



The GNOME™ Conference GUADEC

Being a GNOME maintainer

Best practices and known traps for newcomers and seasoned veterans



 Emmanuele Bassi

 Emmanuele Bassi

 He/him

- 🐾 Emmanuele Bassi
- 🐾 He/him
- 🐾 GNOME Foundation

- 🐾 Emmanuele Bassi
- 🐾 He/him
- 🐾 GNOME Foundation
- 🐾 GTK

- 🐾 Emmanuele Bassi
- 🐾 He/him
- 🐾 GNOME Foundation
- 🐾 GTK
- 🐾 Maintained a bunch of projects

Disclaimer

Part I: My Shot

Part I: My Shot

GNOME

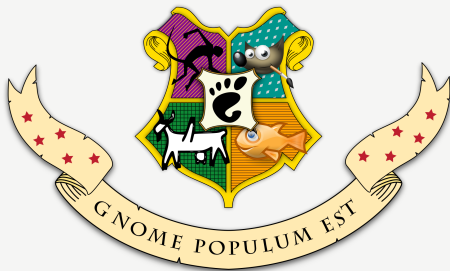


Figure 1: © Jonathan Blandford

GNOME is People



Figure 2: © Metro Goldwyn Meyer

Processes

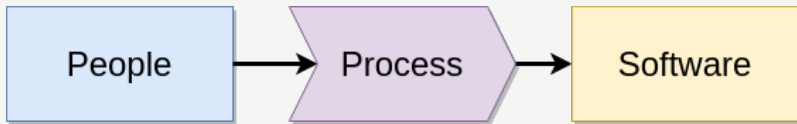


Figure 3: Transforming People into Software

Part II: The room where it happens

Part II: The room where it happens

I guess I'm gonna fin'ly have to listen to you

- 👉 You want to be a developer, stick to coding
- 👉 You want to be a maintainer, you get to deal with people

Talk less, smile more

- 🐾 Code is less important than people
- 🐾 People scale less than code
- 🐾 You cannot maintain a large project by yourself

Well, hate the sin, love the sinner

👉 Users don't know what they want

Well, hate the sin, love the sinner

- 🐾 Users don't know what they want
- 🐾 Users don't know how things work

Well, hate the sin, love the sinner

- 🐾 Users don't know what they want
- 🐾 Users don't know how things work
- 🐾 Users don't know how to give feedback

Well, hate the sin, love the sinner

- 🐾 Users don't know what they want
- 🐾 Users don't know how things work
- 🐾 Users don't know how to give feedback
- 🐾 Users are fundamental

Well, hate the sin, love the sinner

- 🐾 Users don't know what they want
- 🐾 Users don't know how things work
- 🐾 Users don't know how to give feedback
- 🐾 Users are fundamental
 - 🐾 source of new contributors

Well, hate the sin, love the sinner

- 🐾 Users don't know what they want
- 🐾 Users don't know how things work
- 🐾 Users don't know how to give feedback
- 🐾 Users are fundamental
 - 🐾 source of new contributors
 - 🐾 source of motivation

Well, hate the sin, love the sinner

- 🐾 Users don't know what they want
- 🐾 Users don't know how things work
- 🐾 Users don't know how to give feedback
- 🐾 Users are fundamental
 - 🐾 source of new contributors
 - 🐾 source of motivation
 - 🐾 source of demotivation

Well, hate the sin, love the sinner

- 🐾 Users don't know what they want
- 🐾 Users don't know how things work
- 🐾 Users don't know how to give feedback
- 🐾 Users are fundamental
 - 🐾 source of new contributors
 - 🐾 source of motivation
 - 🐾 source of demotivation
- 🐾 You are a user too

Decisions are happening over dinner

- 👉 High bandwidth, low latency

Decisions are happening over dinner

- 🐾 High bandwidth, low latency
- 🐾 Chat (IRC, Matrix, whatever)

Decisions are happening over dinner

- 👉 High bandwidth, low latency
- 👉 Chat (IRC, Matrix, whatever)
- 👉 Video conference

Decisions are happening over dinner

- 👉 High bandwidth, low latency
- 👉 Chat (IRC, Matrix, whatever)
- 👉 Video conference
- 👉 Hackfests

Decisions are happening over dinner

- 👤 High bandwidth, low latency
- 👤 Chat (IRC, Matrix, whatever)
- 👤 Video conference
- 👤 Hackfests
- 👤 Conferences

Decisions are happening over dinner

- 👣 High bandwidth, low latency
- 👣 Chat (IRC, Matrix, whatever)
- 👣 Video conference
- 👣 Hackfests
- 👣 ~~C~~onferences
- 👣 Remember when those were a thing?

