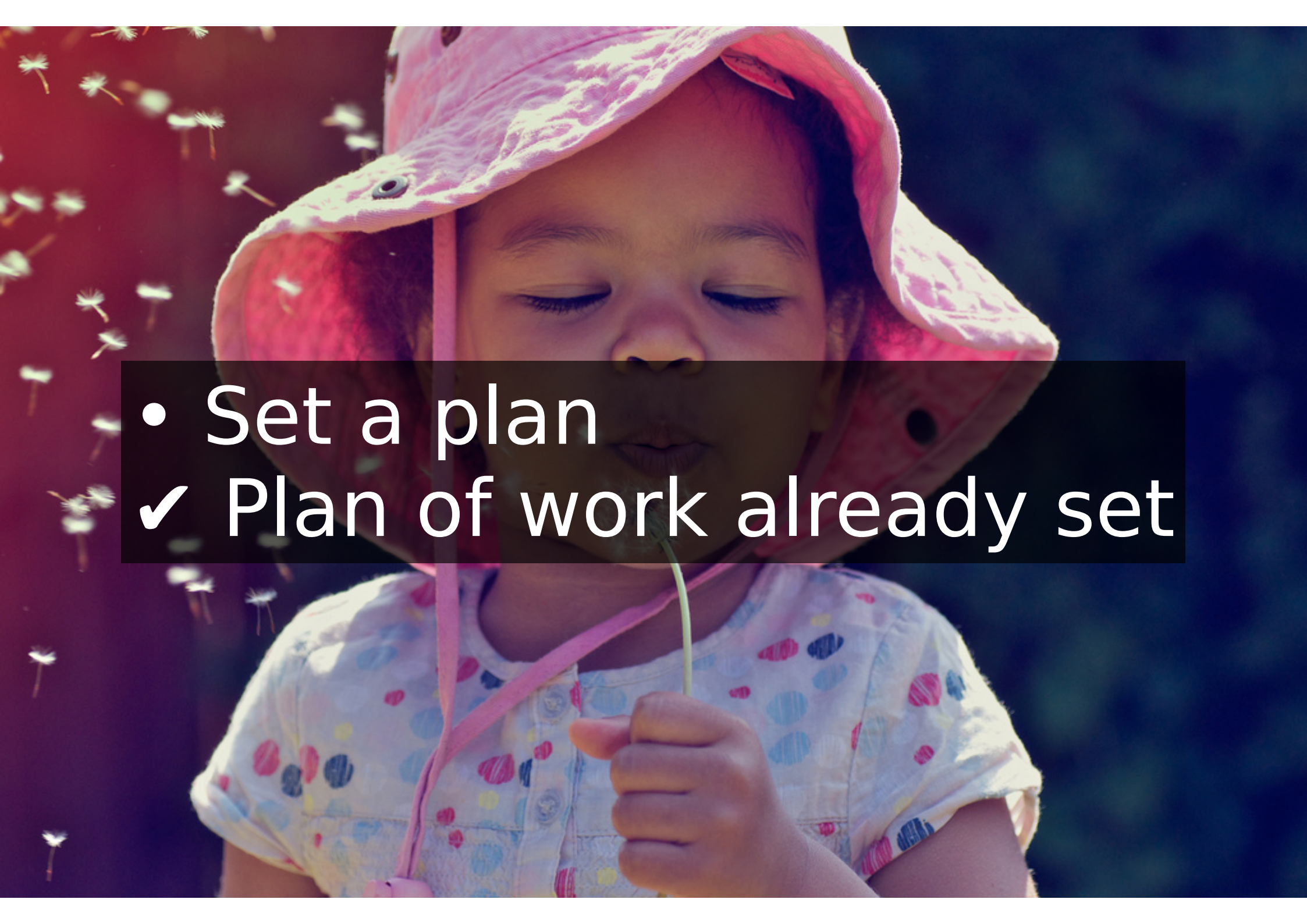
A paper model of a rhinoceros, constructed from brown paper, is shown against a green background. The model is standing and facing left. A black rectangular box with white text is overlaid on the middle of the image.


"10 minutes" tutorials for examples
(too complex for beginners)

A close-up photograph of a young child with dark skin and hair, wearing a pink sun hat and a white shirt with colorful polka dots. The child is blowing a dandelion seed head, with many seeds floating in the air around them. The background is a soft, out-of-focus green, suggesting an outdoor setting. A semi-transparent black banner with white text is overlaid across the middle of the image.