No one really knows how the game is played

- 🐾 Text files in the repository?
- 🐾 Wikis?
- 🐾 Mailing list archives?
- 🐾 Institutional knowledge passed down by community elders around the fire at sundown?
- 🐾 A basic micro-pulse to the brain, and teleologically experiencing the whole of the GNOME development community memories?

The art of the trade

- 🐾 Chat
- 🐾 Discourse
- 🐾 Wiki
- 🐾 Foundation sponsoring for hackfests

How the sausage gets made






- 👣 Take your time to teach other people
- 👣 Write down all that you know
- 👣 Mark issues for newcomers, and outline a solution *that will get merged*
- 👣 Ask newcomers to review merge requests

We just assume that it happens

- 🐾 Design
- 🐾 CI Pipeline
- 🐾 Localisation
- 🐾 Documentation
- 🐾 Nightly builds

I arranged the menu, the venue, the seating

GNOME infrastructure

-  Chat/Discourse
-  GitLab
-  Damned Lies
-  `help.gnome.org`
-  `gnome-build-meta`

No one really knows how the parties get to yes

- 🐾 Design team
- 🐾 Release team
- 🐾 Code of conduct team
- 🐾 Foundation board

The pieces that are sacrificed in ev'ry game of chess

- 🐾 You don't get to be your unique and precious snowflake
- 🐾 Ask the design team before you go off the deep end
- 🐾 Involve the localisation team for user visible text
- 🐾 Talk to the release team about new dependencies
- 🐾 Talk to the maintainers of modules you depend on, as well as the ones that depend on you
- 🐾 You are part of a community; you don't work in a vacuum

Not every issue can be settled by committee

- 👣 Rough consensus
- 👣 Steering committee
- 👣 (SA)BDFL
- 👣 User feedback
- 👣 At the end of the day, you have to make a decision

It isn't pretty

 Flames

It isn't pretty

- 🐾 Flames

- 🐾 Character assassinations over Planet GNOME

It isn't pretty

- 🐾 Flames
- 🐾 Character assassinations over Planet GNOME
- 🐾 Passive aggressive emails to other projects

It isn't pretty

- 👉 Flames
- 👉 Character assassinations over Planet GNOME
- 👉 Passive aggressive emails to other projects
- 👉 Revert wars

It isn't pretty

- 👣 Flames
- 👣 Character assassinations over Planet GNOME
- 👣 Passive aggressive emails to other projects
- 👣 Revert wars
- 👣 Forks

It isn't pretty

- 👤 Flames
- 👤 Character assassinations over Planet GNOME
- 👤 Passive aggressive emails to other projects
- 👤 Revert wars
- 👤 Forks
- 👤 Publicly leaving the project with grand theatrical gestures

A quid pro quo

🐾 You can't always get what you want

Well, we'll see how it goes

🐾 But if you try sometimes well you might find you get what you need

We'll never really know what got discussed



Figure 4: My typical reaction when people bring up tray icons

Click-boom then it happened

- 👉 Decisions happen during a discussion
- 👉 Some discussions go on for *years*
- 👉 Reviews, issues, chat, hackfests
- 👉 Some are logged, some aren't

When you got skin in the game you stay in the game

- 🐾 Group maintenance
- 🐾 Trading reviews
- 🐾 Personal responsibility

But you don't get a win unless you play in the game

🐾 Document your process

But you don't get a win unless you play in the game

- 🐾 Document your process

 - 🐾 How to write documentation

But you don't get a win unless you play in the game

- 🐾 Document your process
 - 🐾 How to write documentation
 - 🐾 How to write code

But you don't get a win unless you play in the game

- 🐾 Document your process
 - 🐾 How to write documentation
 - 🐾 How to write code
 - 🐾 How to contribute a feature