My project for OPW in summer 2012...

- 
- A close-up photograph of a young child with their eyes closed, blowing on a dandelion stem. The child is wearing a pink hat and a white shirt with colorful polka dots. The background is a soft, out-of-focus blue sky with many dandelion seeds floating in the air. A semi-transparent black box is overlaid on the center of the image, containing white text.
- Find a nice mentor
✓ Tiffany Antopolski :-)

- 
- Set a plan
 - ✓ Plan of work already set



• Follow the plan
? Not exactly...

- 
- A close-up photograph of a young child with dark hair, wearing a pink bucket hat and a white shirt with colorful polka dots. The child is blowing dandelion seeds into the air, which are captured in motion against a dark, blurred background. The lighting is warm and soft, highlighting the child's face and the texture of the hat and shirt.
- Build something that does not need much maintenance

A close-up photograph of a young child with dark skin, wearing a pink sun hat and a white shirt with colorful polka dots. The child is blowing a dandelion seed, and many other seeds are captured in mid-air around them, creating a soft, dreamy atmosphere. The background is a blurred green, suggesting an outdoor setting.

X Did you really think that could work?

Goal



The final goal...

A golden ring with intricate Elvish script (Tengwar) engraved on its surface. The ring is shown in a perspective view, curving around. A dark grey horizontal bar is superimposed across the center of the ring, containing the text "One tutorial to rule them all" in white. The background is plain white.

One tutorial to rule them all



One tutorial to find them
(on gnome.org)

A golden ring with intricate Elvish script (Tengwar) engraved on its surface. The ring is shown in a perspective view, curving around. A dark grey semi-transparent rectangular box is overlaid across the center of the ring, containing white text.

One tutorial to bring them all
(together)

A golden ring with intricate Elvish script (Cirth) engraved on its surface. The ring is shown in a perspective view, highlighting its three-dimensional form and the metallic sheen. The script is a complex, flowing language with many decorative flourishes.

And in the darkness bind them

A golden ring with intricate Elvish script inscribed on its surface. The ring is shown in a perspective view, curving around. The script is a mix of cursive and more formal characters, typical of Tolkien's Elvish languages. A dark grey semi-transparent rectangular box is overlaid across the center of the ring, containing white text.

~~And in the darkness bind them~~
(Sorry. Let's be nice.)

A photograph of a park with a winding gravel path. The path starts in the foreground, curves to the right, and then curves back to the left, leading towards a dark-colored park bench. The bench is situated on a small circular gravel area. The surrounding area is lush green grass, with several trees of varying heights and dense foliage in the background. A dark structure, possibly a bridge or overpass, is visible through the trees in the distance.

What happened on the way there?

A photograph of a golf course featuring a well-maintained green lawn, a winding gravel path, and several trees. A dark-colored bench is positioned on the path in the middle ground. The scene is bright and sunny, with shadows cast across the grass.

We changed our plans while working,
of course!

The background is a vibrant, abstract painting. It features a central circular motif with concentric rings of yellow and green. The word "START" is faintly visible in the background, rendered in a bold, black, sans-serif font. The overall composition is rich in color, with various shades of red, blue, and black interspersed with the primary colors. The texture of the paint appears thick and layered.

First plan!

(Followed until GUADEC 2012)

The image is a complex, abstract artwork. At the center is a bright yellow circle containing the word "START" in a bold, black, sans-serif font. This central element is surrounded by several concentric rings of varying colors, including shades of green, brown, and red. The outermost part of the artwork is a highly textured and colorful border, featuring a mix of black, yellow, red, and blue, with some areas resembling a woven or knitted pattern. The overall composition is dynamic and visually rich.

Collection of pages



Organised using class hierarchy



one widget ↔ one page
(but sometimes a couple)



Each page:

- picture of example
- what the widget does
- code for example
- useful methods

A close-up photograph of two chocolate cupcakes. The cupcake in the foreground is larger and features a swirl of chocolate frosting topped with pink and white sprinkles. It sits in a dark brown paper liner with a gold floral pattern. A second, smaller cupcake is visible behind it. Both are on a light blue rectangular plate. A dark grey semi-transparent banner is overlaid across the middle of the image, containing white text.

Too easy
for experienced programmers

A close-up photograph of two chocolate cupcakes on a light blue tray. The cupcake in the foreground is larger and features a swirl of chocolate frosting topped with pink and white sprinkles. The cupcake behind it is smaller and also has chocolate frosting. The background is a soft, out-of-focus grey. A semi-transparent dark grey banner is overlaid across the middle of the image, containing white text.

Too hard
for absolute beginners



Second plan!

(Followed until BrnoDocs 2013)

A photograph of a winding concrete path on a grassy hill. The path starts from the bottom left, curves to the right, and then curves back to the left. There are several black light posts along the path. In the background, there is a tennis court with a green fence. The text "Not one, but two ways to move through the material!" is overlaid on the path in white font on a dark background.

Not one, but two ways
to move through the material!



Reference guide for experts





Collection of pages
organised by class hierarchy




A young child with blonde hair, wearing a pink long-sleeved top and pink pants, is riding a red tricycle with a red trailer. The tricycle has white wheels with red and white patterns. The child is looking back over their shoulder. The scene is set in a courtyard with a brick building in the background, a laundry rack with clothes, and a grassy area. A stone curb separates the paved path from the grass.

Tutorial for beginners




Progression of pages,
easier to harder



Two types of page:

- "widget" pages
- "theory" pages




introduction
windows
images, labels
grid, scrolling...
buttons (signals and callbacks)
statusbar, spinner...



entry widgets
textview
dialogs
menus (Glade!)
selectors

M/V/C design: combobox, treeview
custom widget

A close-up photograph of two chocolate cupcakes. The cupcake in the foreground is larger and features a swirl of pink frosting topped with pink and white sprinkles. It sits in a dark brown paper liner with a gold floral pattern. A second, smaller cupcake is visible behind it. Both are on a light blue square plate. The background is a soft, out-of-focus gradient of purple and blue.

Too easy
and
Too hard



Third plan!

(It's in its first steps.)



"How do I"s for super-experts (in C)

New technologies
illustrated by snippets of code





(Ask Ryan Lortie about it.)

A photograph of a person jumping from a cliff into the ocean at sunset. The person is in mid-air, with their arms outstretched. The cliff is on the left, and the ocean is on the right. The sky is a mix of orange and blue. A semi-transparent dark grey box is overlaid on the image, containing the text.

API Reference Guide

Thank you, g-ir-doctool!
(and everybody working on it)

"10 minutes" tutorials
(they're back!)

Work postponed after having a good...



A young boy with short brown hair, wearing a red, white, and blue striped sweater and blue jeans, is climbing on a dark wood coffee table. He is barefoot and looking towards the right. The room is decorated for Christmas, with a brick fireplace on the right side featuring two red stockings hanging from the mantel. A yellow armchair is visible behind the coffee table, and a colorful plastic play structure is on the floor to the right. The floor is covered with a red carpet. A semi-transparent black banner with white text is overlaid across the middle of the image.

Tutorial for beginners!

A young boy with short brown hair, wearing a red, white, and blue striped sweater and blue jeans, is climbing on a wooden cabinet. He is looking to the right with a focused expression. The room is decorated for Christmas, with stockings hanging on a brick fireplace mantel. A yellow chair is behind him, and a colorful toy table is on the floor to the right. The floor is covered with a red carpet. A semi-transparent black box with white text is overlaid on the center of the image.

Progression of pages,
easier to harder

A young boy with short brown hair, wearing a red, white, and blue striped sweater and blue jeans, is standing on a dark wood coffee table. He is looking towards the right with a curious expression. The room is decorated for Christmas, with a brick fireplace on the right featuring two red stockings hanging from the mantel. A yellow armchair is behind the table, and a colorful plastic play structure is on the floor to the right. A lamp is visible in the background. A semi-transparent black banner with white text is overlaid across the middle of the image.

More "theory" pages than before



Better "widget" pages

A close-up photograph of an owl's face, showing its large, bright green eyes and dark beak. The owl's feathers are a mix of brown and white. The text "Let's look inside a widget page..." is overlaid on the image in a white font on a dark background.

Let's look inside a widget page...