But you don't get a win unless you play in the game

- 🐾 Document your process
 - 🐾 How to write documentation
 - 🐾 How to write code
 - 🐾 How to contribute a feature
 - 🐾 How to write issues

But you don't get a win unless you play in the game

- 🐾 Document your process

- 🐾 How to write documentation
- 🐾 How to write code
- 🐾 How to contribute a feature
- 🐾 How to write issues
- 🐾 How to triage issues








But you don't get a win unless you play in the game

🐾 Document your process

- 🐾 How to write documentation
- 🐾 How to write code
- 🐾 How to contribute a feature
- 🐾 How to write issues
- 🐾 How to triage issues
- 🐾 How to review a merge request

But you don't get a win unless you play in the game

Document your process

-  How to write documentation
-  How to write code
-  How to contribute a feature
-  How to write issues
-  How to triage issues
-  How to review a merge request
-  How to make a release

You get love for it

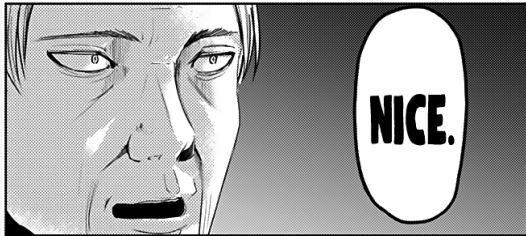


Figure 5: Feedback for a release well done

You get love for it

👉 Everyone loves you when things go according to plan

You get love for it

- 👉 Everyone loves you when things go according to plan
 - 👉 Of course, you need a plan first

You get love for it

- 🐾 Everyone loves you when things go according to plan

- 🐾 Of course, you need a plan first

- 🐾 “Thanks for your patience”

You get love for it

- 🐾 Everyone loves you when things go according to plan
 - 🐾 Of course, you need a plan first
- 🐾 “Thanks for your patience”
- 🐾 Don’t belittle people that use your software

You get hate for it

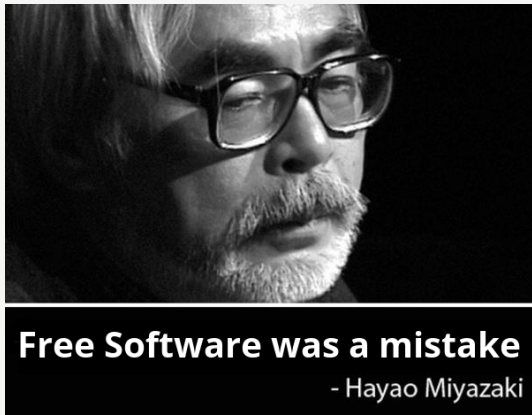


Figure 6: Linux kernel subsystem maintainer Hayao Miyazaki

You get hate for it

- 👉 People invest time and effort before asking you
- 👉 Iteration vs Code drops
- 👉 Scratching does not continue once the itch is gone
- 👉 “Why can’t you just merge this and fix it later?”
- 👉 “You don’t care about users because you won’t merge my code”

You get nothing if you wait for it

- 🐾 Lack of triage
- 🐾 Lack of review
- 🐾 Lack of feedback
 - 🐾 Even negative
- 🐾 Lack of **commitment**

I wanna build something that's gonna outlive me

- 🐾 Plan for you leaving the project

I wanna build something that's gonna outlive me

- 🐾 Plan for you leaving the project
- 🐾 Take breaks, just to see what happens

I wanna build something that's gonna outlive me

- 🐾 Plan for you leaving the project
- 🐾 Take breaks, just to see what happens
- 🐾 Nominate lieutenants

I wanna build something that's gonna outlive me

- 🐾 Plan for you leaving the project
- 🐾 Take breaks, just to see what happens
- 🐾 Nominate lieutenants
- 🐾 Provide historical context and institutional knowledge

I wanna build something that's gonna outlive me

- 🐾 Plan for you leaving the project
- 🐾 Take breaks, just to see what happens
- 🐾 Nominate lieutenants
- 🐾 Provide historical context and institutional knowledge
- 🐾 Remove yourself from the equation

I wanna build something that's gonna outlive me

- 🐾 Plan for you leaving the project
- 🐾 Take breaks, just to see what happens
- 🐾 Nominate lieutenants
- 🐾 Provide historical context and institutional knowledge
- 🐾 Remove yourself from the equation
- 🐾 If everything else fails, archive the repository

If you stand for nothing, then what do you fall for?