A close-up photograph of an owl's face. The owl has brown and white mottled feathers. Its eyes are a striking, glowing green color. The owl's beak is dark and pointed downwards. The background is a soft, out-of-focus brown. A semi-transparent black rectangular box is overlaid across the center of the owl's face, containing the text "Picture of example" in white, sans-serif font.

Picture of example

A close-up photograph of an owl's face, focusing on its large, bright green eyes. The owl's feathers are a mix of brown, grey, and white, with a soft, downy texture. The owl is looking directly at the camera. A dark horizontal bar is overlaid across the middle of the image, containing the text "What the widget does" in white. The background is a blurred, light-colored surface, possibly a rock or a piece of wood.

What the widget does

A close-up photograph of an owl's face, showing its brown and white feathers and a striking red eye. The owl is looking directly at the camera. A dark, semi-transparent rectangular box is overlaid on the center of the image, containing white text.

Step-by-step guide
on writing the code for the example



Useful methods

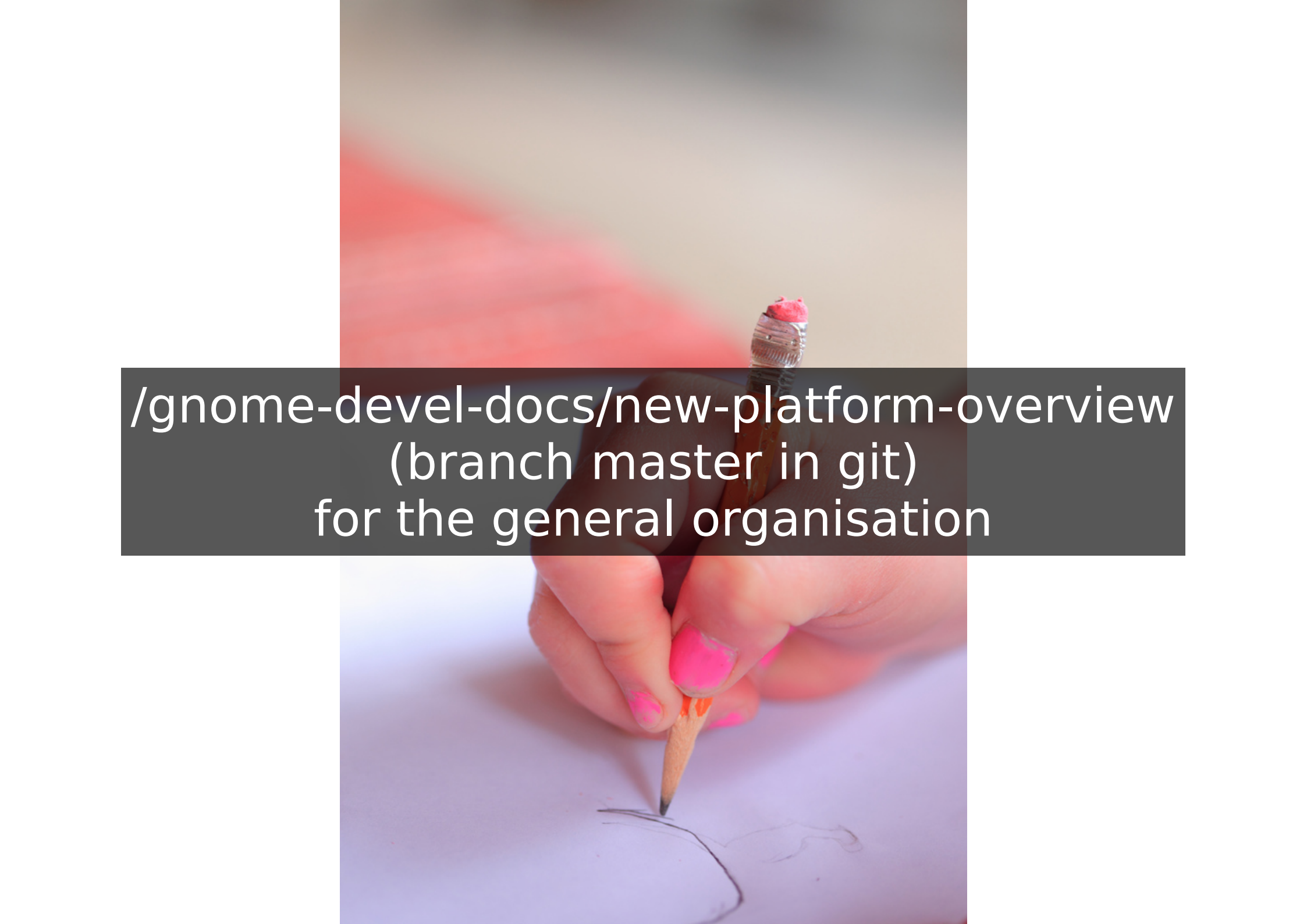


Exercises

A close-up photograph of a hand with bright pink nail polish holding a pencil. The hand is in the process of drawing a pencil sketch on a white surface. The sketch appears to be a simple line drawing of a face or a similar shape. The background is blurred, showing a red and white pattern. A dark grey semi-transparent box is overlaid on the center of the image, containing white text.

How much work has been done?

Not much. (Sorry.)

A close-up photograph of a hand with bright pink nail polish holding a pencil, drawing a sketch on a white surface. The background is blurred, showing a red and white pattern. A dark grey semi-transparent box is overlaid on the center of the image, containing white text.

[/gnome-devel-docs/new-platform-overview](#)
(branch master in git)
for the general organisation



Come to the Documentation BoF!

A close-up photograph of a hand with bright pink nail polish holding a pencil, drawing a sketch on a white surface. The hand is positioned in the lower half of the frame, with the pencil tip touching the paper. The background is blurred, showing a red and white pattern. A dark grey rectangular box is overlaid on the center of the image, containing white text.

`/gnome-devel-docs`
(branch beginners in git)
for the tutorial for beginners

A night sky filled with stars, with a bright shooting star streaking across the upper right. In the bottom left corner, a blurry cardboard box is visible, suggesting a wish being made.

What more do we wish?

A night sky filled with stars, with a bright shooting star streaking across the upper right. In the bottom left corner, there is a blurry, out-of-focus object that appears to be a small structure or a piece of equipment. The text "JavaScript tutorial" is centered in the middle of the image.