- 🐾 Part of the ship, part of the crew
- 🐾 You get to share credit, you get to share blame
- 🐾 You will be seen as a representative, whether you like it or not

The art of the compromise

- 👉 Involve to the engagement team when you have plans that might be controversial

The art of the compromise

- 🐾 Involve to the engagement team when you have plans that might be controversial
- 🐾 Talk to the engagement team when you need help dealing the fallout

The art of the compromise

- 🐾 Involve to the engagement team when you have plans that might be controversial
- 🐾 Talk to the engagement team when you need help dealing the fallout
- 🐾 Get moderators to help you with bad faith actors

Hold your nose and close your eyes

🐾 Stop going to hostile places

Hold your nose and close your eyes

- 🐾 Stop going to hostile places
- 🐾 Stop trying to correct people on the Internet

Hold your nose and close your eyes

- 🐾 Stop going to hostile places
- 🐾 Stop trying to correct people on the Internet
- 🐾 Write down your position once, and then leave

Hold your nose and close your eyes

- 🐾 Stop going to hostile places
- 🐾 Stop trying to correct people on the Internet
- 🐾 Write down your position once, and then leave
- 🐾 Never, ever, ever engage with bad faith actors

Hold your nose and close your eyes

- 🐾 Stop going to hostile places
- 🐾 Stop trying to correct people on the Internet
- 🐾 Write down your position once, and then leave
- 🐾 Never, ever, ever engage with bad faith actors
- 🐾 Filter, ignore, block, lock down issues, and move on

We want our leaders to save the day

Maintainers:

- 👉 **You** have the last word
 - 👉 That word may be “no” more often than it is “yes”
- 👉 **Respect** different opinions, but don't be afraid to **dissent**
- 👉 You don't owe **anything** to anybody using your project
- 👉 You owe even less to anybody not using it

But we don't get a say in what they trade away

Users:

- 👉 **Respect** the maintainer's opinion
- 👉 They probably thought about this longer than you
- 👉 They most definitely will be around longer than you

We dream of a brand new start

Definitely, too much stuff in those private structs needs to be accessed, esp for GtkTreeView/GtkIconView (but not only), it will become an unmanageable mess at some point if I have to LD_PRELOAD almost all exported GTK functions, while copying all of the GTK code. So we had a discussion with Wizzup and parazyd (the guys that I am expecting to create devuan-maemo repo) and we decided that GTK fork is the only sane option.

Figure 7: A perfectly valid option

- 🐾 Downstream patches
- 🐾 Fork
- 🐾 Convince downstreams to pick up your fork

But we dream in the dark for the most part

- 🐾 Lots of effort
- 🐾 No guarantee of success
- 🐾 Novelty wears out fast
- 🐾 Now you get to maintain a whole project by yourself

Dark as the tomb where it happens

- 👉 Maybe better to get involved?
- 👉 You may convince the maintainer
- 👉 You may change your mind after looking at the problem from a different angle

I've got to be in the room where it happens

*SOMETIMES, IT'S JUST NICE TO HAVE A
STRESS-FREE DAY. NO DRAMA, NO TWISTS.*

Figure 8: Something that never happened in the history of GNOME

- 👉 You will definitely learn something
- 👉 Your opinions will carry more weight
- 👉 You might end up being the next maintainer

Click-boom

- 👉 Automate **ALL** the things!
 - 👉 CI job for code style, static analysis, ASan/UBSan
- 👉 Use more bots!
 - 👉 First triage, review requests, auto-closing
- 👉 Use CODEOWNERS
 - 👉 It's great; and if GitLab used it to ping people for a review it would be even better *hint hint nudge nudge*
- 👉 Mentor newcomers
 - 👉 Review trading, document decisions
- 👉 Market your project better
 - 👉 Development blog (GTK, Shell), Discourse topics (Tracker)
- 👉 Stop reading the comments
 - 👉 Dunning-Kruger in users leads to Brain Worms in maintainers

Thank you!

Questions?