JavaScript tutorial



(Thank you, Meg Ford!)

A night sky filled with stars, with a bright shooting star streaking across the upper right. In the bottom left corner, there is a blurry, out-of-focus object that appears to be a piece of wood or a small structure.


C tutorial (volunteers?)



Tutorials for other libraries
(suggestions on priorities?)

A woman is riding a bicycle on a city street. She is wearing a pink helmet with a face-like design, white sunglasses, a white dress with a sash that says "Louis", and white furry boots. She is riding a bicycle that is shaped like a unicorn, with a pink body, gold mane, and a silver horn. The background shows a busy city street with a yellow taxi, a McDonald's sign, and other pedestrians.

More wild dreams...

A woman is riding a bicycle on a city street. She is wearing a pink helmet with a face-like design, white sunglasses, a white dress, and a necklace. She is holding a microphone and a sign that says "Louis". The bicycle is decorated with a large, gold and pink unicorn costume. The background shows a busy city street with a yellow taxi, a McDonald's sign, and other pedestrians.

Interactive exercises
(Codecademy, anyone?)

A woman with long dark hair is riding a bicycle on a city street. She is wearing a bright pink helmet with a face-like design, white sunglasses, a white sequined dress, and a white sash that says "Louis". She is also wearing white furry boots and silver high-heeled shoes. The bicycle is decorated with a large, pink unicorn head with a gold horn and mane. The background shows a busy city street with a yellow taxi, a McDonald's sign, and other pedestrians.

What would you like?



Where will all this live?

A gingerbread house is the central focus of the image. It is a dark brown, rectangular structure with a peaked roof. The roof is decorated with white icing piped along the edges and in a crisscross pattern. Several small, heart-shaped candies in red and pink are scattered on the roof. A yellow pretzel is placed near the peak. The front of the house features three windows and a door, all decorated with white icing and colorful patterns. The windows have pink and yellow designs, while the door has a black and white pattern with a red heart. In front of the house, there are several small figurines: a woman in a red hood and green dress, two children, and a brown bear. A small green Christmas tree with red and yellow ornaments is on the left. The house is surrounded by white and yellow pretzels. The entire gingerbread house is placed on a white lace doily, which is on a dark surface. A semi-transparent dark grey banner with white text is overlaid across the middle of the image.

developer.gnome.org



Somewhere in Help too?





Ideas?
Questions?



Offers of help? :-)

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